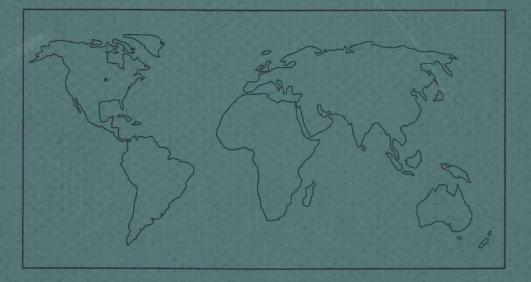


97 ANNUAL REPORT



# MINNESOTA STATE BOARD OF INVESTMENT

HJ 3835 .M6 A25 1997

## 1997 Annual Report

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MINNESOTA STATE BOARD OF INVESTMENT



#### **Board Members:**

Governor Arne H. Carlson

State Auditor Judi Dutcher

State Treasurer Michael A. McGrath

Secretary of State Joan Anderson Growe

Attorney General Hubert H. Humphrey III

#### **Executive Director:**

Howard J. Bicker

Suite 105, MEA Bldg. 55 Sherburne Avenue St. Paul, MN 55155 (612)296-3328 FAX (612)296-9572

An Equal Opportunity Employer December, 1997

The Minnesota State Board of Investment (SBI) is pleased to present its report for the fiscal year ending June 30, 1997.

#### **Investment Environment**

Fiscal year 1997 was another outstanding year for most financial assets. Amid continued low inflation and positive corporate earnings reports, the US stock market produced exceptionally strong returns for the third consecutive year. The Wilshire 5000 Stock Index moved up 29.3% which is more than double its historical average. With a small decline in interest rates for the 12 month period, the US bond market, as measured by the Lehman Brothers Aggregate Bond Index, provided a respectable gain of 8.2%.

As in the previous year, international stock markets did not keep pace with the rapid rise in the US, but overall returns were very much in line with historical averages. The Morgan Stanley Capital International index of Europe, Australia and the Far East (EAFE) gained 12.8% for the twelve months ended June 30, 1997. The gains produced by the markets of developing countries, often referred to as "emerging markets", also advanced by 12.8% for the year.

#### **SBI Results**

Within this favorable investment environment, the retirement assets under the Board's control performed well:

- The Basic Retirement Funds gained 21.8% during fiscal year 1997. The Funds benefited from their high stock exposure as well as exceptionally strong returns from private equity investments such as venture capital and buyout funds. (See page 8.)
- The Post Retirement Fund advanced 20.9% for the year. This gain, combined with strong returns in prior years, will provide a lifetime post retirement benefit increase of 10.1% for eligible retirees. (See page 11.)

During fiscal year 1997, SBI staff conducted a comprehensive review of the internal and external resources used to account for and report on investment performance. This study enabled staff to institute significant efficiencies in the reporting process for all funds under the SBI's control and is expected to enhance productivity of staff resources in the future.

On June 30, 1997, assets under management totaled \$37.2 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 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 performance of the funds under its control.

Sincerely,

var Bicker

Howard Bicker Executive Director



LEGISLATIVE REFERENCE LIBRARY STATE OFFICE BUILDING ST. PAUL, MN 55155

## State Board of Investment

Governor Arne H. Carlson, Chair State Auditor Judith H. Dutcher State Treasurer Michael A. McGrath Secretary of State Joan Anderson Growe State Attorney General Hubert H. Humphrey III

## Investment Advisory Council

The Legislature has established a seventeen 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 process: Asset Allocation, Domestic Managers, International 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\*

Gary Austin Executive Director Teachers Retirement Association

David Bergstrom Executive Director Mn. State Retirement System

John E. Bohan V.P., Pension Investments Grand Metropolitan-Pillsbury

Roger Durbahn Governor's Appointee Retiree Representative

Douglas Gorence Director, Pension Investments Honeywell, Inc.

Kenneth F. Gudorf Chief Executive Officer Agio Capital Mgmt., LLC

P. Jay Kiedrowski Executive Vice President Norwest Bank Minnesota

Han Chin Liu Governor's Appointee Active Employee Representative Judith W. Mares Financial Consultant Mares Financial Consulting, Inc.

Malcolm W. McDonald, Vice Chair Director & Corp. Secretary Space Center, Inc.

Robert McFarlin Governor's Appointee Active Employee Representative

Gary R. Norstrem Sr. Vice Pres., Institutional Mktg. Piper Capital Management

Daralyn Peifer Director, Benefits Finance General Mills, Inc.

Wayne Simoneau Commissioner Mn. Dept. of Finance

Michael L. Troutman Assistant to the President Board of Pensions, ELCA

Mary Vanek Executive Director Public Employees Retirement Assoc.

Jan Yeomans, Chair Treasurer 3M Co.

\* As of January 1998

## Staff, Consultants & Custodians\*

Howard Bicker Executive Director

#### **Investment Staff**

*Equities Lois E. Buermann* Mgr., Equity Investments

Karen Vnuk Analyst, International Equities

Kristine J. Hanson Analyst, Domestic Equities

A. Arthur Kaese Analyst, Internal Equities

Fixed Income Michael J. Menssen Mgr., Fixed Income Investments

Sheila H. Berube Analyst, Fixed Income/Trust Funds

Alternative Assets John N. Griebenow Mgr., Alternative Investments

Mark T. Regal Analyst, Alternative Investments

Cash Management John T. Kinne Mgr., Short Term Accounts

Harold L. Syverson Analyst, Short Term Accounts

**Public Programs** James E. Heidelberg Mgr., Public Programs

Deborah Griebenow Analyst, Shareholder Services

**Research/Special Projects** Mansco Perry III Manager, Research & Development

N. Robert Barman Analyst, Special Projects

## **Administrative Staff**

*Finance and Accounting L. Michael Schmitt* Administrative Director

Mable E. Patrick Accounting Supervisor

*Thomas L. Delmont* Accounting Officer, Intermediate

Wellington Newton Accounting Officer, Intermediate

Nancy L. Wold Accounting Officer, Intermediate

Kathy Sears Network Administrator

Support Services Charlene Olson Secretary to the Executive Director

Carol Nelson Secretary

Sondra Wagner Secretary

#### **Consultants**

General Consultant Richards & Tierney, Inc. Chicago, Illinois

Special Projects Consultant Pension Consulting Alliance Studio City, California

Deferred Compensation Program Watson Wyatt Minneapolis, Minnesota

#### **Custodian Banks**

Retirement and Trust Funds State Street Bank & Trust Co. Boston, Massachusetts

State Cash Accounts First Trust National Association St. Paul, Minnesota

\*As of January 1998

The Minnesota State Board of Investment is responsible for the investment management of various retirement funds, trust funds and cash accounts. On June 30, 1997 the market value of all assets was \$37.2 billion.

#### Constitutional and Statutory Authority

The Minnesota State Board of Investment (SBI) is established by Article XI of the Minnesota Constitution to invest all state funds. Its membership is also specified in the Constitution and is comprised of the Governor (who is named as chair of the Board), State Auditor, State Treasurer, Secretary of State and State Attorney General.

All investments undertaken by the SBI are governed by the 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 Section 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 Section 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, *Minnesota Statutes* Section 11A.24 contains a specific list of asset classes available for investment, including common stocks, bonds, short term securities, real estate, private equity, and resource funds. The statutes prescribe the maximum percentage of fund assets that may be invested in various asset classes 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.

The Board has adopted guidelines concerning investments in stock markets outside the U.S. The guidelines do not prohibit investment in any market, but do require that additional notification/presentation be provided to SBI staff or the SBI Administrative Committee in certain cases (refer to page 45 for more information on these guidelines).

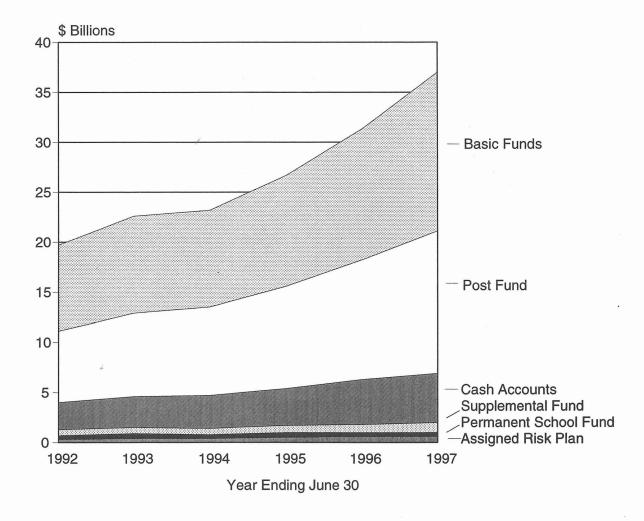
The Board, its staff, and the Investment Advisory Council have conducted detailed analyses of each of the funds under the SBI's control that address investment objectives, asset allocation policy and management structure. These studies guide the on-going management of these funds and are updated periodically.

#### Important Notes

Readers should note that the SBI's returns in this report are shown *after* transactions costs and fees are deducted. Performance is computed and reported after all applicable charges to assure that the Board's focus is on true net returns.

Due to the large number of individual securities owned by the funds managed by the SBI, this report contains only summarized asset listings. A complete list of securities is available upon request from the State Board of Investment.

## **Growth in Assets** Fiscal Years 1993 - 1997



Note: The Environmental Trust Fund was \$0.2 billion as of June 30, 1997

Market Value June 30, 1997

\$15.9 billion

#### **Basic Retirement Funds**

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

Teachers Retirement Fund	\$6,703 million
Public Employees Retirement Fund	3,417 million
State Employees Retirement Fund	3,273 million
Public Employees Police and Fire Fund	1,623 million
Police and Fire Consolidation Fund	468 million
Highway Patrol Retirement Fund	233 million
Correctional Employees Fund	178 million
Judges Retirement Fund	19 million

#### Post Retirement Fund

The Post Retirement Investment Fund is composed of the reserves for retirement benefits to be paid to retired employees. Life-time retirement benefit increases are permitted based on both inflation and investment performance.

#### Supplemental Investment Fund

The Supplemental Investment Fund includes 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 seven separate accounts with different investment emphases designed to meet a wide range of investment needs and objectives.

Income Share Account	stocks and bonds	\$470 million
Growth Share Account	actively managed stocks	206 million
Common Stock Index Account	passively managed stocks	143 million
International Share Account	non U.S. stocks	21 million
Bond Market Account	actively managed bonds	27 million
Money Market Account	short-term debt securities	52 million
Fixed Interest Account	guaranteed investment contracts	71 million

#### Assigned Risk Plan

The Minnesota Workers Compensation Assigned Risk Plan provides worker compensation insurance for companies unable to obtain coverage through private carriers. The SBI is the investment manager for the Plan's portfolio.

#### Permanent School Trust Fund

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

#### **Environmental Trust Fund**

The Environmental Trust Fund is a trust established for the protection and enhancement of Minnesota's environment. It is funded with a portion of the proceeds from the state's lottery.

State Cash Accounts	\$4.9 billion
These accounts are the cash balances of state government funds, including the Invested	
Treasurers Cash Fund, transportation funds, and other miscellaneous cash accounts.	
Assets are invested in high quality, liquid debt securities.	

Total	Assets
I Grai	ADDOLD

14.2 billion

1.0 billion

\$0.6 billion

\$0.4 billion

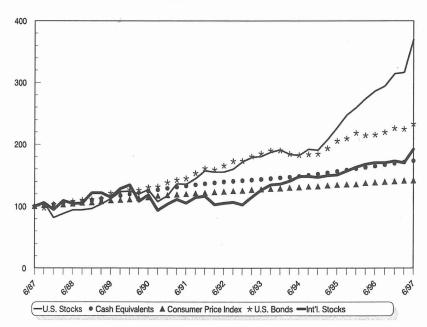
\$0.2 billion

The "Combined Funds" represent the assets of both active and retired public employees who participate in the defined benefit plans of three state-wide retirement systems: Teachers Retirement Association (TRA), Public Employees Retirement Association (PERA) and the Minnesota State Retirement System (MSRS). On June 30, 1997, the Combined Funds had a market value of \$30.1 billion.

The Combined Funds are so named because they represent the combined assets of both the Basic Retirement Funds (the fund for active employees) and Post Retirement Fund (the fund for retired employees). Unlike most other public and corporate pension plans, the assets of active and retired employees are separated under statute and therefore managed and accounted for separately. More information on the structure and performance of the Basic and Post Funds are contained in the following chapters.

While the Combined Funds do not exist under statute, the Board finds it instructive to review asset mix and performance of all defined benefit pension assets under its control. This more closely parallels the structure of other public and corporate pension plan assets and therefore allows for more meaningful comparison with other pension fund investors. The comparison universe used by the SBI is the Master Trust portion of the Trust Universe Comparison Service (TUCS). This universe contains information on public and corporate pension and trust funds with a balanced asset mix and over \$1 billion in size.

Figure 1. Performance of Capital Markets FY 1988-1997



**Cumulative Returns** 

It is important to note that the historical data on the Combined Funds presented in this report reflect only the Basic Retirement Funds through fiscal year 1993. Both the Basic and Post Funds are included thereafter.

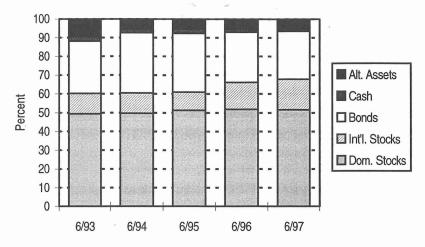
This distinction is necessary due to the very different asset allocation strategies employed by the two funds in the past. The Basic Funds have always been managed to maximize total rates of return over the longterm and therefore its asset allocation has historically included a substantial stock segment. In contrast, until the post retirement benefit increase formula was changed in 1993, the Post Retirement Fund was managed to maximize current income which necessitated a large commitment to bonds. As a result, the investment goals of the two funds were incompatible for analytical purposes until fiscal year 1994.

(Please refer to the chapter on the Post Retirement Fund for more information on the change in the benefit increase formula and its impact on the asset allocation strategy for that Fund).

#### **Asset Allocation**

As illustrated in Figure 1, historical evidence strongly indicates that common stocks (both domestic and international) will provide the greatest opportunity to maximize investment returns over the longterm. As a result, the Board has chosen to incorporate a large commitment to common stocks in its asset allocation policy for retirement 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 alternative investments in the total portfolio. These assets diversify the Funds and reduce wide fluctuations in investment returns on a year to year basis. This diversification should not impair the Funds' ability to meet or exceed their actuarial return targets over the long-term.





Note: Data for fiscal year 1993 represents the Basic Funds only.

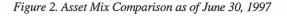
#### Asset Mix Compared to Other Pension Funds

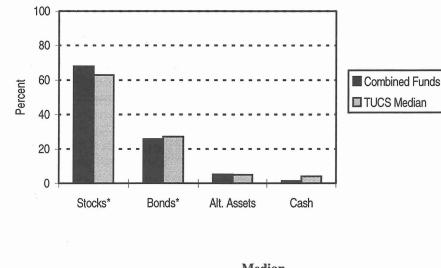
Comparisons of the Combined Funds' actual asset mix to the median allocation to stocks, bond and other assets of the funds in TUCS on June 30, 1997 are displayed in Figure 2. It shows that the Combined Funds were overweighted in stocks relative to the median allocation in TUCS and underweighted in their allocation to bonds and cash. Historical data on the Combined Funds' asset mix is shown in Figure 3.

#### **Return Objectives**

The Combined Funds are evaluated relative to three total rate of return objectives:

- Provide Real Returns. Over a ten year period, the Combined Funds are expected to produce returns that exceed inflation by 3-5 percentage points on an annualized basis.
- Exceed Median Fund Returns. Giver a five year period, the Combined Funds are expected to outperform the return of the median fund in a representative universe of other public and corporate pension and trust funds with a balanced asset mix of stocks and bonds. As noted earlier, the universe used by the SBI is the Master Trust portion of TUCS and includes funds with assets of more than \$1 billion. All funds in TUCS report





		wiedian
	Combined	Allocation
	Funds	in TUCS
Stocks*	67.8%	62.8%
Bonds*	25.7	27.1
Alternative Assets	5.2	5.0**
Cash	1.3	4.1

\* Both international and domestic

\*\* All other assets in TUCS

their returns gross of fees and the Combined Funds are ranked on a gross of fees basis as well.

Exceed Market Returns. Over a five year period, the Combined Funds are expected to outperform a composite of market indices weighted in a manner that reflects the asset mix of the Combined Funds.

#### **Investment Results**

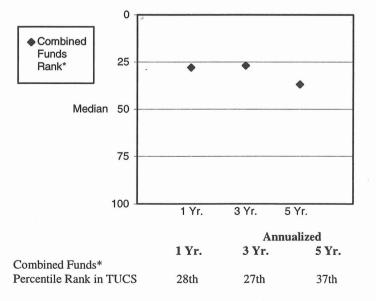
#### Comparison to Inflation

Over the last ten years, the Combined Funds exceeded inflation by 8.2 percentage points, an amount well in excess of the return objective cited above. Historical results compared to inflation are shown in Figure 4.

#### **Comparison to Other Funds**

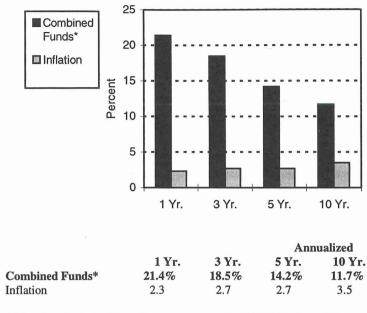
While the SBI is naturally concerned with how its returns compare to other pension investors, universe comparison data should be used with great care. There are two primary reasons why such comparisons will provide an "apples-to-oranges" look at performance:

Figure 5. Combined Funds Performance Compared to Other Pension Funds



\*Compared to public and corporate plans greater than \$1 billion, gross of fees.

Figure 4. Combined Funds Performance vs. Inflation



\*After fees. Includes Basic Funds only through 6/30/93, Basic and Post Funds thereafter.

- Differing Allocations. Asset allocation will have a dominant effect on returns. The allocation to stocks among the funds in TUCS typically ranges from 20-90%, a very wide range for meaningful comparison. In addition, it appears that many funds do not include alternative asset holdings in their reports to TUCS. This further distorts comparisons among funds.
- Differing Goals/Liabilities.
   Each pension fund structures its portfolio to meet its own liabilities and risk tolerance.
   This may result in different choices on asset mix. Since asset mix will largely determine investment results, a universe ranking may not be relevant to a discussion of how well a plan sponsor is meeting its long-term liabilities.

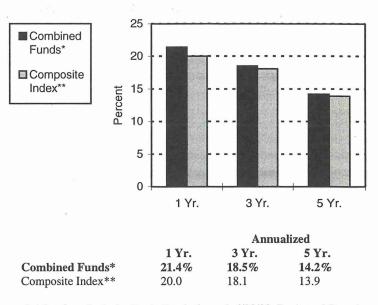
With these considerations in mind, the performance of the Combined

Funds compared to other public and corporate pension funds over \$1 billion in the Master Trust portion of TUCS is displayed in Figure 5. It shows that the Combined Funds have ranked in the top half of the comparison universe over the last five years. Over the most recent one and three year periods the Funds have ranked near the top quarter of its peer group.

#### Comparison to Market Returns

The Combined Funds' performance is also evaluated relative to a composite of market indices which is weighted in a manner that reflects the actual asset allocation of the Combined Funds. Performance results and a breakdown of the composite index are shown in Figure 6. The Combined Funds exceeded the composite index by 0.3 percentage point over the last five years and therefore met their stated performance goal. The Funds exceeded the composite index by 0.4 percentage point over the last three years and exceeded it by 1.4 percentage points over the most recent fiscal year. These results are largely a measure of value added or lost from active management after all fees and expenses have been taken into consideration.

Figure 6. Combined Funds Performance vs. Composite Index



\* After fees. Includes Basic Funds through 6/30/93, Basic and Post thereafter.

\*\*Adjusted to reflect the SBI's restriction on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93.

#### **Composite Index on June 30, 1997**

Asset Class	Market Index	Composite Index Wts.*
Domestic Stocks	Wilshire 5000	50.0%
Int'l. Stocks	Int'l. Composite**	15.0
Domestic Bonds	Lehman Aggregate	27.5
Alternative Assets	Wilshire Real Estate	2.1
	Venture Capital Funds	2.9
	Resource Funds	0.5
Unallocated Cash	91 Day T-Bills	2.0
Total		100.0%

\* Weights are reset quarterly in the composite to reflect the combined allocation policies of the Basic and Post Funds.

\*\* Composite of MSCI EAFE Free and MSCI Emerging Markets Free.

## **Basic Retirement Funds**

The Basic Retirement Funds accumulate the retirement assets of public employees during their working years. On June 30, 1997, the Funds covered more than 260,000 active employees and had a market value of \$15.9 billion.

Figure 7 identifies the eight different retirement funds which comprise the Basic Funds. The Basic Funds invest the pension contributions that employees and employers make to defined benefit pension plans during the employees' years of active service.

#### **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 benefits at the time of retirement.

#### Actuarial Assumed Return

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 the initially 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 advantage of the long run return opportunities offered by common stocks and other equity investments in order to meet its actuarial return target.

#### **Return Objective**

The Board measures the performance of the Basic Retirement Funds relative to a composite of market indices that is weighted in a manner that reflects their long-term asset allocation policy. The Basic Funds are expected to exceed their composite index over a five year period. *Performance is reported net of all fees and costs* to assure that the Board's focus is on its true net return.

#### Asset Allocation

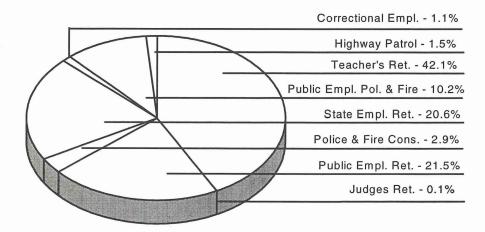
The allocation of assets among stocks, bonds, and alternative investments can have a dramatic impact on investment results. In fact, asset allocation decisions overwhelm the impact of individual security selection within a total portfolio. Consequently, the Board has focused considerable attention on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

#### 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:

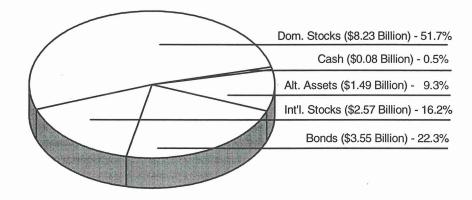
Domestic Stocks	45%
International Stocks	15
Bonds	24
Alternative Assets	15
Unallocated Cash	1

Figure 7. Composition of Basic Funds as of June 30, 1997



## **Basic Retirement Funds**

Figure 8. Asset Mix as of June 30, 1997



Notes: Percentages may differ slightly due to rounding of values. Uninvested portions of the allocation to Alternative Assets are held in Domestic Stocks.

Figure 8 presents the actual asset mix of the Basic Funds at the end of fiscal year 1997. Historical asset mix data are displayed in Figure 9.

#### **Total Return Vehicles**

The SBI invests the majority of the Basic Funds' assets in common stocks (both domestic and international). 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. Including international stocks in the asset mix allows the SBI to diversify its holdings across world markets and offers the opportunity to enhance returns and reduce the risk/volatility of the total portfolio. The rationale underlying the inclusion of private equity (e.g., venture capital) is similar. However, the relatively small size of the private equity market presents a practical limit to the amount that may be invested in this asset class.

The Board recognizes that this sizable policy allocation to common stock and private equity 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**

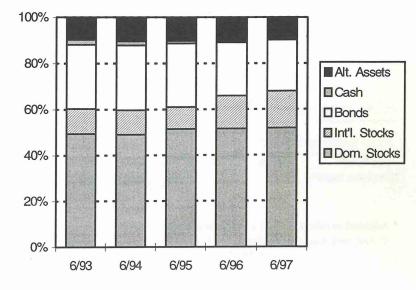
The Board includes other asset classes in the Basic Funds both to

Figure 9. Historical Asset Mix FY 1993-1997

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 periods of rapidly rising prices, these "hard" assets have appreciated 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. As a result, their inclusion in the Basic Funds serves to dampen return volatility.

The allocation to *bonds* 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, are expected to 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.



## **Basic Retirement Funds**

#### FY 1997 Changes

The Board did not make changes to its long-term asset allocation targets for the Basic Funds during fiscal year 1997.

During the previous fiscal year, the Board added a 2% allocation to emerging markets within the international stock segment. Approximately half of this allocation was funded by the end fiscal year 1996. During fiscal year 1997, the remainder of the allocation was funded.

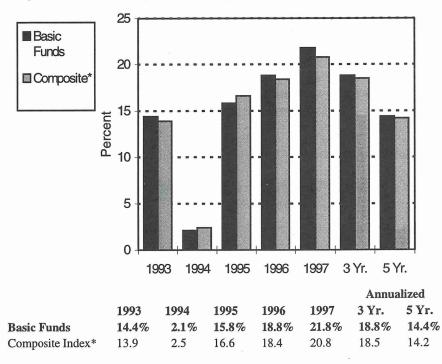
It should be noted that the unfunded allocation to alternative investments in the Basic Funds is held in domestic stocks until it is needed for investment. As a result, the actual amount invested in domestic stocks was above its long-term target.

#### Investment Management

All assets in the Basic Retirement Funds are managed externally by private money management firms retained by contract. In order to gain greater operating efficiency, the Basic Funds share the same domestic stock, international stock and bond managers with the Post Fund.

More information on the structure, management and performance of these pools of managers is included in the **Investment Pool** section of this report.

Figure 10. Basic Funds' Performance vs. Composite Index



\* Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93.

#### **Investment** Performance

As stated earlier, the Basic Funds are expected to exceed the return of a composite of market indices over a five year period. Performance relative to this standard will measure two effects:

- The ability of the managers selected by the SBI, in aggregate, to add value to the returns available from the broad capital markets.
- The impact of the SBI's rebalancing activity. The SBI rebalances the total fund when market movements take the stock or bond segments above or below their long term asset allocation targets. This policy imposes a low risk discipline of "buy low-sell high" between asset classes on a total fund basis.

For the five year period ending June 30, 1997, the Basic Funds outperformed the composite index by 0.2 percentage point annualized. The primary contributors to the value added came from above index performance by the international stock, bond, and real estate segments of the portfolio. Value added by these groups of managers was sufficient to counterbalance below index performance by the domestic stock segment during the period. The SBI's policy of periodically rebalancing back to asset allocation targets also contributed to the overall value added during the last five years.

Actual returns relative to the total fund composite index over the last five years are shown in Figure 10. For more information on the performance of each asset class, please refer to the **Investment Pool** section of this report.

The assets of the Post Retirement Fund are used to finance monthly annuities to retired public employees. These annuities may be adjusted upwards over the life of a retiree based on a formula that reflects both inflation and investment performance. On June 30, 1997, the Post Fund had a market value of \$14.2 billion and more than 85,000 retiree participants.

The Post Retirement Fund includes the assets of retired public employees covered by nine state-wide retirement plans; the eight plans which participate in the Basic Retirement Funds as well as the Legislative and Survivors Retirement Fund.

#### **Benefit Increase Formula**

The retirement benefit increase formula applicable to the Post Retirement Fund was changed through legislation enacted by the 1992 Legislature. The revised formula was effective beginning in fiscal year 1993 and is based on a combination of two components:

Inflation Component. Each year, retirees receive an inflation-based adjustment equal to 100% of inflation, up to a maximum specified in statute. The inflation component is granted regardless of investment performance. The cap is necessary to maintain the actuarial soundness of the entire plan. It is the difference between the return assumption for the Basic Funds, and the return assumption for the Post Fund.

The return assumption in the Basic Funds is 8.5%. The return assumption for the Post Fund was 5.0% through fiscal year 1997. For fiscal year 1998 and in future years, the return assumption for the Post Fund will be changed to 6.0%. This means the cap on the inflation adjustment was 3.5% for fiscal years 1993-1997. In fiscal year 1998, and in future years, the inflation cap will be 2.5%.

More information on the change in the inflation cap can be found in the **Major Policy Initiatives** section of this annual report beginning on page 41.

— Investment Component. Each year, retirees also receive an investment-based adjustment, provided net investment gains are above the amount needed to finance the Post Fund's actuarial

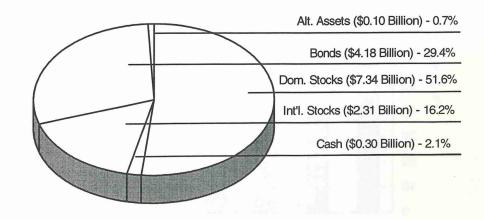
Figure 11. Asset Mix as of June 30, 1997

assumption and the inflation adjustment. Investment gains and losses are spread over five years to smooth out the volatility of returns. In addition, all accumulated investment losses must be recovered before an investment-based adjustment is granted.

#### Advantages

The current formula has two primary advantages:

 It provides benefit increases that are more sensitive to inflation than those granted under the formula prior to fiscal year 1993.



Notes: Percentages may differ slightly due to rounding of values. Uninvested portions of the Alternative Assets allocation are held in Bonds.

 It allows the Post Fund to maximize the long-term earning power of its assets. Without the need to generate the higher levels of current income required under the old formula, the Post Fund can hold a large stock exposure and thereby enhance its prospects for higher total rates of return over the long run.

#### **Investment Objective**

#### Time Horizon

The time horizon of the Post Fund is 15-20 years and corresponds to the length of time a typical retiree can be expected to draw benefits. While this is shorter than the time horizon of the Basic Funds, it is still sufficiently long to allow the Board to take advantage of the long run return opportunities offered by common stocks in order to meet its actuarial return target as well as to finance retirement benefit increases.

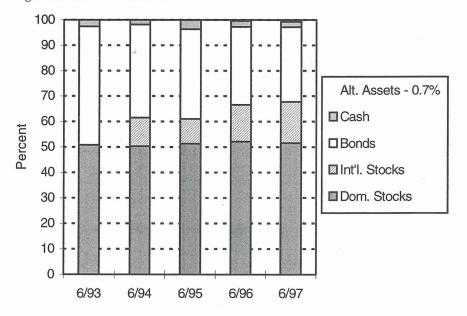
#### **Return Objective**

The Board measures the performance of the Post Retirement Fund relative to a composite of market indices that is weighted in a manner that reflects its long-term asset allocation policy. The Post Fund is expected to exceed its composite index over a five year period. *Performance is reported net of all fees and costs* to assure that the Board's focus is on true net return.

#### **Asset Allocation**

The Board revised its asset allocation strategy for the Post Fund in fiscal year 1993 in order to reflect the goals associated with the new post retirement benefit increase formula. Throughout fiscal year 1993, the actual asset mix of the Post Fund gradually moved toward a 50% allocation to common stocks. During fiscal year 1994, the Board added allocations to international stocks and alternative investments. The current long-term asset allocation for the Post Fund is as follows:

#### Figure 12. Historical Asset Mix FY 1993-1997



Domestic Stocks	50%
Int'l. Stocks	15
Bonds	27
Alternative Assets	5
Unallocated Cash	3

The Post Fund's year-end asset mix is presented in Figure 11. Historical asset mix data are shown in Figure 12.

The SBI invests the majority of the Post Fund's assets in *common stocks* (both domestic and international). A large allocation is consistent with the moderately long time horizon of the Post Fund and the advantageous long term risk-return characteristics of common stocks. Including international stocks in the asset mix allows the SBI to diversify its holdings across world markets and offers the opportunity to enhance returns and reduce the risk/volatility of the total portfolio.

As with the Basic Funds, the Board recognizes that this sizable allocation will be likely to 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 Post Fund both to provide some insulation against highly deflationary environments and to diversify the portfolio sufficiently to avoid excessive return volatility.

The *bonds* in the Post Fund act as a hedge against a deflationary economic environment. In the event of a major deflation, high quality fixed income assets, particularly long term bonds, are expected to protect principal and generate significant gains. And, under more normal

financial conditions, bonds diversify the Post Fund, thereby controlling return volatility on a year-to-year basis.

Yield oriented alternative invest*ments* provide the opportunity for higher long term returns than those typically available from bonds yet still generate sufficient current income to be compatible with the objectives of the Post Fund. Typically, these investments (e.g. business loan participations, mortgage loan participations and income producing private placements) are structured more like fixed income securities with the opportunity to participate in the appreciation of the underlying assets. While these investments may have an equity component, they display a return pattern more like a bond. As such, they will help reduce the volatility of the total portfolio but should also generate higher returns relative to more traditional bond investments.

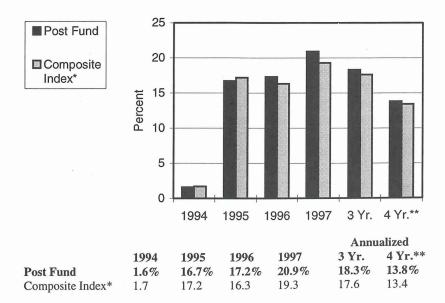
#### FY 1997 Changes

The Board did not make changes to its long-term asset allocation targets for the Post Fund during fiscal year 1997.

During the previous fiscal year, the Board added a 2% allocation to emerging markets within the international stock segment. Approximately half of this allocation was funded by the end of fiscal year 1996. During fiscal year 1997, the remainder of the allocation was funded.

While the Board made several commitments to yield oriented alternative investments during the year, the market value of the alternative segment was only 0.7% of the total fund on June 30, 1997. The Board expects this percentage to increase gradually over the next three to five years. Until appropriate vehicles are identified, the uninvested portion of the alternative asset allocation is held in bonds. As a result, the actual amount invested in bonds was above its long-term target.

Figure 13. Post Fund's Performance vs. Composite Index



\* Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93.

\*\* Since asset allocation change to 50% domestic stocks was implemented.

Figure 14. Historical Benefit

Increases Granted	Ir	icreases	Granted
-------------------	----	----------	---------

Benefit Increase
6.9%
4.0
5.1
4.3
4.6
6.0
4.0
6.4
8.0
10.1

\* Payable beginning January 1, of the following calendar year.

\*\* Benefit increase granted under the revised formula.

#### Investment Management

In July 1993, assets of the Post Fund were transferred to external managers. In order to gain greater operating efficiency, the Basic and Post Funds have shared the same domestic stock, bond and international stock managers since that time.

More information on the structure, management and performance of these pools of managers is included in the **Investment Pool** section of this report.

#### **Investment Performance**

#### **Total Fund Performance**

As stated earlier, the Post Fund is expected to exceed the return of a composite of market indices over a five year period. Since the asset allocation of the Fund changed dramatically during fiscal year 1993, performance relative to this standard is available only since fiscal year 1994. The Post Fund's performance exceeded its composite market index by 0.4 percentage point for the most recent four year period.

More information on the performance of each asset class is included in the **Investment Pool** section of this report.

Actual returns relative to the total fund composite index over the last four years are shown in Figure 13.

#### **Benefit Increase**

The Post Fund will provide a benefit increase of 10.1% for fiscal year 1997 payable beginning January 1, 1998. As noted earlier, this increase is comprised of two components:

- Inflation component of 2.1% which is equal to 100% of the reported Consumer Price Index for wage earners (CPI-W) increase for the twelve months ending June 30, 1997. (This is the same inflation index used to calculate increases in Social Security payments).
- Investment component of 8.0% This represents a portion of the market value increase that exceeds the amount needed to cover the actuarial assumed rate of return (5.0% in FY97 and 6.0% beginning FY98) and the inflation adjustment.

Benefit increases granted for the past ten years are shown in Figure 14. The 10.1% increase granted for fiscal year 1997 represents the fifth post retirement adjustment provided under the revised benefit increase formula described above. Prior to fiscal year 1993, the benefit increase formula was dependent on the level of excess realized income generated by the Post Fund.

More detail on the calculation for the fiscal year 1997 benefit increase is included in the **Statistical Data** section.

To gain greater operating efficiency, external managers are grouped into several "Investment Pools" which are segregated by asset class. The various retirement funds participate in one or more of the pools corresponding to their individual asset allocation strategies.

The Basic Retirement Funds, Post **Retirement Fund and Supplemental** Investment Fund share many of the same stock and bond managers. This is accomplished by grouping managers together, by asset class, into several Investment Pools. The individual funds participate in the Investment Pools by purchasing "units" which function much like shares of a mutual fund.

This investment management structure allows the State Board of Investment (SBI) to gain greater operating efficiency within asset classes and to keep management costs as low as possible for all participants.

## Domestic Stock Pool

The Basic Retirement Funds have participated in the Domestic Stock Pool since its inception in January 1984. The Post Retirement Fund has participated in the Pool since July 1993. In addition, the Growth Share Account in the Supplemental Investment Fund has utilized a portion of the Pool since April 1988.

As of June 30, 1997, the dollar value of each fund's participation in the Pool was:

**Basic Funds** \$8.2 billion (active, passive and semi-passive)

\$7.3 billion Post Fund (active, passive and semi-passive)

Growth Share		
Account	\$206 million	
(active and semi-passive)		

#### Management Structure

The SBI uses a three-part approach to the management of the Domestic Stock Pool:

- Active Management. At the end of fiscal year 1997, approximately 40% of the Domestic Stock Pool was actively managed by a group of 11 external money managers. The assets allocated to each manager ranged from \$200-900 million.

> In addition, the actively managed segment of the Pool includes 8 managers in the SBI's Emerging Manager Program. Each Emerging Manager has a portfolio of \$40 million or more which gives the entire Emerging Manager Program about the same weight as an average single manager in the rest of the active manager program.

Semi-Passive Management. At the end of fiscal year 1997, approximately 29% of the Domestic Stock Pool was managed by a group of 3 semipassive external money managers with portfolios of approximately \$1.5 billion each.

Passive Management. At the end of fiscal year 1997, approximately 31% of the Stock Pool was managed passively by a single manager.

The goal of the *actively managed* segment of the Domestic Stock Pool is to add value to the asset class target which is the Wilshire 5000. Each active manager is expected to add incremental value over the long run relative to a customized benchmark which reflects its unique investment approach or style.

This type of active manager structure can result in misfit or style bias. "Misfit" can be defined as the difference between the aggregate benchmarks of the active managers and the asset class target. Historically, the SBI experienced three major areas of misfit in its active manager group:

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

The SBI attempts to compensate for active manager misfit through the use of a completeness fund. A "completeness fund" is so named because it is intended to fill in, or complete, any areas of market exposure that are not being covered by the aggregate benchmarks of the active managers. This strategy is designed to allow the value added by individual active managers to benefit the total Domestic Stock Pool. It should also result in a decrease in the volatility of returns for the entire Stock Pool relative to the asset class target since it negates the impact of

style bias within the active manager group.

The SBI's completeness fund had been passively managed since it was first introduced in October 1990 until December 1994. During fiscal year 1995, the completeness fund moved from being entirely passively managed to a structure that was half passive/half semi-passive. At the start of fiscal year 1996, the completeness fund was allocated entirely to semipassive management. Semi-passive approaches provide the potential to outperform the completeness fund benchmark, but also incorporate procedures that constrain the level of risk/volatility relative to the benchmark.

A description of each domestic stock manager's investment approach is included in the **Investment Manager Summaries** section.

#### FY 1997 Changes

Two domestic stock managers (Waddell & Reed and Kennedy Capital Management) were deleted from the active manager group during the fiscal year.

During fiscal year 1997, several current active managers modified their investment processes in order to increase the probability of producing value added in their portfolios. Six managers (Alliance, American Express, Forstmann, Franklin, Lincoln, and Oppenheimer) were asked to increase the level of active risk in their portfolio resulting in a reduction in the number of issues held at any one time. In effect, these managers now hold more concentrated portfolios and make larger bets on their "best" stock ideas.

#### **Investment Performance**

A comprehensive monitoring system has been established to ensure that the many elements of the Domestic Stock Pool conform to the SBI's investment policies. Customized performance benchmarks have been developed for each active and semipassive stock manager. These benchmarks enable the SBI to evaluate the managers' results, both individually and in aggregate, with respect to risk incurred and returns achieved.

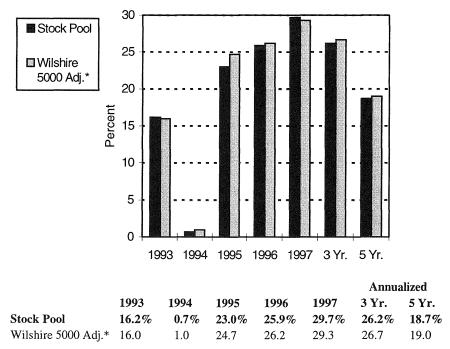
Two primary long run *risk objectives* have been established for the domestic stock managers:

Investment Approach. Each manager (active, semi-passive, or passive) is expected to hold a portfolio that is consistent, in terms of risk characteristics, with the manager's stated investment approach. In the short run, the active stock managers may depart from their risk targets as part of their specific investment strategies.  Diversification. Each active domestic stock manager is expected to hold a highly nondiversified portfolio, while the passive and semi-passive managers are expected to hold highly diversified portfolios.

The domestic stock managers successfully fulfilled their long-term risk objectives during fiscal year 1997. In general, the managers constructed portfolios consistent with their stated investment approaches and maintained levels of diversification that were appropriate to their respective active, semipassive and passive approaches.

The Board's *return objectives* for its active and semi-passive stock managers are measured against the performance of customized indices constructed to represent a manager's specific investment approach. This type of custom index is commonly

Figure 15. Domestic Stock Pool Performance FY 1993-1997



\* Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93.

referred to as a "benchmark portfolio." A benchmark portfolio takes into account the equity market forces that at times favorably or unfavorably impact certain investment styles. Thus, an individual benchmark is a more appropriate return target against which to judge a manager's performance than a broad market index.

Individual active managers are expected to exceed their custom benchmark by 0.50-1.00 percentage point annualized, over time. The semi-passive managers are expected to exceed their benchmark by 0.15-0.30 percentage point, over time, and the passive manager is expected to track its market index within  $\pm$  0.60 percentage point annually.

In aggregate, the Domestic Stock Pool outperformed the Wilshire 5000 by 0.4 percentage point for the year. The active, semi-passive and passive components all outperformed their respective benchmarks. Relative to their aggregate benchmarks, the active manager group added value by overweighting large "blue chip" muti-national companies and underweighting small and mid capitalization stock issues. The semipassive managers added value by continuing to invest in stocks with high earnings expectations and the passive segment benefited from positive tracking during the year.

Figure 15 provides more detail on the historical performance of the entire Pool. Individual manager performance for fiscal year 1997 is shown in Figure 16.

While the returns for the Pool substantially exceeded the historical returns available from the domestic stock market, individual manager performance relative to their respective benchmarks was mixed. Six active managers outperformed their benchmarks while five under performed. Two of the three semi-

Figure 16. Domestic Stock Manag	er Performance FY 1	997
	Actual Return	Benchmark Return
Active Managers		
Alliance Capital	41.7%	35.2%
Brinson Partners	32.7	28.6
Forstmann Leff	30.0	26.8
Franklin Portfolio	31.6	26.2
GeoCapital	9.1	5.6
Investment Advisers	15.1	27.5
IDS Advisory	25.4	34.5
Independence Associates	28.8	34.8
Lincoln Capital	32.1	35.8
Oppenheimer	37.1	31.4
Weiss Peck & Greer	1.3	8.5
Semi-Passive Managers		
Franklin Portfolio	33.7	32.5
J.P. Morgan	32.1	32.5
Barclays Global Investors	33.1	32.5
Passive Manager		
Barclays Global Investors	29.9	29.3
Aggregate Stock Pool*	29.7	
Asset Class Target Wilshire 5000	29.3	
* Includes Emerging Manager Pro	ogram, see below.	

Fierma	17	Emanaina	Mangaan	Daufannaa	EV	1007
rigure	1/.	Linerging	manager	Performance	ГІ	1991

	Actual Return	Benchmark Return
CIC Asset Management	29.0%	32.8%
Cohen Klingenstein & Marks	37.8	32.8
Compass Capital	24.4	32.3
New Amsterdam	34.6	28.2
Valenzuela Capital	42.5	26.8
Wilke/Thompson	-7.2	10.9
Winslow Capital	18.8	28.0
Zevenbergen Capital	25.8	27.5

passive managers outperformed the completeness fund benchmark and the passive manager outperformed its target, the Wilshire 5000 index.

Performance data for the individual managers in the Emerging Manager Program are presented in Figure 17. The emerging managers also had mixed performance for the fiscal year. Three managers outperformed their benchmarks and five managers underperformed.

Historical information on individual manager performance and portfolio characteristics is included in the

**Statistical Data** section. Section II of the Annual Report provides **Summarized Asset Listings** for each manager and the Pool in aggregate.

## **Bond Pool**

The Basic Retirement Funds have participated in the Bond Pool since its inception in July 1984. The Post Retirement Fund has participated in the Pool since July 1993. In addition, the Bond Market Account in the Supplemental Investment Fund has utilized portions of the Pool since July 1986.

As of June 30, 1997, the dollar value of each fund's participation in the Pool was:

Basic Funds \$3.6 billion (active and semi-passive)

Post Fund \$4.2 billion (active and semi-passive)

Bond Market \$27 million Account (active and semi-passive)

#### Investment Management

The SBI uses a two-part approach to the management of the Bond Pool:

- Active Management. No more than one-half of the Bond Pool will be actively managed. At the end of fiscal year 1997, approximately 51% of the Bond Pool was actively managed by a group of six external money managers with portfolios of \$350 million-\$1.1 billion each.
- Semi-Passive Management. At least one-half of the assets allocated to the Bond Pool will be managed by semi-passive managers. At the end of fiscal year 1997, approximately 49% of the bond segment was invested by three managers with

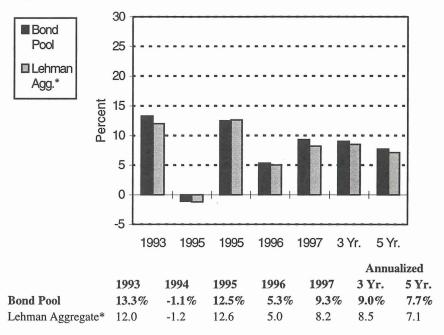
portfolios of approximately \$1.3 billion each.

The group of *active* bond managers was selected for its blend of investment styles. Each of the managers focuses on high quality fixed income securities across all sectors of the market. 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 Pool as a deflation hedge, the active managers are restricted regarding the minimum average life of their portfolios. This requirement is designed to prevent the total Pool from assuming an excessively short-lived position and thus, severely diluting its deflation hedge capacity. In addition, to avoid extreme variability in total returns, the SBI constrains the maximum duration (a measure of average life) of the managers' portfolios to a band of three to seven years. The active bond managers focus on high quality (BAA or better) bonds. Several of the managers are permitted to invest a limited portion of their portfolios in non-US issues and BB- and B- rated dollar denominated debt. The managers use this additional authority on a tactical basis.

The goal of the *semi-passive* managers is to add incremental value to the Lehman Brothers Aggregate Bond Index through the superior selection of bonds for the portfolios. The managers adhere very closely to characteristics of the Lehman Aggregate and essentially match its duration and maturity structure. 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

Figure 18. Bond Pool Performance FY 1993-1997



\*Lehman Brothers Aggregate Bond Index. Prior to July 1994, the Salomon Broad Investment Grade Bond Index was used.

managers seek to exceed the performance of the index, the possibility exists that the semipassive approach may slightly under perform the target index during some periods.

A description of each bond manager's investment approach is included in the **Investment Manager Summaries** section.

#### FY 1997 Changes

The active and semi-passive structure and the individual managers in the Bond Pool were unchanged during fiscal year 1997.

#### **Investment 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. As noted earlier, the managers are restricted in terms of the duration of their portfolios and the quality of their fixed income investments. The active and semi-passive bond managers successfully fulfilled their long-term risk objectives during fiscal year 1996. In general, the managers constructed portfolios

Figure 19. Bond Manager Performance FY 1997 Actual Return **Active Managers BEA** Associates 10.3% Investment Advisors 8.3 **IDS** Advisory 8.8 Miller, Anderson & Sherrerd 10.9 Standish, Ayer & Wood 10.0 Western Asset Management 10.9 **Semi-Passive Managers** BlackRock 8.7 Goldman Sachs 8.7 Lincoln Capital 8.2 9.3 **Aggregate Bond Pool** Asset Class Target 8.2 Lehman Aggregate

consistent with their stated investment approaches and maintained appropriate levels of quality and duration. The returns of each of the Board's bond managers is compared to the Lehman Aggregate. Due to the broad diversification of each manager, customized benchmarks are not deemed necessary for the bond managers at this time. Individual active managers are expected to exceed the target by 0.25-0.50 percentage point annualized, over time, and each semi-passive manager is expected to exceed the target by 0.15-0.25 percentage point annualized, over time.

In aggregate, the Pool exceeded the Lehman Aggregate by 1.1 percentage point for the most recent fiscal year. Relative to the index, the Pool benefited from overweightings in corporates and mortgages with a commensurate underweighting in Treasuries. Exposure to high yield and international bonds added value as well. Performance over longer time periods also has been positive, exceeding the index by 0.5 percentage point annualized over the last three years and 0.6 percentage point over the last five years. In general, the decision to hold portfolios with a modestly longer duration than the market accounted for the out performance over the longer term.

The relative performance of the managers was very good over fiscal year 1997. Each of the managers exceeded or matched the benchmark. The managers who had authority to include high yield or international bonds in their portfolios added the most value relative to their target.

Figure 18 shows historical performance for the entire Pool. Individual manager performance for fiscal year 1997 is shown in Figure 19. Historical information on individual manager performance and portfolio characteristics is included in the **Statistical Data** section. Section II of the Annual Report provides **Summarized Asset Listings** for each manager and the Pool in aggregate.

## International Stock Pool

The SBI began its international stock program in October 1992. The Basic Retirement Funds have participated in the International Stock Pool since its inception. The Post Retirement Fund began utilizing the Pool in October 1993. The International Share Account in the Supplemental Investment Fund has participated in the Pool since September 1994.

On June 30, 1997 the dollar value of each fund's participation in the International Stock Pool was:

Basic Funds \$2.6 billion (active and passive)

Post Fund \$2.3 billion (active and passive)

International \$21 million Share Account (active and passive)

#### Management Structure

The SBI uses a two part approach to the management structure of the International Stock Pool:

 Active Management. At least one-half of the International Stock Pool will be actively managed. At the end of fiscal year 1997, approximately 43% of the Pool was actively managed by a group of 7 external money managers with portfolios ranging from \$100-\$400 million each. Four of these managers focus on developed markets and three are emerging

markets specialists. (The allocation to active management was below its target at the end of the fiscal year due to two manager terminations during the year.)

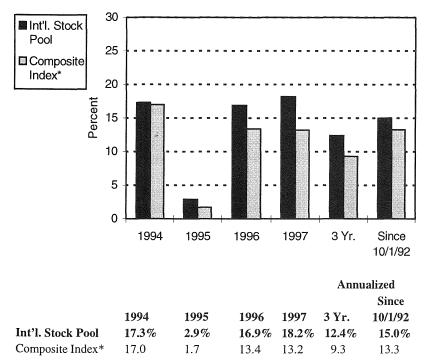
— Passive Management. No more than one-half of the International Stock Pool will be passively managed. At the end of fiscal year 1997, approximately 57% of the International Stock Pool was passively managed by a single manager.

The International Stock Pool is designed to add value to the asset class target which is blended index weighted 87% to the Morgan Stanley Capital International (MSCI) index of Europe, Australia and the Far East Free (EAFE Free) and 13% to MSCI Emerging Markets Free. The four *active* managers who focus on developed markets (Brinson, Marathon, Rowe Price-Fleming, and Scudder) use a variety of investment approaches in an attempt to maximize market value and outperform the EAFE Free index, over time. These managers address currency management as part of their investment process. Their views on currency may be factored into their country and security selection or they may explicitly hedge currency exposure on an opportunistic basis.

The remaining three active managers (Genesis, Montgomery and City of London) are emerging markets specialists. They are expected to add incremental value, over time, to the MCSI Emerging Markets Free index of markets in developing countries throughout the world.

The *passive* manager in the International Stock Pool is State

Figure 20. International Stock Pool Performance



\* EAFE Free through 4/31/96. Composite of EAFE-Free and Emerging Markets Free since 5/1/96.

Street Global Advisors. Their portfolio is designed to consistently and inexpensively track the EAFE Free index. The currency exposure of the index fund is managed in a dynamic hedging program that is designed to avoid currency losses during periods of US dollar strength. The manager of this *currency overlay* program is Record Treasury Management.

A description of each international stock manager's investment approach is included in the **Investment Manager Summaries** section.

#### FY 1997 Changes

During fiscal year 1997, the Board elected to terminate its relationship with two developed markets managers (Barings Asset Management and Templeton Investment Counsel).

During the prior year, the SBI aded an allocation within the Pool to emerging markets specialists. At the close of fiscal year 1996, approximately half of the emerging markets program had been funded. During fiscal year 1997, a third manager (City of London) was added and the remainder of the emerging markets allocation was invested among the threeemerging markets specialists.

#### **Investment Performance**

Similar to the Domestic Stock Pool, two long run *risk objectives* have been established for the international stock managers:

- Investment Approach. Each manager (active or passive) is expected to hold a portfolio that is consistent with the manager's stated investment approach.
- Diversification. Each active manager is expected to hold a highly non-diversified portfolio, while the index manager is expected to hold a well

diversified portfolio which tracks its target index.

The international stock managers successfully fulfilled their long-term risk objectives during fiscal year 1997. In general, the managers constructed portfolios consistent with their stated investment approaches and maintained appropriate levels of diversification.

At the present time, the Board's *return objectives* for the international stock program are stated relative to the Morgan Stanley Capital International (MSCI) indices. The indices are capitalization weighted and measured in U.S. dollar terms, unhedged. While the Board would prefer to measure performance relative to customized benchmarks

similar to those used for domestic stock managers, such customized benchmarks are not yet available for international assets. In the future, SBI staff, in conjunction with the SBI's consultants and managers, intend to develop more appropriate benchmarks for the international managers within the Pool.

Individual active managers are expected to exceed their index by at least 1.00 percentage point annualized, over time, and the index manager is expected to track its index  $\pm 0.50$  percentage point, annually. The currency overlay program is expected to add value to the passively managed portion of the pool in periods when the US dollar strengthens relative to major currencies. The actual value added

Figure 21. International Manager Performance FY 1997

	Actual Return	Benchmark
Active EAFE Managers		
Brinson Partners	18.1%	12.8%
Marathon Asset Mgmt.	9.6	12.8
Rowe Price-Fleming	18.4	12.8
Scudder, Stevens & Clark	21.3	12.8
Active Emerging Markets Managers		
City of London	23.1*	20.3*
Genesis Asset Managers	22.0	12.8
Montgomery Asset Mgmt.	21.8	12.8
Passive EAFE Manager		
State Street Global Advisors	13.0	12.8
Equity Only Aggregate	15.6	
Aggregate International Pool**	18.2	
Asset Class Target ***	13.2	

\* Manager retained November 1, 1996. Performance reflects Nov. 1996-June 1997 only.

- \*\* Includes impact of currency overlay gain/loss. During fiscal year 1997, the overlay program implemented by Record Treasury Management added 5.1% to the passive portfolio. The impact on the total program was positive 2.4%.
- \*\*\* At the beginning of the fiscal year, the asset class target/composite index was weighted 92% EAFE Free and 8% Emerging Markets Free. At the close of the fiscal year, the composite was weighted 87% EAFE Free and 13% Emerging Markets Free.

through the currency overlay program will be correlated to the extent of the US dollar's rise in any given period.

Performance results for the International Stock Pool are shown in Figure 20. In aggregate, the Pool outperformed the target for the year by 5.0 percentage points. Performance since inception in October 1992 (4.75 years) has exceeded the index by 1.7 percentage points annualized.

Individual manager performance during fiscal year 1997 is shown in Figure 21. With one exception, the active managers outperformed their respective indices for the year by substantial margins. The Pool also benefited from positive tracking error in the passively managed portion of the program. The currency overlay program added significant value to the passive portfolio and compensated for the effects of foreign currency depreciation against the US dollar in that portion of the pool.

More information on the performance and portfolio composition of individual managers is included in the **Statistical Data** section. Section II of the Annual Report provides **Summarized Asset Listings** for each manager and the Pool in aggregate.

## Alternative Investment Pools

Like the stock and bond segments, alternative assets (private equity, real estate and resource fund investments) are also managed on a pooled basis. However, due to the nature of these investments, separate pools have been established for the Basic and Post Retirement Funds and each fund owns 100% of the assets in its respective pool.

#### **Statutory Constraints**

The statutory constraints regarding the SBI's investments to alternative assets are the same for both the Basic and Post Funds:

- Real Estate. State statutes authorize investments in real estate through commingled funds, limited partnerships and trusts, including real estate investment trusts (REIT's). Regardless of its form, each investment must involve at least four other participants and the SBI's investment may not exceed 20% of a given investment. State law does not permit the SBI to invest in real estate through direct investments, separate accounts or individual transactions.
- Private Equity. By law, the SBI is authorized to invest in private equity through limited partnerships and corporations. As with real estate investments, each private equity investment must involve at least four other investors, and the Board's investment may not exceed 20% of a particular partnership or corporation.
- Resource Funds. The SBI invests in oil and gas partnerships specifically structured for pension funds and other tax-exempt investors. As with real estate and private equity investments, there must be four other investors and the Board may invest no more than 20% of a partnership's total capital.

### Alternative Investments Basic Funds

The Basic Retirement Funds began making investments in alternative assets in the early 1980's. Given their long investment time horizon, the Basic Funds are especially well suited to alternative investments that are equity oriented and focus on long-term capital gains. As a result, up to 15% of the Basic Retirement Funds are targeted for alternative investments. A breakdown of the segment is shown in Figure 22. As of June 30, 1997 the market value of current alternative investments was \$1.5 billion, or 9.3% of the Basic Funds.

Descriptions of each of the Basic Funds' alternative investments are included in the **Investment Manager Summaries** section.

#### **Real Estate**

By investing in several open-end and closed-end commingled funds, the Basic Funds have 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 US real estate market and, as such, is expected to earn at least real estate 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 manager's experience, investment strategy and performance history.

*During fiscal year 1997,* the SBI approved one new real estate commitment in TA Realty Associates Fund IV. The SBI will continue to review and add new real estate investments as attractive opportunities are identified.

#### Private Equity Pool

The Basic Funds maintain a private equity portfolio that is broadly diversified across three dimensions: location, industry type and stage of development of individual portfolio companies. Prospective private equity managers are reviewed and selected based, primarily, on the manager's experience, investment strategy, diversification potential and performance history.

During fiscal year 1997, the Board approved commitments to IAI U.S. Venture fund II, Piper Jaffray Healthcare Fund II, and Contrarian Capital Fund II. The SBI will continue to review and add new private equity investments, as attractive opportunities are identified, to replenish commitments that will expire within the next five years.

#### **Resource Fund Pool**

The oil and gas partnerships in the Basic Retirement Funds concentrate their investments in producing properties and royalty interests that are diversified geographically and/or geologically. Resource investments are selected based on the manager's experience, investment strategy and performance history.

*During fiscal year 1997*, the SBI to continued to review resource investments for possible inclusion in the Pool but did not make new commitments in this area.

#### Investment Performance

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 fiscal year 1997, the SBI's real estate pool under performed the index and exceeded the rate of inflation (SBI real estate 7.7%, Wilshire Real Estate Index 9.7%, CPI 2.3%). Comparisons over the last five years show that the real estate pool outperformed the real estate index but trailed the rate of inflation (SBI real estate 2.1% annualized, Wilshire index 1.7% annualized, CPI 2.7% annualized). As the above data illustrate, the real estate market as a whole is just beginning to strengthen after a lengthy period of negative performance.

The SBI's *private equity* pool provided a 28.4% return in fiscal year 1997 and 16.6% annualized over the last five years. The *resource* (oil and gas) pool returns are 32.0% for the year and 14.0% annualized over the last five years.

At this time, benchmarks have not been established for the private equity 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 private equity markets preclude comprehensive performance evaluation. In the future, as markets for these asset classes become more institutionalized, the SBI hopes to integrate appropriate performance standards for these assets into its performance analysis.

#### Alternative Investments Post Fund

The Post Retirement Fund made its first commitment to alternative assets during fiscal year 1994. The Post Fund has a somewhat shorter investment time horizon than the Basic Funds and therefore is best suited to investments that will generate a fairly high level of current income. The Board has allocated up to 5% of the Post Retirement Fund to yield-oriented alternative investments. As of June 30, 1997, the market value of the Post Fund's alternative investments was \$95.4 million, 0.7% of the Post Fund.

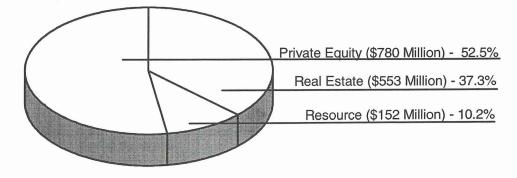
Descriptions of each of the Post Fund's alternative investments are included in the **Investment Manager Summaries** section.

*Yield-oriented investments* (e.g. business loan participations, mortgage loan participations, and income producing private

placements) provide additional vehicles to obtain both higher yield and long-term capital appreciation. Typically, these investments are structured more like fixed income securities with an opportunity to participate in the appreciation of the underlying assets. While these investments may have an equity component, they display a return pattern more like a bond. As such, they will help to reduce the volatility of the total portfolio, but should also provide the opportunity to generate higher returns relative to bonds.

During fiscal year 1997, the Board approved two commitments for the Post Fund: Summit Subordinated Debt fund II and Westmark Commercial Mortgage Fund III. Both commitments are follow-on funds with existing managers. While these investments cross asset class lines (the first is private equity, the second is real estate), they both meet the criteria of yield oriented vehicles. The SBI will continue to review additional investments for the Post Fund in order to move closer to the 5% allocation target in future years.

Figure 22. Basic Funds' Alternative Investments as of June 30, 1997



Note: Percentages may differ slightly due to rounding of values.

The Supplemental Investment Fund is a multi-purpose investment program that offers a range of investment options to state and local public employees. The Fund serves more than 36,000 individuals who participate in defined contribution or supplemental retirement savings plans. On June 30, 1997, the market value of the entire fund was \$990 million.

The different participating groups use the Supplemental Fund for a variety of purposes:

- It functions as the sole investment manager for all assets of the Unclassified Employees Retirement Plan, Public Employees Defined Contribution Plan and Hennepin County Supplemental Retirement Plan.
- It is one investment vehicle offered to public employees as part of the state's Deferred Compensation Plan, as well as the Individual Retirement Account Plan and College Supplemental Retirement Plan offered by Minnesota State Colleges and Universities.
- It serves as an external money manager for a portion of some local police and firefighter retirement plans.

## **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 Supplemental Fund offers seven different investment options (See Figure 23). The objectives, asset allocation, management and performance of each account in the Fund are explained in the following sections.

#### 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 share value. In the Income Share Account, the Growth Share Account, the Common Stock Index Account, the International Share Account and the Bond Market Account, shares are priced monthly based on the market value of each 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 Fixed Interest Account, share values remain constant and the accrued interest income is credited to the accounts through the purchase of additional shares at predetermined intervals.

Figure 23. Accounts in the	Supplemental Investment Fund
Income Share	a balanced portfolio of stocks and bonds
Growth Share	a portfolio of actively and semi-passively managed common stocks
Common Stock Index	a passively managed common stock portfolio
International Share	a portfolio of both actively and passively managed non U.S. stocks
Bond Market	fixed income portfolio utilizing active and semi- passive management
Money Market	a portfolio of liquid, short-term debt securities
Fixed Interest	an investment option utilizing guaranteed investment contracts (GIC's)

The investment returns shown in this report are calculated using a timeweighted rate of return formula. These returns are net of investment management fees and transaction costs. They do not, however, reflect any asset-based charge deducted by the retirement systems to defray their own administrative costs.

The distribution of assets in the Supplemental Investment Fund as of June 30, 1997 is shown by Account in Figure 24 and by Plan in Figure 25. Figure 24. Composition by Account as of June 30, 1997

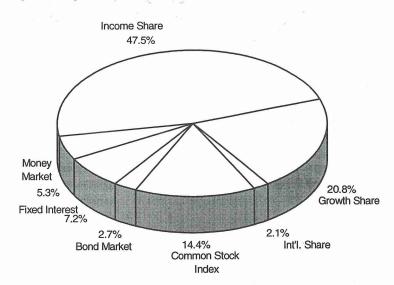
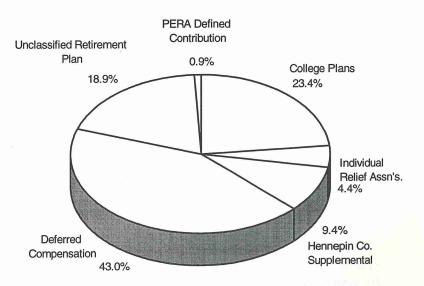


Figure 25. Participation by Plan as of June 30, 1997



## Income Share Account

#### Objective

The Income Share Account resembles the Basic and Post 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 with the following longterm asset mix: 60% domestic 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.

At the close of fiscal year 1997, the value of the Income Share Account was \$470 million.

#### Management

The Income Share Account's investment management structure combines internal and external management. SBI staff manage the fixed income segment. The common stock segment is managed externally as part of a passively managed index fund designed to track the Wilshire 5000. Since July 1995, the manager for this portion of the Account has been Barclays Global Investors.

#### Performance

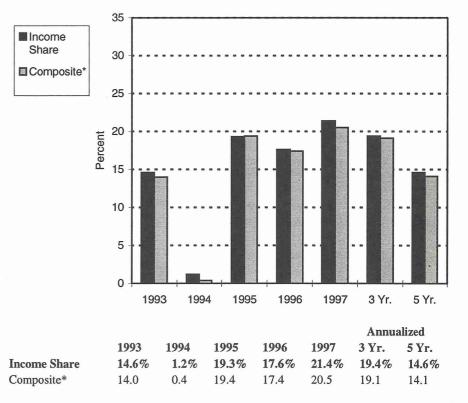
Similar to the other SBI funds which utilize a multi-manager investment structure, the Board evaluates the performance of the Income Share Account on two levels:  Total Account. The Income Share Account is expected to exceed the returns of a composite of market indices weighted in the same proportion as its long term asset allocation.

— Individual Manager. The passive stock manager is expected to track closely the performance of the Wilshire 5000 (adjusted for the SBI's liquor and tobacco restrictions through 3/31/93 and American Home Products through 10/31/93). The internal bond manager for the Account is

Figure 26. Income Share Account FY 1993-1997

expected to exceed the performance of the Lehman Brothers Aggregate Bond Index.

The Income Share Account provided a return of 21.4% for fiscal year 1997, outperforming its composite index. Over the most recent five years, the Income Share Account has also exceeded its composite. Figure 26 shows a five year history of performance results.



\*60% Wilshire 5000 Adj./35% Lehman Brothers Aggregate Bond Index/ 5% T-Bill Composite. The Wilshire 5000 has been adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93. Prior to 7/1/94, the Salomon Broad Investment Grade Bond Index was used as a component of the Composite.

## **Growth Share Account**

#### Objective

The Board has established aboveaverage capital appreciation as the primary investment objective of the Growth Share Account. To achieve this objective, the Account maintains an exposure to U.S. common stocks.

At the close of fiscal year 1997, the value of the Growth Share Account was \$206 million.

#### Management

The SBI has assigned the Growth Share Account to external active and semi-passive managers. This allocation reflects a more aggressive investment than is available through passive management. Throughout fiscal year 1997, these assets are managed by the same active and semi-passive managers utilized by the Basic and Post Retirement Funds in the Domestic Stock Pool. (Prior to fiscal year 1997, the Account used only active managers.)

#### Performance

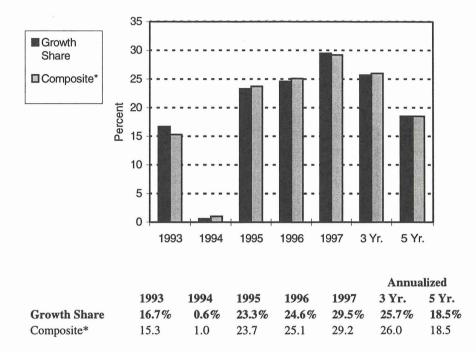
Like the Income Share Account, the Board evaluates the performance of the Growth Share Account on two levels:

- *Total Account.* The Growth Share Account is expected to exceed the returns of a composite of market indices weighted 95% stock and 5% cash.
- Individual Manager.
   Performance objectives for the individual managers are described in the Investment Pool section.

The Growth Share Account provided a return of 29.5% for the fiscal year, outperforming its composite index by 0.3 percentage point. Over the most recent five years, the Account has matched its composite index.

A five year history of performance results is shown in Figure 27.

Figure 27. Growth Share Account FY 1993-1997



\* 95% Wilshire 5000 Adj./5% T-Bill Composite. The Wilshire 5000 has been adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93.

## Common Stock Index Account

### Objective

The investment objective of the Common Stock Index Account is to generate returns that track the performance of the entire U.S. 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 domestic stocks. At the end of fiscal year 1997, it had a market value of \$143 million.

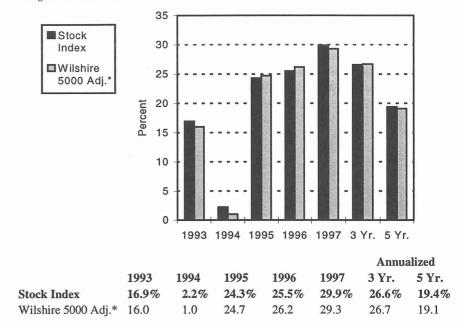
#### Management

Since July 1, 1995, the Account has been managed by Barclays Global Investors.

#### Performance

The performance objective of the Common Stock Index Account is straightforward. The Account is expected to track the performance of the Wilshire 5000 (adjusted for the SBI's restrictions on liquor and tobacco through 3/31/93 and American Home Products through 10/31/93). The SBI recognizes that the Account's returns may deviate slightly from those of the Wilshire 5000 due to the effects of management fees, timing of new contributions and tracking error.

During fiscal year 1997, the Common Stock Index Account produced a return of 29.9%, which was 0.6 percentage point above the Wilshire 5000. Over the most recent five years, the Account has exceeded its index by 0.3 percentage point annualized. Total Account results for the last five years are shown in Figure 28.



\* Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and American Home Products restriction through 10/31/93.

Figure 28. Common Stock Index Account FY 1993-1997

## International Share Account

The International Share Account was added to the Supplemental Investment Fund in September 1994. At the end of fiscal year 1997, it had a market value of nearly \$21 million.

#### Objective

The investment objective of the International Share Account is to earn a high rate of return by investing in the stock of companies outside the U.S.

Typically, a majority of the Account is invested in the four largest international markets (Japan, United Kingdom, Germany and France). Most of the remainder is invested in other well established markets in Canada, Europe and the Pacific region. In addition, a portion of the Account may be invested in developing countries or "emerging markets" around the world including those in Latin America, Asia and Africa.

#### Management

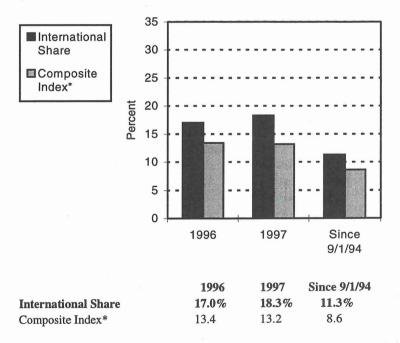
The structure of the International Share Account combines both active and passive management. Approximately one half of the Account is passively managed and is designed to consistently and inexpensively track the return of the Morgan Stanley Capital International index of Europe, Australia and the Far east (EAFE Free). The remainder of the Account is actively managed by a group of international stock managers who buy and sell stocks in an attempt to maximize market value. The Account uses the same active, passive, and currency overlay managers utilized by the Basic and Post Retirement Funds in the International Stock Pool.

#### Performance

The International Share Account is expected to exceed the performance of a composite of international indices. During fiscal year 1997, the International Share Account produced a return of 18.3%, which was 5.1 percentage points above its composite index. Since inception of the Account in September 1994 (2.83 years), returns exceeded the index by 2.7% annualized.

Total Account results since its inception are shown in Figure 29.

Figure 29. International Share Account Performance



\*EAFE Free through 4/31/96. Composite of EAFE-Free and Emerging Markets Free since 5/1/96.

## Bond Market Account

#### Objective

The Bond Market Account is invested primarily in investmentgrade government bonds, corporate bonds and mortgage securities with intermediate to long maturities. As such, it is a more conservative investment alternative than any of the accounts described in the previous sections. At the end of fiscal year 1997, the market value of the Account was \$27 million.

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 common stocks.

#### Management

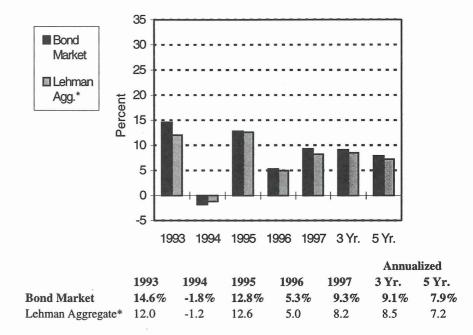
Throughout fiscal year 1997, the structure of the Bond Market Account included active and semipassive managers and mirrored the structure of the Bond Pool utilized by the Basic and Post Funds. (Prior to fiscal year 1997, the Bond Market Account used only active managers.)

#### Performance

The Bond Market Account is expected to exceed the performance of the bond market, as represented by the Lehman Brothers Aggregate Bond Index. For fiscal year 1997 the Account outperformed by 1.1 percentage point. For the most recent five years, the Account has outperformed by 0.7 percentage point annualized.

Total Account results for the last five years are shown in Figure 30.

Figure 30. Bond Market Account FY 1993-1997



\* Lehman Brothers Aggregate Bond Index. Prior to 7/1/94 the Salomon Broad Investment Grade Bond Index was the benchmark.

## 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 1997, the Money Market Account had a market value of \$52 million.

#### Management

The Account utilizes the same cash manager as the Basic and Post Retirement Funds, which is State Street Bank & 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 1997 with a 5.5% return versus a return on 91 Day Treasury Bills of 5.3%. Total account results for prior years are shown in Figure 31.

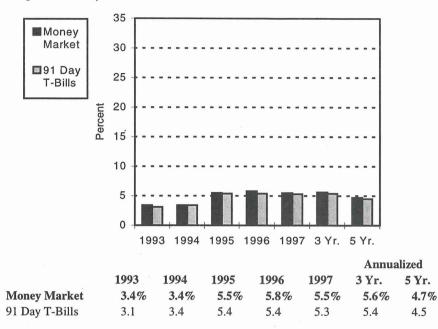


Figure 31. Money Market Account FY 1993-1997

## **Fixed Interest Account**

#### Objective

The investment objectives of the Fixed Interest Account are to protect investors from loss of their original investment and to provide competitive interest rates using somewhat longer term investments than typically found in a money market account. At the end of fiscal year 1997, the Account totaled \$71 million.

#### **Current Structure**

Contributions made on or after November 1, 1994 are invested in a pool of guaranteed investment contracts (GIC's) and GIC-type investments offered by major U.S. insurance companies and banks. The pool has a blend of maturities and a credited interest rate that changes monthly. The manager for this GIC pool since its creation has been Galliard Capital Management, a unit of Norwest Bank, N.A.

The pool provided participants with a return of 6.6% during fiscal year 1997. Since inception in November 1994 (2.67 years), the pool has returned 6.8% annualized.

#### **Previous Structure**

Prior to November 1, 1994, the SBI invested the Fixed Interest Account in separate three-year GIC's offered by major U.S. insurance companies and banks. Annually, the SBI accepted bids from banks and insurance companies that met financial quality criteria defined by State statute. Generally, the insurance company or bank who bid the highest three-year GIC interest rate was awarded the contract for the threeyear period. Participants who made contributions over the following twelve months received the fixed rate for the remainder of the three year contract period. The Minnesota Workers Compensation Assigned Risk Plan was established in 1983 to provide workers' compensation coverage to Minnesota employers rejected by a private insurance carrier. On June 30, 1997 the market value of the Plan's portfolio was \$591 million.

The Assigned Risk Plan operates as a non-profit, tax-exempt entity and is administered by the Department of Commerce. The Plan provides disability income, medical expenses, retraining expenses and death benefits, with payments being made either periodically or in lump sum. Investment management responsibility for the Assigned Risk Plan was transferred from the Department of Commerce to the State Board of Investment (SBI) effective May 1991.

#### **Investment Objectives**

The SBI recognizes that the Assigned Risk Plan has limited tolerance for risk due to erratic cash flows, no allowance for surplus, and generally short duration liabilities.

The SBI has therefore established two investment objectives for the Plan:

- to minimize mismatch between assets and liabilities
- to provide sufficient liquidity (cash) for payment of on-going claims and operating expenses

Performance relative to these objectives is measured against a composite index that reflects the asset allocation of the portfolio.

### **Asset Allocation**

The SBI believes that due to the uncertainty of premium and liability cash flows, the Plan should be invested very conservatively.

The *bond* segment is invested to fund the shorter-term liabilities (less than 10 years) and the common stock segment is invested to fund the longer-term liabilities. This creates a high fixed income allocation which minimizes the possibility of a future fund deficit. The smaller *stock* exposure provides higher expected returns and hedges some of the inflation risk associated with the liability stream.

In the future, the actual asset mix will fluctuate in response to changes in the liability stream projected by the

Figure 32. Asset Mix as of June 30, 1997

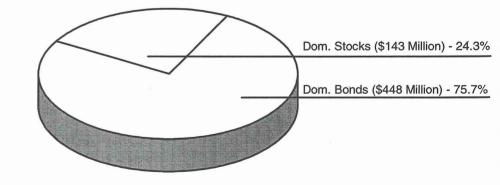
Plan's actuary and further analysis by the SBI staff.

Figure 32 presents the actual asset mix of the Assigned Risk Plan at the end of fiscal year 1996. The current long term asset allocation targets for the Fund are as follows:

Domestic Stocks	20%
Domestic Bonds	80

### Investment Management

Voyageur Asset Management has managed the bond segment of the Assigned Risk Plan since inception with the SBI. GE Investment Management has managed the equity segment since January 1995.



Note: Percentages may differ slightly due to rounding of values.

# Assigned Risk Plan

### **Bond Segment**

The bond segment is designed to fund the shorter-term liabilities of the Plan with a target duration of 3 years. The segment is actively managed to add incremental value through sector, security and yield curve decisions.

### Stock Segment

The stock segment is structured to fund the longer-term liabilities of the Plan. Currently, the equity segment is semi-passively managed with a broadly diversified portfolio of high quality, large capitalization companies. Prior to fiscal year 1995, the stock segment was actively managed.

### Investment Performance

Due to the focus on liability matching, the composition of the Assigned Risk Plan's investment portfolio is conservatively structured. While active management is utilized, return enhancement plays a secondary role.

The Assigned Risk Plan is measured against a composite index which is weighted to reflect the asset allocation of the Plan.:

— the target for the equity component is the S&P 500.

e. segment out (7.8% ARP

 the target for the fixed income component reflects the duration target established for the bond segment (approximately 3 years) as well as the manager's suggested sector allocation.

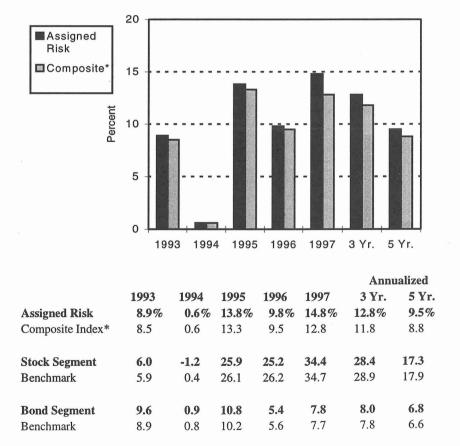
During fiscal year 1997, the *bond* segment outperformed its benchmark (7.8% ARP vs. 7.7% benchmark). The *stock* segment also underperformed its benchmark (34.4% ARP vs. 34.7% benchmark).

*Overall,* the Assigned Risk Plan provided a return of 14.8% for fiscal year 1997, outperforming its composite index by 2.0 percentage points, annualized. The stock segment was overweighted during much of the year. Due to the strong performance of stocks relative to bonds, the total fund outperformed its composite index for the period despite the underperformance of the stock segment noted above.

Over the last five years, the total portfolio has outperformed its composite index by 0.7 percentage point, annualized. The outperformance was attributable to the portfolio's overweighting in stocks in the last two fiscal years as well as above benchmark performance in the bond segment of the portfolio during the entire period.

Historical performance results are presented in Figure 33.

#### Figure 33. Assigned Risk Plan Performance FY 1993-1997



\*Weighted 20% stocks, 80% bonds since 11/93.

Weighted 15% stocks, 85% bonds prior to 11/93.

# Permanent School Trust Fund

The 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, lake shore and other leases are invested in the Fund. Income generated by the Fund's assets is used to offset state school aid payments. On June 30, 1997 the market value of the Fund was \$437 million.

#### **Investment Objective**

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.

### Constraints

The Fund's investment objectives are influenced by the legal provisions under which its investments must be managed. These provisions require that the Fund's principal remain inviolate. 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 dividend income must be distributed in the year in which it is earned.

distributed. Finally, all interest and

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 volatility. The SBI, therefore, has invested the Fund's assets to produce the maximum amount of current income, within the constraint of maintaining adequate portfolio quality.

# Asset Allocation

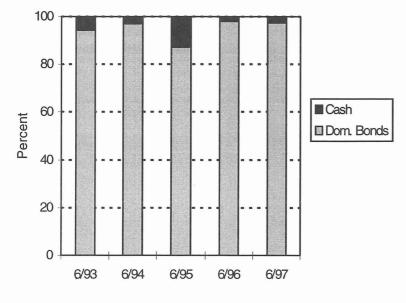
The SBI has maximized current income by investing all of the Permanent School Trust Fund's assets in fixed income securities.

The SBI has had a strong incentive not to invest in equity assets:

- 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, common stock price volatility cannot be smoothed out by including past realized capital gains in spendable income.

Legislation was enacted during fiscal year 1992 to change the amortization period for realized gains and losses from five to ten years. This change makes equities a more attractive investment for the Fund. The SBI hopes to re-introduce equities to the portfolio in future years in order to grow the principal over time. However, since this change would reduce spendable income over the near term, the transition could not

# Figure 34. Historical Asset Mix FY1993-1997



# Permanent School Trust Fund

occur without the knowledge and agreement of the Legislature.

During the 1995 Legislative Session, "rider" language was added to legislation which will allow equities to be introduced into the Fund when income levels reach a predetermined level. Due to declining bond vields during fiscal year 1996 and 1997, the income target was not reached. Therefore, the fund remained invested in fixed income securities throughout fiscal year 1997.

Historical asset mix data for the Fund are shown in Figure 34.

#### FY 1997 Changes

As noted earlier, the Permanent School Fund has been invested entirely in fixed income securities for more than a decade. While this asset allocation maximized current income, it limits the long term growth of the Fund and will cause the income stream to lose value in inflation adjusted terms, over time.

Both issues could be addressed by reintroducing equities to the Fund's asset mix. While this would be beneficial over the long term, such a move would reduce income over the short term and therefore has budgetary implications for the state. As a result, such an asset allocation change cannot be implemented without the consent of the executive and legislative branches.

During fiscal year 1997, SBI staff worked with the Department of Finance to prepare a budget initiative to address this issue. The initiative received the Governor's recommendation and was incorporated into the education budget presented to the Legislature during the 1997 Session. The proposal was favorably received and was deemed approved upon passage of the K-12 education finance bill during the 1997 First Special Legislative Session. As a result, the

Fund will move to a 50% stock/50% fixed income allocation at the start of fiscal year 1998.

### Investment Management

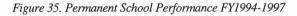
SBI staff manage all assets of the Permanent School Fund. Given the unique constraints of the Fund, management by SBI staff is considered to be the most cost effective at this time.

Prior to fiscal year 1994, staff used a "buy-and-hold" laddered maturity approach to manage the portfolio. As such, the portfolio was dominated by long duration Treasury issues to minimize reinvestment risk and reduce the chance of realizing any losses which would negatively impact spendable income.

Due to the statutory changes regarding amortization of gains and losses, staff moved the portfolio to a more traditional active bond

Total Fund

Lehman Agg.\*



16

management approach during fiscal year 1994. This approach includes more corporate and mortgage securities as well as a shorter overall duration but should maintain or increase the yield for the Fund. At the same time, the structural change was compatible with the long range goal of reintroducing equities into the total portfolio.

### **Investment Performance**

For fiscal year 1997, the Fund produced a total rate of return of 8.5% which was 0.3 percentage point higher than the return provided by the Lehman Aggregate Bond Index. On June 30, 1997, the Fund's bond portfolio had a duration (a measure of average life) of 4.7 years which matched the duration of the Lehman Aggregate.

The total return for the Fund for the most recent five year period was calculated at 8.0% annualized. It

5 Yr.

8.0%

7.1

14 12 Lehman 10 Agg.\* 8 Percent 6 4 2 0 -2 -4 1994 1995 1996 1997 3 Yr. 5 Yr. Annualized 1996 1997 3 Yr. 1994 1995 9.2% **Total Fund** -3.1% 14.1% 5.1% 8.5% 8.5 5.0 8.2

\* Lehman Brothers Aggregate Bond Index. Prior to 7/1/94, the Salomon Broad Investment Grade Bond Index was used.

12.6

-1.2

# Permanent School Trust Fund

should be noted that total rate of return was not an appropriate measure of the buy-and-hold strategy prior to fiscal year 1994.

On June 30, 1997, the Fund had the following characteristics:

Duration	4.7 years
Current Yield	7.22%
Average Quality	AAA

# Spendable Income

Spendable income generated by the portfolio over the last five fiscal years is shown below:

<b>Fiscal Year</b>	Millions
1993	\$34
1994	\$33
1995	\$31
1996	\$31
1997	\$30

# **Environmental Trust Fund**

The Environmental Trust Fund was established in 1988 by the Minnesota Legislature to provide a long-term, consistent and stable source of funding for activities that protect and enhance the environment. On June 30, 1997 the market value of the Fund was \$179 million.

In 1990, a constitutional amendment was approved which mandates that 40 percent of the net proceeds from the state lottery be credited to the Fund until the year 2001. The Legislature may fund projects from a portion of revenue deposited in the Fund through 1997 and, thereafter, from earnings on the principal of the Fund. By statute, the State Board of Investment (SBI) invests the assets of the Environmental Trust Fund.

### **Investment Objective**

The Environmental Trust Fund's investment objective is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity.

#### Investment Constraints

The Fund's investment objectives are influenced by the legal provisions under which its investments must be managed. As with the Permanent School Fund, these provisions require that the Fund's principal remain inviolate. 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.

### **Asset Allocation**

By 1993, the Fund had received sufficient contributions to warrant an investment policy that incorporated allocations to longer-term assets such as stocks and bonds. SBI staff worked with the Legislative Commission on Minnesota Resources to establish an asset allocation policy that is consistent with the Commission's goals for spendable income and growth of the Fund.

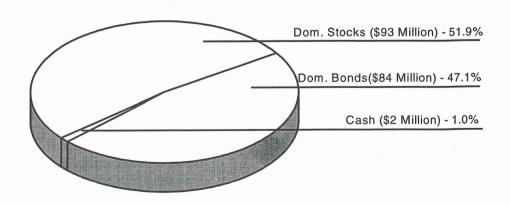
Over the long-term, the principal of the Fund will be invested in a balanced portfolio of 50% common stocks and 50% bonds. The Commission endorsed this approach in a resolution passed on February 6, 1992. However, prior to this resolution, the Legislature enacted spending plans for fiscal year 1993

Figure 36. Asset Mix as of June 30, 1997

that required a higher level of income than could be generated by a balanced portfolio of stocks and bonds. As a result, the Commission agreed with the SBI staff's recommendation to invest the portfolio entirely in fixed income securities until the end of fiscal year 1993.

During fiscal year 1994, the SBI introduced equities into the portfolio and moved to the targeted 50% allocation to domestic common stocks. This allocation was maintained throughout fiscal years 1995-1997.

Figure 36 presents actual asset mix of the Environmental Trust Fund at the end of fiscal year 1997. The current long term asset allocation targets for the Fund are:



Note: Percentages may differ slightly due to rounding of values.

# **Environmental Trust Fund**

Domestic Stocks	50%
Domestic Bonds	48
Cash	2

#### Investment Management

SBI staff manage all assets of the Environmental Trust Fund (ETF). Given the unique constraints of the Fund, along with its relatively small size, management by SBI staff is considered to be the most cost effective at this time.

#### Stock Segment

The *stock* segment of the Fund is passively managed to track the performance of the S&P 500.

#### **Bond Segment**

The bond segment is actively managed to add incremental value through sector, security and yield curve decisions and its performance is measured against the Lehman Brothers Aggregate Bond Index.

#### **Investment Performance**

The *stock* segment accomplished its objective of closely tracking the return of the S&P500 benchmark (ETF Stocks 34.7% vs. S&P500 34.7%). By investing in most of the stocks in the benchmark at their index weighting, the segment was able to track the benchmark return on a monthly and annual basis. The portfolio was periodically rebalanced using an optimization model to minimize trading costs while still maintaining an acceptable tracking error relative to the benchmark.

The *bond* segment outperformed its benchmark during the fiscal year (ETF Bonds 8.6% vs. Lehman Aggregate 8.2%) due to the sector weightings held in the portfolio versus the Lehman Aggregate.

*Overall*, the Environmental Trust Fund provided a return of 21.4% for fiscal year 1997, outperforming its composite index by 0.5 percentage point. The bond segment's outperformance accounted for the total fund's outperformance for the fiscal year.

The fund experienced a modest lag in performance over the last three years due to the accumulation of spendable income within the Fund. The lower return on these cash equivalents reduced total fund performance relative to the composite index for the three year annualized return. Spendable income is now transferred out of the portfolio on a periodic basis to alleviate this effect.

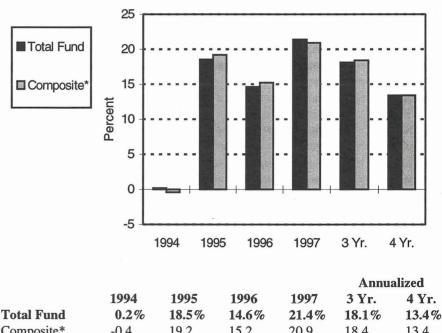
Performance results are presented in Figure 37.

### Spendable Income

Spendable income generated by the Fund is shown below:

<b>Fiscal Year</b>	Millions
1994	\$3.9
1995	\$5.2
1996	\$6.0
1997	\$6.8

#### Figure 37. Environmental Trust Fund Performance



Composite*	-0.4	19.2	15.2	20.9	18.4	13.4
Stock Segment	<b>1.5</b>	<b>26.0</b>	<b>26.0</b>	<b>34.7</b>	<b>28.8</b>	<b>21.4</b>
S&P500	1.5	26.1	26.2	34.7	28.9	21.4
Bond Segment	<b>0.4</b>	<b>12.7</b>	<b>4.8</b>	<b>8.6</b>	<b>8.7</b>	<b>6.5</b>
Lehman Aggregate	-1.2	12.6	5.0	8.2	8.5	6.0

\* Weighted 50% S&P500, 48% Lehman Aggregate, 2% 91 Day T-Bills.

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. On June 30, 1997, the total value of these accounts was \$4.9 billion.

# Internal Cash Pools

The SBI invests these cash accounts in short-term, liquid, high quality debt securities on a non-leveraged basis. These investments include U.S. Treasury and Agency issues, repurchase agreements, bankers acceptances, and commercial paper. On June 30, 1997 the combined value of all agency cash balances was \$4.9 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 trust fund retirement-related accounts that are managed internally. The Trust Fund Pool had an average daily balance of \$108 million during the year.
- 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 had an average daily balance of \$3.8 billion during the year.

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

#### Performance

The SBI measures the performance of both pools against customized benchmarks which reflect the maturity structure of each pool.

For fiscal year 1997, the Trust Fund Pool outperformed its benchmark while the Treasurer's Cash Pool under performed. Both pools matched or outperformed the total return on 91 Day Treasury Bills.

Trust Fund Pool	<b>5.6%</b>
Benchmark	5.5
<b>Treasurer's Cash Pool</b>	<b>5.3</b>
Benchmark	5.6
91 Day Treasury Bills	5.3

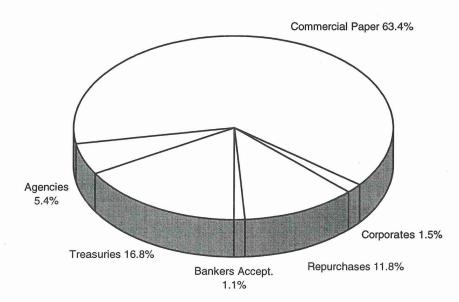
From April 1993 through December 1996, the benchmark for both pools was weighted 75% State Street Short Term Investment Fund/25% 1-3 year Treasuries. Beginning in January 1997, the Trust Fund Pool is measured against the IBC All Taxable Money fund Index.

Beginning in January 1997, the Treasurer's Cash Pool is measured against a blended benchmark consisting of the Lehman Brother's 1-3 year government Index for the first \$600 million and the IBC All Taxable Money Fund Index for the balance of the portfolio.

#### **Treasurer's Cash Pool**

On June 30, 1997 the Treasurer's Cash Pool was dominated by high quality commercial paper holdings. The composition of the pool is shown in Figure 38. At the end of the fiscal year, the pool had a current yield of 5.7% and an average maturity of 157 days.

Figure 38. Invested Treasurer's Cash Fund Distribution as of June 30, 1997



# Cash Management & Related Programs

# Securities Lending Program

The SBI participates in securities lending programs in which securities held by the SBI are loaned to banks and security dealers for a daily fee. These loans are fully collateralized. Currently, the majority of the SBI's securities lending activity is undertaken by the SBI's master custodian bank, State Street Bank and Trust. Securities lending generated additional income of approximately \$11 million during fiscal year 1997 for all portfolios controlled by the SBI.

# Certificate of Deposit Program

The SBI also manages a certificate of deposit (CD) program in which it purchases CD's from Minnesota financial 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.

The SBI's 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.

Only the cash reserves of the retirement funds are used in the program. The Federal Deposit Insurance Corporation (FDIC) provides \$100,000 in insurance coverage for each retirement plan in the Basic Funds in each of the financial institutions participating in the program. Therefore, the maximum CD investment in any financial institution is \$750,000. Within these limits, all CD's purchased by the SBI are fully insured by the FDIC. During fiscal year 1997, the SBI purchased over \$253 million of CD's from Minnesota financial institutions. Since it began the program in 1980, the SBI has purchased over \$2.4 billion of CD's from approximately 500 financial institutions throughout the state.

# Securities Repurchase Program

Since 1980, the SBI has invested in banks throughout Minnesota through the SBI's Certificate of Deposit (CD) program. In recent years, community banks throughout Minnesota have experienced an increased need for funds due to a reduction in local deposits and a reduced ability to sell investments held in bank portfolios due to changes in federal accounting requirements. The SBI created the Securities Repurchase Program to help meet the increased needs of banks throughout the state.

Under the program, the SBI temporarily buys securities such as Treasuries and Governments from banks under a repurchase agreement (repo). At the end of the agreement period, the securities are returned to the selling banks (i.e. "repurchased") and the bank pays the SBI principal and interest.

The transactions are fully collateralized and range in size from \$100,000 to \$2 million per institution. Amounts above \$500,000 are based on availability of funds and other factors such as a bank's preferred lending ranking by the Small Business Administration (SBA).

For ease of administration, the program uses the same rates, offering dates and maturity dates as the SBI's CD program. With the support of both the Minnesota Department of Commerce and the SBA, a proposal for a pilot program was approved by the Board at its meeting in December 1995. The initial offering was made in April 1996 with 10 banks participating in the placement of \$6.5 million.

During fiscal year 1997, the SBI purchased \$20 million in repos from Minnesota financial institutions. The SBI expects to evaluate the pilot program during fiscal year 1998.

# Legislative Update

The State Board of Investment (SBI) did not initiate any legislative proposals for the 1997 Legislative Session. The Legislature did, however, enact several measures that impact SBI operations.

#### The Pension Uniformity Bill was

enacted as *Laws of Minnesota 1997*, Chapter 233. The bill increases the initial retirement annuity and decreases the inflation component of post retirement benefit increases. In effect, a portion of future post retirement benefit increases were exchanged for a higher initial benefit formula.

Existing retirees received a one-time benefit increase on July 1, 1997 to compensate them for the reduction in future Post Fund benefit increases. Retirees will receive their first benefit increase under the revised benefit increase formula on January 1, 1999.

As part of the change, the interest assumption on the assets in the Post Retirement Fund was raised from 5% to 6%. This change will be effective July 1, 1997.

#### The Omnibus Pension Bill was

enacted as *Laws of Minnesota 1997*, Chapter 233. It contains the following provisions of interest to the SBI:

- The 457 State Deferred Compensation Plan will be able to offer a wider range of investment options in the future. In addition to insurance company products, the Plan will be allowed to utilize mutual funds and other products sponsored by registered investment advisers and qualified banks.
- The SBI, in consultation with the Commissioner of Commerce, was directed to study the most desirable method for evaluating insurance companies for the existing 403(b) matching program for local school districts. The study also requires recommendations on the most effective delivery mechanism for bringing 403(b) annuities to employees. The SBI must make its report to the Legislature by February 1, 1998.
- The law amends existing investment reporting requirements for all public pension funds in the State. Effective for calendar year 1997, the SBI will provide monthly data on the Basic, Post and Combined Retirement Funds on behalf of the statewide retirement plans and quarterly data on behalf of local plans who participate in the Supplemental Investment Fund. The information is provided to the Office of the State Auditor who will, in turn, compile an

annual report for the Legislature.

#### The Higher Education Funding

**Bill**, enacted as *Laws of Minnesota 1997*, Chapter 183, provides tax deferred savings and matching dollars to participants who contribute to a new college savings program termed "Edvest". Contributions are to be invested in a single investment vehicle designed and selected by the SBI. The SBI is also charged with the responsibility to assist the Higher Education Services Office (HESO) in selecting a recordkeeper for the program. The program is not expected to be operational for at least a year.

# **Emerging Manager Program**

The Emerging Manager Program (EMP) provides funding to a group of younger and smaller active domestic stock managers. The EMP is considered a "feeder pool" to the larger domestic equity program and the firms in the EMP must have the potential to "graduate" to the larger program and manage \$200 million or more for the SBI for the foreseeable future. The program was funded by the State Board of Investment (SBI) in April 1994 and provided three year contracts with the firms.

During fiscal year 1997, staff reviewed the results of the program with the Domestic Manager Committee of the Investment Advisory Council (IAC) and made several recommendations concerning the future structure of the program:

- Eight firms in the EMP appeared to be viable candidates for larger allocations in the future and were recommended for continuation (CIC, Cohen, Klingenstein & Marks, Compass Capital, New Amsterdam, Valenzuela, Wilke/Thompson, Winslow, and Zevenbergen). One firm (Kennedy) did not meet this criteria and therefore its contract was allowed to expire in March 1997.
- Staff and the Committee recommended that Cohen, Klingenstein & Marks receive additional funding and that they be added as a candidate for future manager searches conducted by the SBI.

— They also recommended that future candidates for the EMP have at least \$100 million under management and be required to provide an acceptable benchmark prior to receipt of funding from the SBI.

The IAC and the Board adopted all these recommendations at their meetings in December 1996.

# **Responsibility for Deferred Compensation Programs**

The State Board of Investment (SBI) has responsibilities for several deferred compensation-related programs:

- The SBI selects insurance company providers for the State Deferred Compensation Plan, an Internal Revenue Code (IRC) 457 plan administered by the Minnesota State Retirement System.
- The SBI selects insurance company providers for the employer match to IRC 403(b) tax sheltered annuities for K-12 teachers.
- The SBI approves providers selected by the Minnesota State University and Community College (MnSCU) and the Minnesota Historical Society for their IRC 401(a) defined contribution retirement plan.

The insurance companies currently used by these programs are shown in Figure 39. Figure 39. Insurance Companies Selected or Approved by the SBI

**State Deferred Compensation (457) Plan** Great-West Life & Annuity Insurance Co. The Minnesota Mutual Life Insurance Co.

#### 403(b) Match Program

Aetna Life Insurance & Annuity Co. Great-West Life & Annuity Insurance Co. IDS Life Insurance Co. Metropolitan Life Insurance Co. The Minnesota Mutual Life Insurance Co. Nationwide Life Insurance Co. United Investors Life Insurance Co. The Variable Annuity Life Insurance Co. (VALIC)

#### MnSCU (401a) Plans

Great-West Life & Annuity Insurance Co. The Minnesota Mutual Life Insurance Co. Teachers Insurance & Annuity Association-College Retirement Equities Fund (TIAA-CREF) The Variable Annuity Life Insurance Co. (VALIC)

#### Historical Society (401a) Plan

Teachers Insurance & Annuity Association-College Retirement Equities Fund (TIAA-CREF)

# **Police and Fire Fund Activity**

In 1987, legislation was enacted that establishes procedures for voluntary consolidation of local police and firefighter plans with the Public Employees Retirement Association (PERA). When a merger is approved, assets are transferred from the local plan to the State Board of Investment (SBI).

By statute, the Executive Director of the 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 stated market value.

Five plans consolidated during fiscal year 1997 with assets of \$30.4 million. Since 1987, 40 plans with total assets of \$568.6 million have merged with PERA. After consolidation, these assets are managed as part of the Basic and Post Retirement Funds. Police and fire plans that are not consolidated with PERA may invest their assets with the SBI through the Supplemental Investment Fund.

During fiscal year 1997, 25 additional plans selected the Fund for all or a portion of their retirement related assets. This brought the total number of police and fire plans participating in the Supplemental Investment Fund to 127 by the end of the fiscal year.

The SBI expects this growth trend to continue as plans become more familiar with the SBI and its ability to offer a variety of investment options at a low administrative cost.

### Guidelines on International Investing

As noted in prior sections of this report, the State Board of Investment (SBI) made its first international stock investments in 1992. The case for international investing lies in three areas: increased investment opportunity, greater diversification and potential for higher return. Nearly two-thirds of the world's markets now lie outside the U.S.

Japan, U.K., Germany and France comprise about three quarters of the value of the international markets. Sixteen (16) other countries in Europe and the Pacific Basin make up the remainder of the more well established stock markets. Emerging markets in Central and South America, Eastern Europe, Africa and Asia are growing rapidly and pose special investment considerations and limitations.

#### Task Force

The Board has established an International Investing Guidelines Task Force to recommend guidelines that address these limitations as well as other concerns related to international investing.

The membership of the Task Force includes a representative of each Board member, a representative of each statewide retirement system, two private sector representatives from the Investment Advisory Council, two representatives from organized labor and one representative from environmental groups. The SBI executive director and the SBI's consultant are also members of the Task Force.

# Guidelines

Based on information compiled from U.S. State Department reports, the Task Force grouped countries into three broad categories. It is important to note that the guidelines listed below do not prohibit an active stock manager from purchasing the stock of any country. Rather, in certain instances they require additional notification or presentation by the manager regarding the firm's investment strategy.

**Group I.** These countries have legal structures that generally respect worker and human rights. Because these countries have strong worker and human rights protections, there is little concern that economic and social disruptions may occur which would have an adverse effect on financial markets. As a result, active stock managers should be authorized to invest in companies domiciled in these countries without additional notification to the SBI.

Group II. These countries have legal protections for worker and human rights but violations of these rights have been cited in the State Department reports. Because violations of legally protected worker and human rights continue to occur in these countries, there is some concern that economic and social disruptions may occur which may have an adverse effect on their financial markets. An active stock manager may invest in companies domiciled in the countries shown under "Group II" if the manager believes that it would be a breach of fiduciary responsibility not to do so. If a manager chooses to invest in one or

more of these markets, the manager must notify the SBI in writing.

Group III. These countries lack basic protections for worker and human rights and do not appear to be making adequate progress in establishing an appropriate legal structure to address these issues. Because of this basic lack of human and worker rights, the potential exists for economic, political and social unrest that could adversely affect the stability of the financial markets within these countries. An active stock manager may invest in companies domiciled in countries shown under "Group III" if the manager believes that it would be a breach of fiduciary responsibility not to do so. If a manager chooses to invest in one or more of these markets, the manager must appear at the SBI to present its reasons for the decision to do so.

### **Review Process**

When the Task Force made its original report to the Board in December 1992, the Task Force assumed that the country groupings would be updated periodically to reflect changes in the world markets. At its meeting in June 1994, the Board adopted the following review process regarding guidelines:

 Staff will review reports from the US State Department regarding worker and human rights issues and designate countries "Group I, II or III" using the existing policy guidelines recommended by the Task Force and adopted by the Board.

 Staff designations will be reviewed with the SBI Administrative Committee. This includes any movement of countries between categories as well as categorizations of any new countries that need to be added to the list of available markets.

 A manager who elects to purchase stocks of companies domiciled in Group III countries will appear before the SBI Administrative Committee to discuss their investment decision. Figure 40. Current International Investing Guidelines Country Groupings\*

**Group** I Australia Austria Barbados Belgium Canada Costa Rica Czech Republic Denmark Finland France Germany Greece Hong Kong Hungary Italy Ireland Japan Luxembourg Netherlands New Zealand Norway Poland Portugal Singapore Slovak Republic Slovenia Spain Sweden Switzerland United Kingdom Uruguay

**Group II** Argentina Bangladesh Bolivia Botswana Brazil Chile Cote d'Ivorie Columbia Ecuador Egypt Estonia Ghana India Israel Jamaica Kazakhstan Kenya Korea, Republic of Latvia Lithuania Malawi Malaysia Mauritius Mexico Mongolia Namibia Nepal Panama Papua New Guinea Philippines Romania Russia South Africa Sri Lanka Taiwan Thailand Trinidad & Tobago Tunisia Turkey Venezuela Ukraine Zambia Zimbabwe

Group III China, Peoples Republic of Croatia Indonesia Jordan Kuwait Lebanon Morocco Myanmar (Burma) Nigeria Peru Pakistan Swaziland United Arab Emirates Vietnam

\* last revised in June 1996

# 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 monitor corporate activity in Northern Ireland. In January 1997, the SBI held stocks or bonds in 40 out of 44 corporations identified by IRRC as having operations in Northern Ireland.

The SBI filed shareholder resolutions with 5 of these corporations during the 1997 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.

One resolution was withdrawn when the targeted company agreed to provide information on their employment activity in Northern Ireland. One company challenged the proposed resolutions and received a no-action letter from the SEC stating that the proposal could be omitted because it did not meet resubmission vote requirements.

The voting results on the remaining 3 resolutions are shown below:

	Affirmative
Company	Vote
Baker Hughes	15.9%
Dun & Bradstreet	12.2
Interpublic	10.5

### **Tobacco Issues**

During fiscal year 1997, investment in tobacco-related stocks received considerable attention by the State Board of Investment (SBI).

It is widely known that the tobacco industry has been subject to increasing scrutiny and criticism during the 1990's. In 1994, the Food and Drug Administration (FDA) proposed to regulate nicotine as a drug and Congress held hearings on the tobacco industry. In 1995, the FDA drafted rules designed to prevent marketing of tobacco products to minors, and these rules were made public by President Clinton in 1996. The federal regulations were challenged by the tobacco industry and are now on appeal to the U.S. Fourth Circuit Court of Appeals.

Other legal and regulatory pressures on the industry include Justice Department inquiries into whether industry executives conspired to obstruct Congressional investigations, lawsuits filed by Attorneys General in at least 40 states seeking reimbursement for Medicaid expenditures due to the health consequences of smoking and several class action lawsuits alleging nicotine addiction or health risks.

In June 1997, some states and some tobacco companies agreed on proposed federal legislation to settle various legal claims. The proposed settlement would provide payment from the tobacco companies of more than \$368 billion over 25 years. To date, there has been no Congressional action to implement the proposal.

#### **Directive to Stock Managers**

Throughout the year, members of the SBI watched these developments very carefully and monitored the SBI's holdings in the stock of tobacco-related companies. At its meeting in December 1996, Board members expressed heightened concern about the litigation risk connected with investments in companies which obtain a large majority of their revenues from the sale of tobacco. To address this concern, the SBI Executive Director issued a directive to the SBI's stock managers which requires them to provide written justification to SBI staff if a manager chooses to make new or additional purchases of stock in companies which obtain more than 50% of their revenues from the sale of tobacco.

The Board receives updates on the SBI's holdings to tobacco related stocks at each of its quarterly meetings and is expected to continue to monitor the situation very closely.

#### Shareholder Resolutions

During the 1997 proxy season, the SBI cosponsored six (6) tobacco related resolutions. Two resolutions were challenged by the companies and received a no-action letter from the SEC stating that the proposal could be omitted. Three other resolutions were withdrawn when the companies agreed to negotiations with the sponsors.

The remaining resolution at Loews requested compliance with proposed FDA youth smoking regulations. This resolution received support from 7.2% of the votes cast.

# **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. These resolutions range from routine issues, such as those involving the election of corporate directors and ratification of auditors, to matters such 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. Except for the shares held by active international managers, 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 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 caseby-case basis.

### **Corporate Governance Issues**

The voting guidelines for major corporate governance issues are summarized below:

*Routine Matters.* In general, the SBI supports management on routine matters such as uncontested election of directors; selection of auditors; 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 super-majority 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 (e.g. 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 or enhance 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.

*Executive Compensation.* In general, the SBI supports efforts to have boards of directors comprised of a majority of independent directors, to have compensation committees made up entirely of independent directors, and to have executive compensation linked to a company's long-term performance.

*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.

#### Social Responsibility Issues

The voting guidelines for major social responsibility issues are shown below:

*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. The SBI also supports resolutions that request companies to submit reports to shareholders concerning their labor practices or their sub-contractors' labor practices in Northern Ireland.

*Tobacco and Liquor.* In general, the SBI supports a variety of tobacco and liquor related resolutions including those that call for corporations to limit their promotion of tobacco and liquor products and to report on their involvement in tobacco issues.

### Environmental Protection. 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 Ceres Principles (formerly known as the Valdez 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.

# Summary of FY 1997 Proposals

During fiscal year 1997, the SBI voted proxies for more than 4,300 U.S. corporations and approximately 1,000 international companies.

As in past years, the issues on corporate ballots included a broad range of proposals in the *corporate governance* area, as reflected in information provided by the Investor Responsibility Research Center (IRRC), Washington, D.C.:

 Shareholder proposals regarding executive compensation were supported by an average of 11.7% of the shares voted. Shareholders submitted 20 proposals on various compensation issues.

- Shareholders submitted 13 proposals to redeem "poison pills" (an anti-takeover device) or submit them to shareholder vote. These proposals received average support of 53.9%.
- Two (2) proposals were submitted concerning confidential voting. These proposals received average support of 47.2%.
- Shareholders submitted 4 proposals to restrict or cancel non-employee director pensions or shift at least half of board members' pay to equity ownership. These proposals received average support of 22.3%.
- Other proposals included the repeal of classified boards which were supported by an average of 44.9% of shares voted; limitations of severance packages to top executives ("golden parachutes") which received support from an average of 26.8% of shares voted; cumulative voting which was supported by an average of 27.7% of shares voted; and requirements for the majority of directors to be independent received support from an average of 17.4% of shares voted.

In the *social responsibility* area, the environment, fair employment issuesboth domestic and international, and tobacco were the major issues, as reflected in information provided by the IRRC:

 Ceres Principles resolutions received 11 resolutions with average support of 9.7%.

- Energy related issues received 5 resolutions with an average support level of 7.2%.
- Equal employment issues received 7 resolutions with an average support of 7.8%.
- Resolutions on a variety of tobacco-related issues were on 17 ballots with an average support of 6.4%, which was slightly lower than the support level from the previous year.
- Human rights issues received 8 resolutions with an average support level of 5.5%.
- Northern Ireland issues received 7 proposals this year with an average support of 14.0%.
- Resolutions asking 3 corporations to report on operations of U.S. companies' Maquiladoras operations received average support of 7.2%.

# Domestic 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 medium to large growth companies and the firm does not tend to concentrate 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. The firm was retained by the SBI in March 1983. During fiscal year 1997, Alliance Capital moved the SBI account to a more concentrated portfolio approach. The firm now limits its holdings to approximately 30 to 40 issues.

#### American Express Asset Management

Currently, American Express (formerly IDS Advisory Group) employs a concentrated style of management for the SBI portfolio. The methodology is based on a fundamentally driven and quantitatively managed process. Using 20 to 30 of the top-rated stocks by research analysts, the portfolio seeks to maximize the greatest level of risk-adjusted return for a predetermined level of risk tolerance. Due to the level of concentration, the active risk versus the normal portfolio will be higher than that of the typical active manager. Trading within the portfolio is also analyst driven, which will lead to turnover between 80 and 120 percent per year. Because the focus of the

methodology is concentrated stock selection, the portfolio will remain fully invested at all times. Prior to fiscal year 1997, the firm used a more broadly diversified approach for the SBI account. The firm was retained by the SBI in March 1983.

#### **Barclays Global Investors**

Barclays manages both passive and semi-passive portfolios for the SBI. For the semi-passive account, the firm uses a Core Alpha Model which disaggregates individual equity returns for each of the 3500 stocks in their universe into three components: fundamental, expectation, and technical. The fundamental factors look at measures of underlying company value including earnings, book value, cash flow, and sales. These factors help identify securities that trade at prices below their true economic value. The expectational factors incorporate future earnings and growth rate forecasts made by over 2500 security analysts. The technical factors provide a measure of recent changes in company fundamentals, consensus expectations, and performance. Estimated alphas are used in a portfolio optimization algorithm to identify the optimal portfolio that maximizes the portfolio's alpha while maintaining a risk level specified by the client.

For the *passive* account, Barclays minimizes tracking error and trading costs, and maximizes control over all investment and operational risks. Their strategy is to fully replicate the larger capitalization segments of the market and to use an optimization approach for the smaller capitalization segments. The optimizer weighs the cost of a trade against its contribution to expected tracking error to determine which trades should be executed.

The firm was retained by the SBI for semi-passive management in January

1995 and for passive management in July 1995.

#### **Brinson Partners**

Brinson Partners uses a relative value approach to equity investing. They believe that the market price will ultimately reflect the present value of the cash flows that the security will generate for the investor. They also believe both a macroeconomic theme approach and the bottom-up stock selection process can provide insight into finding opportunistic investments. Brinson uses their own discounted free cash flow model as their primary analytical tool for estimating the intrinsic value of a company. Brinson was retained by the SBI in July 1993.

### CIC Asset Management (Emerging Manager Program)

CIC Asset Management uses a disciplined relative value approach to managing equities. The firm believes that purchasing companies at attractive prices provides superior long-term performance with lower volatility. This investment process is designed for clients who desire equity market exposure with both incremental value added and downside protection due to reasonable dividend yields, moderate price to book values and low normalized price to earning ratios. Finally, the process provides a synergy between quantitative valuation techniques and "Graham & Dodd" fundamental analyses. CIC was retained by the SBI in April 1994.

# Cohen Klingenstein & Marks Inc. (Emerging Manager Program)

Cohen Klingenstein & Marks Inc., seeks to outperform the market by focusing on two variables: economic cycles and security valuation. Within economic cycles, they believe that stocks exhibit predictable patterns

that reflect changing expectations on corporate profits and interest rates. Similarly, they believe that stock prices normally reflect earnings expectations. The firm exploits short run inefficiencies through an unbiased process that relates the price of a stock to consensus earnings expectations. The firm was retained by the SBI in April 1994.

#### Compass Capital Management (Emerging Manager Program)

**Compass Capital Management** combines aspects of growth and value investing to achieve the proper blend of return (growth) and risk (value). They use a computer based data network to screen for large, well established companies whose earnings grow in spite of a weak economy. In addition, they look for companies whose earnings have grown well over long time periods, but which may experience earnings pressure with downturns in the economy. Particular focus is given to growth in sales, earnings, dividends, book value and the underlying industry. Due to their "growing company" orientation, their portfolios generally hold no utility, bank, deep cyclical, or oil and gas stocks. Compass was retained by the SBI in April 1994.

#### Forstmann Leff Associates

Forstmann Leff is a classic example of a "rotational" manager. The firm focuses almost exclusively on sector weighting decisions. Based upon its macroeconomic outlook, the firm will move aggressively into and out of equity sectors over the course of a market cycle. The firm tends to purchase liquid, medium to large capitalization stocks that will benefit the most during the current phase of the market cycle. The firm was retained by the SBI in March 1983. During fiscal year 1997, Forstmann was asked to begin weighting more heavily their top stock ideas.

#### Franklin Portfolio Associates

Franklin Portfolio Associates manages both active and semipassive portfolios for the SBI. Franklin'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.

For the *active* product, Franklin's portfolio management process adds value by focusing on buying and selling the right stock rather than attempting to time the market or pick the right sector or industry groups. During fiscal year 1997, Franklin moved the active account to a more concentrated portfolio approach. The firm now limits its holdings in the SBI account to approximately 30 to 40 issues.

For the *semi-passive* product, Franklin adds incremental value to a benchmark by buying stocks ranked the highest and selling stocks ranked the lowest, while maintaining the portfolio's systematic risk and industry weightings at levels similar to the benchmark. Franklin attempts to allocate 75% or more of the total risk level set by the client to specific stock selection and the rest to systematic and industry risk. The firm always remains fully invested.

Franklin was retained by the SBI as an active manager in April 1989 and as a semi-passive manager in January 1995.

#### 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 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 strong product development and limited competition. In the intrinsic value area, the key factors are corporate assets, free cash flow, and an unrecognized 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. GeoCapital was retained by the SBI in April 1990.

#### Investment Advisers, Inc.-Regional

Investment Advisers Inc. seeks to own the highest quality companies which demonstrate sustainable growth. IAI tries to achieve this objective by investing at least 80% of the portfolio in companies which have their headquarters in Minnesota, Wisconsin, Illinois, Iowa, Nebraska, Montana, North Dakota and South Dakota. Twenty percent of the portfolio can be used to purchase large capitalization stocks that display the same quality and growth characteristics but have headquarters outside this region. The portfolio uses the same discipline as the IAI, Inc.-Regional Mutual Fund. IAI was retained by the SBI in July 1993.

#### Independence Associates

Independence believes that individual stocks which outperform the market always have two characteristics: 1) they are intrinsically cheap; and 2) their business is in the process of improving. Independence ranks their universe using a multifactor model. Using input primarily generated by their internal analysts, the model ranks each stock based on ten discreet criteria. Independence

constrains their portfolio by using the top 60% of their ranked universe and optimizing it relative to the benchmark selected by the client to minimize the market and industry risks. Independence maintains a fully invested portfolio and rarely holds more than a 1% cash position. The firm was retained by the SBI in February 1992.

#### J.P. Morgan Investment Management

J.P. Morgan manages a semi-passive portfolio for the SBI and believes that superior stock selection is necessary to achieve excellent investment results. To accomplish this objective, they use fundamental research and a systematic valuation model. Analysts forecast earnings and dividends for the 650 stock universe and enter these into a stock valuation model that calculates an expected return for each security. The stocks are ranked according to their expected return within their economic sector. Stocks most undervalued are placed in the first quintile. The portfolio includes stocks from the first four quintiles, favoring the highest ranking stocks whenever possible, and sells those in the fifth quintile. In addition, the portfolio will closely approximate the sectors and style of the benchmark. The firm remains fully invested at all times. The firm was retained by the SBI in January 1995.

#### Lincoln Capital Management

Lincoln Capital concentrates on established, medium to large capitalization companies that have demonstrated historically strong growth and will continue to grow. The firm uses traditional fundamental company analysis and relative price/earnings valuation disciplines in its stock selection process. In addition, companies held by Lincoln generally exhibit premium price/book ratios, high return on equity, strong balance sheets and moderate earnings variability. Lincoln was retained by the SBI in July 1993. During fiscal year 1997, Lincoln moved the SBI account to a more concentrated portfolio approach. The firm now limits its holdings to approximately 30 to 35 issues.

## New Amsterdam Partners (Emerging Manager Program)

New Amsterdam Partners believe that investment results are evaluated by actual return, and therefore, investment opportunities should be evaluated by expected return. They believe that all valid techniques depend on forecasts of the amounts and timing of future cash flows. Thus, the firm focuses on forecasted earnings growth, yield, price-to-book ratio, and forecasted return on equity. They believe that the disciplined application of their valuation techniques in conjunction with sound financial analysis of companies, is the key to understanding and maximizing investment returns. New Amsterdam was retained by the SBI in April 1994.

#### **Oppenheimer Capital**

Oppenheimer's objectives are to: 1) preserve capital in falling markets; 2) manage risk in order to achieve less volatility than the market; and 3) produce returns greater than the market indices, the inflation rate and a universe of comparable portfolios with similar objectives. The firm achieves its objectives by purchasing securities considered to be undervalued on the basis of known data and strict financial standards. In addition, Oppenheimer will make moderate shifts between cash and equities based on its outlook on the market and the economy, The firm focuses on five key variables when evaluating companies: management, financial strength, profitability, industry position and valuation. Oppenheimer was retained by the SBI in July 1993. During fiscal year

1997, Oppenheimer moved the SBI account to a more concentrated portfolio approach. The firm now limits its holdings to approximately 30 to 35 issues.

#### Valenzuela Capital Management (Emerging Manager Program)

Valenzuela Capital Management believes that stock selection and adherence to valuation analysis are the backbone of superior performance. Their investment philosophy is one of risk averse growth. The firm seeks companies undergoing strong rates of change in earnings, cash flow and returns. These companies are experiencing positive changes in revenues, gross and operating margins and financial structure. To be considered for investment, these stocks must sell at or below market valuations. The firm believes that below market valuations provide downside protection during weak market periods. In strong markets the portfolios will be driven by both earnings growth and multiple expansion. Valenzuela was retained by the SBI in April 1994.

#### Weiss, Peck & Greer

Weiss, Peck & Greer's dynamic growth process concentrates on small to medium size growth companies that have demonstrated consistent superior earnings growth rates. The process emphasizes companies in new or dynamic, rapidly growing industries where there is a potential for a major acceleration in earnings growth. The firm also believes that superior stock selection can be achieved through in-depth fundamental company research. The firm was retained by the SBI in July 1993.

### Wilke/Thompson Capital Management Inc. (Emerging Manager Program)

The investment philosophy of Wilke/Thompson is to invest in high quality, small capitalization growth companies that demonstrate the ability to sustain strong secular earnings growth, notwithstanding overall economic conditions. The firm's investment approach involves a bottom-up fundamental process. The stock selection process favors companies with strong earnings, high unit growth, a proprietary market niche, minimum debt, conservative accounting and strong management practices. They formulate investment ideas by networking with the corporate managers of their current and prospective holdings, as well as with regional brokers, venture capitalists, and other buy-side portfolio managers. The firm was retained by the SBI in April 1994.

# Winslow Capital Management (Emerging Manager Program)

Winslow Capital Management believes that investment in companies with above average earnings growth provide the best opportunities for superior portfolio returns over time. The firm believes that a high rate of earnings growth is often found in medium capitalization growth companies of \$1 to \$10 billion market capitalization. Thus, to seek superior portfolio returns while maintaining good liquidity, Winslow emphasizes a growth strategy buying securities of both medium and large capitalization companies. The objective is to achieve a weighted average annual earnings growth rate of 15-20% over a 2-3 year time horizon. Winslow was retained by the SBI in April 1994.

### Zevenbergen Capital Inc. (Emerging Manager Program)

Zevenbergen Capital is a growth manager. Its investment philosophy is based on the belief that earnings

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drive stock prices while quality provides capital protection. Hence, portfolios are constructed with companies showing above-average earnings growth prospects and strong financial characteristics. They consider diversification for company size, expected growth rates and industry weightings to be important risk control factors. The firm uses a bottom-up fundamental approach to security analysis. Research efforts focus on finding companies with superior products or services showing consistent profitability. Attractive buy candidates are reviewed for sufficient liquidity and potential for diversification. The firm does not believe in market timing. Zevenbergen was retained by the SBI in April 1994.

Portfolio statistics for each of the domestic equity managers can be found in the Statistical Data section of this report.

# International Stock Managers

#### Brinson Partners, Inc.

Brinson manages an active country/passive stock portfolio for the SBI. Brinson uses a proprietary valuation model to rank the relative attractiveness of individual markets based on fundamental considerations. Inputs include forecasts for growth, inflation, risk premiums and foreign exchange movements. Quantitative tools are used to monitor and control portfolio risk, while qualitative judgments from the firm's professionals are used to determine final country allocations. The passive stock portion of the portfolio is managed internally. Brinson constructs its country index funds using a proprietary optimization system. Brinson was retained by the SBI in April 1993.

### City of London

City of London is an emerging markets specialist. The firm invests in closed-end country and regional funds to enhance performance when discounts to net asset value (NAV) narrow and to assure broad diversification within markets. They perform two levels of analysis. The first level is to compile macroeconomic data for each country in their universe. Countries are ranked nominally according to the relative strength of their fundamentals and the expected upward potential of their stock markets. The second level is research on closed-end country and regional funds which use analyzed funds for corporate activity, liquidation dates, liquidity and discounts to NAV. They also analyze the quality and expertise of the closed-end fund managers. Countries are then re-ranked according to the relative pricing and discounts to NAV of country specific funds.

### **Genesis Asset Managers**

Genesis is an emerging markets specialist. Genesis believes that the critical factor for successful investment performance in emerging markets is stock selection. They also believe that structural changes in emerging markets will continue to create both winners and losers in the corporate sector. Finally, they believe that following index stocks will not necessarily expose an investor to the highest returns since those stocks are typically concentrated in large capitalization companies that have already attained a certain level of recognition. They identify those countries in which structural change will most likely generate growth opportunities for business and/or where the environment is supportive of a flourishing private sector. Stock selection is based on Genesis' estimate of the value of the company's future real earnings stream over five years relative to its current price. The portfolio consists

of the most undervalued stocks across all markets with emphasis on growth with value. The SBI retained Genesis in May 1996.

#### Marathon Asset Management

Marathon uses a blend of flexible. qualitative disciplines to construct portfolios which exhibit a value bias. Style and emphasis will vary over time and by market, depending on Marathon's perception of lowest risk opportunity. Since the firm believes that competition determines profitability, Marathon is attracted to industries where the level of competition is declining and they will hold a sector position as long as the level of competition does not increase. At the stock level, Marathon tracks a company's competitive position versus the attractiveness of their products or services and attempts to determine whether the company is following an appropriate reinvestment strategy for their current competitive position. Marathon was retained by the SBI in November 1993.

#### Montgomery Asset Management

Montgomery manages an emerging markets portfolio for the SBI. The firm combines quantitative investment techniques and fundamental stock selection to take advantage of market inefficiencies and low correlation within the emerging markets. Their top-down analysis begins with a quantitative approach which evaluates historical volatility and correlations between markets. The model identifies attractive countries which are then qualitatively analyzed for "event risk" which the model cannot take into account. Fundamental analysis is used to evaluate the financial condition, quality of management, and competitive position of each stock. Stocks will come from two tiers. Tier I will be 60-100 blue chip stocks. Tier 2 will be 100-150

smaller cap stocks with substantial growth potential. Characteristics of selected stocks may include low PE's to internal growth rates, above average earnings growth potential or undervalued/hidden assets. Montgomery was retained by the SBI in May 1996.

#### **Record Treasury Management**

Record Treasury manages a currency overlay program for the SBI. Record Treasury avoids all forms of forecasting in its approach to currency overlay. Rather, the firm employs s systematic model which uses a form of dynamic hedging. The firm creates a portfolio of synthetic currency options using forward contracts. Like traditional options, Records' "in-house options" allow the client to participate in gains associated with foreign currency depreciation. As with all dynamic hedging programs, Record Treasury will tend to sell foreign currency as it weakens and buy as it strengthens. The SBI retained Record Treasury in December 1995.

### Rowe Price-Fleming International, Inc.

Rowe Price-Fleming believes that world stock markets are segmented. The firm attempts to add value by identifying and exploiting the resulting pricing inefficiencies. In addition, they believe that growth is frequently under priced in the world markets. The firm establishes its economic outlook based largely on interest rate trends and earnings momentum. The portfolio management team then assesses the country, industry and currency profile for the portfolio. Within this framework, stock selection is the responsibility of regional portfolio managers. Stocks are selected using fundamental analysis that emphasizes companies with above-market earnings growth at reasonable valuations. Information derived from

the stock selection process is a key factor in country allocation as well. Rowe Price-Fleming was retained by the SBI in November 1993.

#### Scudder, Stevens & Clark

Scudder believes that successful international investing requires knowledge of each country's economy, political environment and financial market obtained through continuous and thorough research of individual markets and securities. The investment process focuses on three areas: country analysis, global themes and unique situations. Ideas from all three areas are integrated into Scudder's research universe. Using their own internal research, the firm seeks companies with potential for earnings and dividend growth, strong or improving balance sheets, superior management, conservative accounting practices and dominant position in growing industries. Scudder was retained by the SBI in November 1993.

#### State Street Global Advisors

State Street manages an international index portfolio designed to track the Morgan Stanley Capital International Index of Europe, Australia and the Far East (EAFE index). State Street uses a full replication strategy to construct index modules on a country by country basis. These modules are then combined to form a portfolio which will track the entire index. State Street was retained by the SBI in October 1992.

Portfolio statistics for each of the international managers can be found in the Statistical Data section of this report.

# Bond Managers

#### American Express Asset Management

American Express (formerly IDS Advisory) puts more emphasis on corporate and treasury securities than mortgages to add value in bond portfolios. The firm uses duration management combined with in-depth fundamental analysis of the corporate sector to add value to the portfolio. Active duration management begins with an economic overview and interest rate outlook. These factors help American Express determine the direction of both short and long-term interest rates which leads to the portfolio duration decision. After the firm determines duration, they use their extensive corporate research capabilities to determine corporate sector allocation and to select individual issues. The firm was retained by the SBI in July 1993.

#### **BEA Associates**

BEA Associates' investment approach focuses on security and sector selection rather than forecasts of short term interest rates. BEA keeps the duration close to the benchmark but may be slightly longer or shorter depending on its long-term economic outlook. The firm's approach is distinguished by 1) a quantitative approach which avoids market timing; 2) contrarian weighting of bond sectors; and 3) rigorous call and credit analysis rather than yield driven management. The firm was retained by the SBI in July 1993.

# BlackRock Financial Management

BlackRock manages a semi-passive bond portfolio designed to track the Lehman Aggregate index and uses a controlled duration style of management. BlackRock's enhanced index strategy can be described as active management with tighter

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duration and sector constraints to ensure that the portfolio's aggregate risk characteristics and tracking error never significantly differ from the designated index. BlackRock's value added is derived primarily from sector and security selection driven by relative value analysis while applying disciplined risk control techniques. BlackRock was retained by the SBI in April 1996.

#### Goldman Sachs Asset Management

Goldman Sachs manages a semipassive bond portfolio designed to track the Lehman Aggregate index. The firm models Treasury coupons with an arbitrage based pricing model. This model determines the spread between actual and intrinsic market yields and determines whether the security is rich or cheap. Goldman takes a highly quantitative and analytical approach to value mortgage securities as well. The firm uncovers undervalued securities using proprietary research and internally developed models. In the corporate sector, Goldman performs its own credit review of each issue. The firm adds value to the corporate sector with extensive research, market knowledge and trading skill. Goldman was retained by the SBI in July 1993.

#### 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 significant moves between cash and long maturity investments over the course of an interest rate cycle. Quality and sector choices are made through yield spread analyses consistent with interest rate forecasts.

Individual security selection receives very limited emphasis and focuses largely on specific bond characteristics such as call provisions. Investment Advisers was retained by the SBI in July 1984.

#### Lincoln Capital Management

Lincoln Capital manages a diversified semi-passive bond portfolio designed to track the Lehman Aggregate index. Lincoln employs quantitative disciplines that model the Lehman index according to a variety of risk variables. Lincoln seeks to enhance returns relative to the index by modest alterations to sector weightings, with the use of undervalued securities, and through an aggressive trading strategy in mortgage securities. The objective is to provide modest increments to the index return on a consistent basis. Lincoln was retained by the SBI in July 1988.

#### Miller, Anderson & Sherrerd

Miller Anderson focuses its investments in misunderstood or under-researched classes of securities. Over time, 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. Miller was retained by the SBI in July 1984.

#### Standish, Ayer & Wood

Standish, Ayer & Wood adds value by capitalizing on market inefficiencies and trading actively through intra and inter-sector swapping. The firm does not forecast interest rates but adds value to the portfolio by buying non-Treasury issues. Key to the approach is active sector trading and relative spread analysis of both sectors and individual issues. In addition to sector spreads, the firm also analyzes how secular trends affect bond pricing. The firm believes that 65% of its value added comes from intersector swapping in non-government sectors. Standish was retained by the SBI in July 1993.

#### 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. Western was retained by the SBI in July 1984.

Portfolio statistics for each of the bond managers can be found in the Statistical Data section of this report.

# Alternative Investment Managers

#### **Basic Retirement Funds**

### **Real Estate**

### Aetna Realty Investors Fund: RESA

**Real Estate Separate Account** (RESA) is an open-end commingled real estate fund managed by the AetnaRealty Investors. The fund was formed in 1978 and the SBI's commitment was made in 1982. The fund has no termination date: investors have the option to withdraw all or a portion of their investments. 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.

#### **Colony Advisors**

*Fund: Colony Investors II, L.P.* Colony Investors II is a closed-end commingled real estate fund managed by Colony Capital Inc. of Los Angeles, California. The fund's strategy is to invest in undervalued equity and debt real estate-related assets. The SBI committed to the Fund in 1994. The fund is expected to terminate in 2003.

#### Equitable Real Estate Group Fund: Prime Property Fund

Prime Property Fund was formed in 1973 by the New York-based Equitable Real Estate Group., Inc. The account is an open-end commingled real estate fund and the SBI's commitment was made in 1981. The fund has no termination date and investors retain the option to withdraw all or a portion of their investment. The fund makes equity investments in existing real estate and 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.

### First Asset Realty Funds: First Asset Realty Fund

First Asset Realty Fund (FAREEF), was created by First Bank in 1981 as an open-end real estate fund and in 1990 adopted a closed-end format. The fund is currently in liquidation and property sale proceeds are being distributed to unit holders. The SBI received this investment through Police and Fire Fund consolidations.

### Heitman Advisory Corp. (HAC) Funds: HAC Group Trust I HAC Group Trust II HAC Group Trust III HAC Group Trust V

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. Heitman manages the trusts' whollyowned properties. Heitman Advisory is based in Chicago. The SBI committed to the Group Trusts in 1984, 1985, 1987 and 1991. The funds are expected to terminate in 1999, 2001, 2002, and 2005.

### LaSalle Advisors Fund: LaSalle Income Parking Fund

The Income Parking Fund is a closed-end commingled fund managed by LaSalle Advisors of Chicago, Illinois. The fund's strategy is to acquire unleveraged parking facilities to maximize current return to the investors. In special situations, the fund may develop new parking facilities, but only when yield requirements can be maintained. LaSalle has considerable expertise in this area, with close to 100,000

parking spaces under management in the U.S. The SBI committed to the Fund in 1991. The fund is expected to terminate in 2005.

# Rosenberg Real Estate Equity Funds (RREEF)

# Fund: RREEF USA III

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 inhouse staff manages the trust's real estate properties. The firm's primary office is located in San Francisco. The SBI committed to the fund in May 1984. The Fund has reached the end of its investment term and is liquidating its property holdings.

# State Street Bank & Trust Funds: AEW - State Street Real Estate Fund III AEW - State Street Real Estate Fund IV AEW - State Street Real Estate Fund V

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. The SBI committed to the funds in 1985, 1986 and 1987. The funds are expected to terminate in 1999, 2001, and 2002.

### TA Associates Realty Fund: TA Realty Associates Fund III TA Realty Associates Fund IV

TA Realty Associates Fund III and IV are closed-end, commingled real estate funds managed by TA Associates Realty of Boston, MA. The funds invest in small to medium sized properties generally diversified by location and type. On-site management of properties is contracted to outside firms. The SBI committed to the funds in 1994 and 1997 respectively. Each fund has a ten year term.

### Trust Company of the West (TCW) Funds: TCW Realty Fund III TCW Realty Fund IV

TCW Realty Funds are closed-end commingled funds. The funds are managed as joint ventures between Trust Company of the West and Westmark Real Estate Investment Services of Los Angeles. These managers utilize specialty investment vehicles such as convertible and participating mortgages to enhance real estate returns. Investments are diversified by location and type. Portfolio properties are typically managed by local property management firms. The SBI committed to the funds in 1985 and 1986. The funds have reached the end of their investment terms and are in the process of liquidating their property holdings.

# Zell/Merrill Lynch

Funds: Zell/Merrill Lynch Real Estate II Zell/Merrill Lynch Real Estate III Zell/Merrill Lynch Real Estate IV

Zell/Merrill Lynch Real Estate Funds II, and III are based in Chicago, Illinois. The funds will make equity or equity-related investments in opportunistic real estate situations. The partnerships will acquire office, retail, and residential properties and may also invest in mixed-use and industrial properties. The funds have the authority to acquire convertible or participating mortgages. The SBI committed to the funds in 1991, 1994 and 1996. The funds were combined into a single entity in fiscal year 1997 and became publicly traded in July 1997.

### **Private Equity**

# Allied Capital

*Fund:* Allied Venture Partnership Allied Venture Partnership was formed in 1985 with a ten-year term which has been extended until 1998. 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, publicly owned venture capital corporation which was formed in 1958.

### Blackstone Group Fund: Blackstone Capital Partners Fund II

The Blackstone Capital Partners Fund II is a limited partnership which was formed in 1993 and has a ten year term. Based in New York, the fund will invest in a diverse number and type of private equity transactions. Up to 25% of the fund may be invested outside of the United States and Canada.

### **Brinson Partners**

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

Brinson Partners Venture Partnership Acquisition Funds I and II were formed in 1988 and 1990, respectively. The limited partnerships have ten year terms. Fund I and II

invest 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. Brinson Partners is based in Chicago, Illinois.

### ChiCorp Management, Inc. Fund: Midwest Bank Fund III Banc Fund IV

Midwest Bank Fund III was formed in 1992 and has a nine year term. Fund IV was formed in 1996 and has an eight year term. Based in Chicago, Illinois, the funds will invest primarily in sub-regional banks, located primarily in the Midwest, which have demonstrated above average growth and are likely acquisition targets.

#### Churchill Capital, Inc.

*Fund: Churchill Capital Partners II* Churchill Capital Partners II was formed in 1992 and has a twelve year term. Based in Minneapolis, Minnesota, the fund provides subordinated debt to established small and medium-sized companies. Fund investments will not be restricted to any particular region, although it is anticipated that a substantial portion will be in the

# Contrarian Capital Management

*Fund:* Contrarian Capital Fund II Contrarian Capital Fund II was formed in 1997 with a term of 7 years. Based in Greenwich, CT the fund focuses on investments in distressed debt securities.

#### Coral Group Inc.

Midwest.

Funds: IAI Venture Partners Coral Partners I Coral Partners II Coral Partners IV The Coral Group Inc. comprised the professional staff of IAI Venture Capital Group prior to the spinout of that group from Investment Advisers, Inc. in 1993.

Coral Partners I (formerly Superior Ventures) is a Minnesota-based venture capital limited partnership. It was formed in 1986 and has an eleven-year term. 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.

IAI Venture Partners and Coral Partners II (formerly IAI Ventures II) and IV are also Minnesota-based venture capital limited partnerships managed by the Coral Group. These funds have venture capital investment strategies similar to Coral I's but are more diversified geographically. They were formed in 1984, 1991 and 1994 respectively and have eleven year terms. The term for IAI Ventures has been extended to accommodate orderly liquidation of investments.

### DSV Management Ltd. Fund: DSV Partners IV

DSV Partners IV limited partnership was formed in 1985 and is currently in liquidation. 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.

### Golder, Thoma, Cressey and Rauner Funds: Golder, Thoma and Cressey Fund III Golder, Thoma and Cressey Fund IV

Golder, Thoma and Cressey Funds III and IV are venture capital limited partnerships and were formed in 1987 and 1993, respectively. The funds are based in Chicago, Illinois and have ten year terms. Fund III is currently in liquidation. The funds invest in growing private businesses, find and build companies in fragmented industries and invest in small leveraged buyouts. In addition, each fund is diversified geographically and by industry.

### Hellman and Friedman

**Fund:** Hellman and Friedman III Hellman and Friedman III (H&F) was organized in 1994 and has a ten year term. Based in San Francisco, the fund will pursue opportunistic private equity investment located in the U.S. and internationally.

#### **IAI Ventures**

*Fund: IAI U.S. Venture Fund II* IAI U.S. Venture Fund II was organized in 1997 and has a ten year term. Based in Minneapolis, Minnesota the fund will pursue opportunistic venture capital investments throughout the U.S. with an emphasis on Minnesota and the Midwest.

### Inman & Bowman Management Fund: Inman & Bowman

The Inman & Bowman limited partnership was formed in 1985. Its investment focus is early-stage, hightechnology 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 which is currently in liquidation.

### Kohlberg, Kravis, Roberts & Co. (KKR) Funds: KKR 1984 Fund KKR 1986 Fund KKR 1987 Fund KKR 1993 Fund

KKR's Funds are structured as limited partnerships. The funds invest in large leveraged buyouts but may include other types of investments as well. The partnerships' portfolio companies are often mature, low technology companies with very diversified operations. Kohlberg, Kravis, Roberts and Co. operates offices in New York and San Francisco. The funds were formed in the years cited above and have terms of twelve years on individual portfolio company investments.

#### **Matrix Partners**

#### Funds: Matrix Partners II Matrix Partners III

Matrix Partners II and III are venture capital limited partnerships that were formed in 1985 and 1990, respectively, with terms of ten years. Fund II has extended its term for three more years in order to provide for an orderly liquidation of holdings. Investment emphasis is on hightechnology firms in the early and expansion stages of corporate development. However, for diversification the portfolios will include a sizable component of nontechnology firms. The portfolios may include several small leveraged buyout investments as well. The funds are managed by five general partners with offices in Boston, San Jose, and San Francisco.

#### Norwest Venture Capital Management Fund: Northwest Venture Partners I

Northwest Venture Partners I was formed in 1984 and is expected to

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terminate in 2013. 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.

#### Piper Jaffray Ventures Fund: Piper Jaffray Healthcare Fund II

Piper Jaffray Healthcare Fund II was organized in 1997 with a ten year term. Based in Minneapolis, Minnesota the fund will focus on a geographically diverse portfolio of healthcare venture capital investments.

### Smith Barney Venture Corp. Fund: First Century III

First Century III was formed in 1984. It is structured as a limited partnership with a term of twelve years which has been extended two additional 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.

### Stamps, Woodsum and Co. Funds: Summit Ventures I Summit Ventures II

Summit Ventures I and II are limited partnerships formed in 1986 and 1988 with ten-year terms. Fund I is in a two year extension. The funds were formed by Stamps, Woodsum & Co., the managing general partners of the fund. Stamps and Woodsum focus on profitable, expansion stage firms that have not yet received any venture backing. The majority of the partnership investments are in high tech firms. Investments are diversified by location and industry type.

#### The Jacobs Group Fund: IMR Fund, L.P.

The IMR Fund was formed in 1992 and has a ten year term. The Fund will invest in established operating companies with assets and/or business segments offering opportunities for significantly enhanced appreciation. Investments in financially troubled or excessively leveraged companies, particularly bankrupt or poorly managed companies with high asset bases, will be a focus of the Fund.

#### 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.

#### E.M. Warburg, Pincus & Co., Inc. Fund: Warburg, Pincus Ventures, L.P.

Warburg Pincus Ventures, L.P. is based in New York, New York. This

fund will invest private equity in a wide variety of businesses located domestically and abroad. The SBI committed to the fund in 1994. The fund has a 12 year term.

#### Zell/Chilmark

#### Fund: Zell/Chilmark

Zell/Chilmark was formed in 1990 with a 10 year term. Based in Chicago, Illinois, the Fund focuses on corporate restructuring and rejuvenation situations. The partnership will invest primarily in the assets, debt and/or common and preferred stock of companies with a fair market value of at least \$100 million.

#### **Resource Funds**

### Apache Corporation Fund: Apache Acquisition Net Profits Interest

Apache Corporation is a Houston based oil and gas company. Apache Acquisition Net Profits Interest is a private placement that was formed in 1986 to acquire a non-operating interest in the net profit generated by oil and gas properties acquired in 1986 from Occidental Petroleum Company. The fund will remain in effect throughout the producing life of the properties.

### First Reserve Corp. Funds: AMGO I AMGO II AMGO IV AMGO V

American Gas and Oil (AMGO) funds were formed in 1981, 1983, 1988, and 1990, respectively, and are structured as limited partnerships. The funds are expected to terminate in 2001, 2001, 1998, and 2000, respectively. The general partner and manager of the funds is First Reserve Corp. The general partner's longterm 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.

J.P. Morgan Investment Management Fund: Morgan Petroleum Fund II Morgan Petroleum Fund II was formed in 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. The fund has a 15 year term.

### Simmons & Company Funds: OFS Investments, L.P. II OFS Investments, L.P. III

The Funds serve as vehicles for investment in the oil field service (OFS) and equipment industry. The General Partner is located in Houston, Texas and will endeavor to negotiate transactions that display strong fundamentals, value-added opportunities, reasonable pricing and appropriate financial structuring possibilities. Fund I was formed in 1992 and Fund II was formed in 1994. Both funds have a 10 year term.

# Alternative Investment Managers

# **Post Retirement Fund**

#### **Real Estate**

#### **Colony Advisors**

*Fund: Colony Investors II, L.P.* Colony Investors II is a closed-end commingled real estate fund managed by Colony Capital Inc. of Los Angeles, California. The fund's strategy is to invest in undervalued equity and debt real estate-related assets. The SBI committed to the Fund in 1994. The fund is expected to terminate in 2003.

### Westmark Realty Advisors Fund: Westmark Commercial Mortgage Fund II Westmark Commercial Mortgage Fund III

Westmark Commercial Mortgage Fund II and III are funds formed in 1995 and 1996 with ten year terms. Based in Los Angeles, California, the funds focus on mortgage investment in real estate located throughout the U.S.

## Private Equity

#### Citicorp Capital Investors, Ltd. Fund: Citicorp Mezzanine Partners, L.P. II

Citicorp Mezzanine Fund is a limited partnership formed in 1994 by Citicorp Capital Investors Ltd. of New York, New York. Fund II will invest in a broad range of transactions utilizing subordinated debt and equity securities. The SBI committed to Fund II in 1994. The fund has expected term of 10 years.

#### Kleinwort Benson

### Fund: KB Mezzanine Fund II

KB Mezzanine Fund II is a limited partnership formed in 1994 by Kleinwort Benson Group, a leading London-based merchant banking firm. Fund II invests in a broad range of transactions including utilizing subordinated debt and equity securities. The SBI committed to the fund in 1994. The fund has an expected 8 year term.

Stamps, Woodsum & Co.

Funds: Summit Subordinated Debt Fund I Summit Subordinated Debt Fund II

Summit Subordinated Debt Fund I and II are limited partnerships formed in 1994 and 1996, respectively, with ten year terms. The funds were formed by Stamps, Woodsum & Co., the managing general partners of the fund. The fund will invest in many of the same companies as the Summit Venture funds. Investments by this partnership will principally take the form of subordinated debt with equity features. These yield-oriented investments will provide current income over the life of the investment with the potential for additional returns.

### TCW Crescent Mezzanine, L.L.C. Fund: TCW/Crescent Mezzanine Partners, L.P.

TCW/Crescent is a Los Angeles based limited partnership formed in 1991. The Fund will make mezzanine investments including subordinated debt with equity participations primarily in profitable, middle market companies. The SBI committed to the Fund in 1996. The Fund is expected to terminate in 2006.

# 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 the Risk Factor Exposure table that follows this glossary.

SBI analysis of a stock manger'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 a greater exposure to the factor than roughly 68% of the HICAP stocks.

#### Beta

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.

### Book-to Price (B/P)

Measures the book value of a company's common equity divided by market capitalization.

### Dividend Yield (Div. Yld.)

Used as a predictor of dividend yield for the coming year.

### Earnings-to-Price (E/P)

Incorporates several variants of a company's earnings-price ratio. Includes the current earnings-price ratio, the normalized (5 year) earnings-price ratio, and analyst's forecasted earnings-price ratio as compiled by the Institutional Brokerage Estimate Services (IBES).

### Earnings Variability (Earn. Var.)

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.

#### Equity Allocation (Eq. Alloc.)

Measures the percent of the manager's total portfolio invested in common stocks, preferred stocks and convertible securities.

#### **Financial Leverage**

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.

#### Foreign Income (For. Inc.)

Measures the extent to which a company's operating income is generated outside of the U.S.

#### Growth

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.

#### Labor Intensity (Labor Int.)

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.

#### Monthly Turnover (Mo. T/O)

Measures the total equity asset sales divided by the average value of the equity assets in the manager's portfolio.

#### Size

Indicates the relative size of the company. It includes three descriptors: market capitalization, total assets, and the length of earnings history.

#### Success (Suc.)

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 fiveyear 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).

### Trading Activity (Trad. Act.)

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.

### Variability in Markets (Var. Mkts.)

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.

# EXTERNAL ACTIVE STOCK MANAGERS

# Risk Factor Exposures July 1992-June 1997

	Beta	Var. Mkts.	Suc.	Size	Trad. Act.	Growth	E/P	B/P	Earn Var.	Finl.	For. Inc.	Labor Int.	· Div. Yld.		Eq. Alloc.	•
Allianas Cani	4-1															
Alliance Capi Minimum	1.13	0.14	0.00	0.22	0.15	0.22	0.22	-0.49	0.06	0.10	0.26	0.14	0.01	0.16	78%	
Average	1.15	0.14	0.00	0.22	0.15 0.32	0.32 0.59		-0.49	-0.06 0.08	0.10	-0.26 -0.02		-0.81 -0.60	0.16 3.55	18% 98%	
Maximum	1.19	0.55	0.52	0.34	0.52	0.39		-0.38	0.08	0.08	0.02		-0.38		/ -	
Waximum	1.23	0.54	0.07	0.40	0.50	0.77	0.11	-0.20	0.20	0.22	0.25	0.42	-0.58	9.00	10070	
Bmrk. Avg.	1.12	0.21	0.13	0.00	0.14	0.39	-0.07	-0.27	-0.06	0.00	-0.05	0.34	-0.46	N.A.	96%	
American Ex	press															
Minimum	1.06	-0.03	0.01	-0.27	0.15	-0.01	-0.28	-0.24	-0.10	-0.15	-0.33	-0.11	-0.59	0.32	81%	
Average	1.12	0.24	0.25	0.13	0.34	0.23	-0.01	-0.04	0.20	0.03	-0.06	0.09	-0.32	7.53	92%	
Maximum	1.19	0.61	0.63	0.51	0.64	0.42	0.35	0.14	0.34	0.29	0.22	0.45	-0.09	71.41	100%	
Durante Asso	1.06	0.14	0.05	0.01	0.17	0.12	0.02	0.00	0.00	0.05	0.04	0.07	0.15	NT A	0.207	
Bmrk. Avg.	1.00	0.14	0.05	0.01	0.17	0.13	-0.02	0.00	0.09	0.05	-0.04	0.07	-0.15	IN.A.	92%	
Brinson Parti	ners*															
Minimum	0.97	-0.08	-0.32	-0.54	0.08	-0.01	-0.25	0.09	0.11	0.07	-0.39	0.04	-0.32	0.76	94%	
Average	1.03	0.10	-0.13	-0.45	0.22	0.09	0.04	0.18	0.30	0.21	-0.21	0.13	-0.14	3.92	97%	
Maximum	1.09	0.31	0.01	-0.37	0.52	0.29	0.29	0.28	0.60	0.42	0.01	0.18	-0.02	7.96	99%	
Bmrk. Avg.	1.00	0.12	-0.11	-0.53	0.15	0.05	-0.01	0.16	0.16	-0.08	-0.27	0.03	-0.03	N.A.	99%	
Forstmann L	eff															
Minimum	1.04	0.11	-0.28	-1.31	0.07	0.12	-0.43	-0.11	0.13	-0.08	-0.54	-0.37	-0.80	1.99	64%	
Average	1.11	0.47	0.09	-0.79	0.43	0.46	-0.12	0.18	0.43	0.14	-0.24	-0.06	-0.56	8.88	91%	
Maximum	1.25	1.08	0.53	-0.29	0.86	0.83	0.16	0.50	0.71	0.40	0.04	0.17	-0.33	19.41	100%	
Bmrk. Avg.	1.13	0.52	0.06	-0.69	0.52	0.38	-0.04	-0.02	0.24	-0.02	-0.23	0.15	-0.37	N.A.	91%	
Franklin Port	folio															
Minimum	0.98	-0.01	-0.06	-0.58	0.01	-0.05	0.16	0.01	0.00	-0.24	-0.62	-0.25		0.52	95%	
Average	1.04	0.19	0.15	-0.38	0.22	0.07	0.33	0.16	0.16	-0.10	-0.33	0.00	-0.11	9.02	99%	
Maximum	1.06	0.28	0.32	-0.23	0.44	0.17	0.50	0.35	0.39	0.05	-0.01	0.17	-0.01	41.64	100%	'
Bmrk. Avg.	1.03	0.14	-0.02	-0.41	0.15	0.08	0.01	0.05	0.09	-0.04	-0.26	0.06	-0.09	N.A.	98%	

Bmrk. Avg. = Benchmark average.

\* Manager retained as of 7/1/93. Data covers period from 7/1/93-6/30/97 only.

# EXTERNAL ACTIVE STOCK MANAGERS

# Risk Factor Exposures Con't. July 1992-June 1997

	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.
GeoCapital C	orn														
Minimum	1.02	0.53	-0.31	-2 31	0.08	0.76	-0.52	-0 33	0.19	-0.32	-0.71	0.29	-1.00	0.41	88%
Average	1.13	0.87		-2.15	0.37	0.90		-0.19	0.34	0.01	-0.58		-0.81	2.34	
Maximum	1.28	1.28		-1.95	0.91	1.13		0.04	0.52	0.35	-0.49		-0.80		100%
Bmrk. Avg.	1.21	1.23	0.49	-2.18	0.75	1.20	-0.51	-0.24	0.59	-0.06	-0.50	0.49	-0.99	N.A.	98%
Investment A	dviser	s*													
Minimum	0.95	0.01	-0.63	-2.06	-0.20	0.27	-0.20	-0.24	-0.18	-0.41	-0.62	0.31	-0.88	2.73	77%
Average	1.01	0.26	0.16	-1.57	0.02	0.51	-0.04	-0.10	0.09	-0.17	-0.43	0.51	-0.54	10.52	88%
Maximum	1.10	0.66	0.76	-0.95	0.35	0.72	0.12	0.09	0.33	0.08	-0.12	0.67	-0.35	34.97	98%
Bmrk. Avg.	1.00	0.09	-0.03	-0.79	-0.08	0.17	0.01	0.04	0.05	-0.07	-0.38	0.23	-0.18	N.A.	96%
Independence	e Inves	tment A	ssociat	tes**											
Minimum	0.99	-0.17	-0.07	0.20	-0.07	-0.22	0.04	-0.05	-0.12	-0.01	-0.29	-0.14	0.05	0.00	66%
Average	1.00	-0.08	0.01	0.28	0.03	-0.16	0.14	0.02	-0.02	0.11	0.00	-0.04	0.13	6.16	98%
Maximum	1.02	-0.02	0.12	0.36	0.12	-0.08	0.21	0.10	0.07	0.22	0.13	0.05	0.20	43.39	100%
Bmrk. Avg.	1.00	-0.08	-0.04	0.32	-0.01	-0.09	0.02	-0.01	-0.03	0.06	0.07	-0.03	0.07	N.A.	100%
Lincoln Capi	tal Ma	nageme	nt*												
Minimum	1.07	-0.16	-0.19	0.32	-0.19	0.04	-0.27	-0.45	-0.45	-0.06	0.05	0.28	-0.51	0.00	84%
Average	1.09	0.00	0.13	0.50	-0.04	0.20	-0.12	-0.39	-0.34	0.05	0.39	0.35	-0.35	4.28	96%
Maximum	1.12	0.19	0.32	0.69	0.07	0.34	0.11	-0.27	-0.19	0.15	0.71	0.40	-0.19	18.55	99%
Bmrk. Avg.	1.11	0.15	0.08	0.15	0.10	0.34	-0.16	-0.34	-0.23	-0.04	0.14	0.37	-0.39	N.A.	96%
Oppenheimer	· Capit	al*													
Minimum	1.01	-0.12	-0.12	-0.08	0.02	-0.12	0.23	-0.08	-0.23	0.03	-0.04	0.19	-0.22	0.00	86%
Average	1.05	0.00	0.03	0.01	0.09	-0.03	0.33	0.03	-0.07	0.13	0.15	0.28	-0.14	2.02	93%
Maximum	1.07	0.12	0.23	0.15	0.23	0.08	0.42	0.12	0.09	0.23	0.37	0.36	-0.05	7.85	98%
Bmrk. Avg.	0.99	-0.09	-0.08	-0.02	-0.04	-0.10	0.11	0.04	-0.09	-0.04	-0.15	0.05	0.05	N.A.	96%

Bmrk. Avg. = Benchmark average.

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\* Manager retained as of 7/1/93. Data covers period from 7/1/93-6/30/97 only.

\*\* Manager retained as of 2/1/92. Data covers period from 2/1/92-6/30/97 only.

# EXTERNAL ACTIVE STOCK MANAGERS

# Risk Factor Exposures Con't. July 1992-June 1997

	Beta	Var. Mkts.	Suc	Sizo	Trad.	Growth	E/D	B/P	Earn Vor	Finl.	For. Inc.	Labor Int.	Div. Yld.		Eq. Alloc.
	Deta	IVINIS.	Suc.	Size	Act.	Growin	E/F	D/r	var.	Г Ш.	mc.	III.	I IU.	1/0	Anoc.
Weiss Peck &	z Greer	*													
Minimum	1.16	1.23	-0.72	-2.67	0.71	1.15	-0.87	-0.32	0.62	-0.31	-0.55	0.18	-1.17	4.18	95%
Average	1.21	1.37	0.33	-2.48	0.88	1.27	-0.65	-0.17	0.75	-0.24	-0.35	0.44	-0.97	8.54	98%
Maximum	1.30	1.50	0.97	-1.88	1.11	1.38	-0.41	0.09	1.07	-0.15	-0.21	0.60	-0.74	35.87	100%
Bmrk. Avg.	1.23	1.37	0.46	-2.25	0.83	1.30	-0.54	-0.18	0.73	-0.07	-0.46	0.39	-1.01	N.A.	98%
Aggregate															
Minimum	1.06	0.23	0.03	-0.50	0.19	0.32	-0.15	-0.18	0.08	-0.09	-0.29	0.12	-0.60	3.14	88%
Average	1.11	0.38	0.22	-0.40	0.33	0.42	-0.05	-0.11	0.18	0.02	-0.12	0.20	-0.45	6.10	94%
Maximum	1.17	0.58	0.38	-0.28	0.45	0.55	0.05	-0.02	0.25	0.12	0.01	0.26	-0.28	39.72	98%
Bmrk. Avg.	1.10	0.37	0.11	-0.53	0.28	0.38	-0.10	-0.09	0.13	-0.02	-0.16	0.23	-0.38	N.A.	96%

Bmrk. Avg. = Benchmark average.

Aggregate includes data only for active managers retained on 6/30/95.

\* Manager retained as of 7/1/93. Data covers period from 7/1/93-6/30/97 only.

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## EXTERNAL EMERGING STOCK MANAGERS

# Risk Factor Exposures April 1994-June 1997

	Beta	Var. Mkts.	Suc.	Size	Trad. Act.	Growth	E/P	B/P	Earr Var.	ı. Finl.	For. Inc.	Labor Int.	Div. Yld.	Мо. Т/О	Eq. Alloc.
CIC Asset Ma	anagen	nent													
Minimum	0.91	-0.35	-0.41	-0.39	-0.16	-0.41	0.21	0.07	-0.16	-0.23	-0.32	-0.30	0.18	2.87	91%.
Average	0.98	-0.21	-0.25	0.00	-0.06	-0.31	0.35	0.22	-0.02	-0.03	-0.16	-0.04	0.30	8.37	95%
Maximum	1.02	-0.11	-0.10	0.26	0.10	-0.19	0.52	0.41	0.18	0.12	-0.02	0.20	0.41	18.39	99%
Bnmk.Avg.	0.98	-0.19	-0.10	0.17	-0.10	-0.19	0.22	0.10	-0.06	0.02	-0.12	-0.05	0.16	N.A.	98%
Cohen, Kling	ensteir	n & Mar	·ks												
Minimum	1.09	0.19	0.03	-0.50	0.29	0.14	-0.07	-0.39	-0.04	-0.02	-0.14	0.14	-0.39	0.00	90%
Average	1.14	0.37	0.18	-0.38	0.55	0.30	0.15	-0.27	0.13	0.11	0.06	0.33	-0.29	4.39	98%
Maximum	1.18	0.50	0.51	-9.17	0.87	0.47	0.30	-0.15	0.34	0.21	0.22	0.48	-0.22	43.13	100%
Bnmk. Avg.	. 1.09	0.27	-0.05	-0.53	0.37	0.19	0.01	0.06	0.24	0.12	-0.05	0.31	-0.21	N.A.	98%
Compass Cap	oital														
Minimum	0.98	-0.16	-0.38	-0.48	-0.28	0.05	-0.27	-0.34	-0.51	-0.40	-0.21	0.39	-0.32	0.00	93%
Average	1.03	-0.02	-0.20	-0.39	-0.21	0.12	-0.16	-0.29	-0.39	-0.33	-0.02	0.50	-0.24	2.35	98%
Maximum	1.08	0.20	-0.05	-0.31	-0.12	0.16	0.04	-0.22	-0.27	-0.29	0.15	0.62	-0.14	5.77	99%
Bnmk. Avg	1.06	0.11	-0.01	-0.43	-0.01	0.19	-0.13	-0.22	-0.29	-0.13	0.01	0.45	-0.32	N.A.	98%
New Amsterd	lam														
Minimum	1.02	0.16	-0.31	-1.29	-0.05	0.18	-0.06	-0.13	-0.23	-0.30	-0.60	0.04	-0.44	0.00	96%
Average	1.04	0.29	-0.05	-0.97	0.13	0.25	0.12	0.04	-0.16	-0.13	-0.41	0.11	-0.37	2.92	98%
Maximum	1.09	0.52	0.15	-0.72	0.32	0.33	0.32	0.30	-0.12	0.05	-0.25	0.19	-0.29	9.60	99%
Bnmk. Avg.	1.06	0.28	-0.03	-0.56	0.30	0.18	0.12	0.12	0.19	0.00	-0.10	0.08	-0.15	N.A.	99%
Valenzuela C	apital														
Minimum	0.99	0.04	-0.16	-1.25	-0.04	0.01	-0.25	-0.06	-0.06	-0.20	-0.63	0.37	-0.40	0.00	86%
Average	1.03	0.13	0.05	-0.98	0.15	0.15	-0.10	0.01	0.12	0.02	-0.28	0.47	-0.32	5.68	92%
Maximum	1.06	0.22	0.43	-0.78	0.24	0.25	0.03	0.11	0.36	0.18	0.08	0.62	-0.24	9.88	98%
Bnmk. Avg	1.02	0.25	-0.07	-1.16	0.15	0.26	0.02	0.13	0.15	-0.09	-0.45	0.17	-0.26	N.A.	97%
Wilke Thomp	son														
Minimum	1.07	0.85	-0.71	-2.74	0.33	0.98	-0.71	-0.46	-0.01	-0.70	-0.70	0.39	-1.14	0.00	94%
Average	1.12	1.01	0.42	-2.59	0.51	1.13	-0.55	-0.29	0.21	-0.61	0.56	0.50	-1.00	3.01	97%
Maximum	1.18	1.19	1.10	-2.48	0.69	1.23	-0.40	0.05	0.46	-0.52	-0.36	0.56	-0.82	7.85	100%
Bnmk. Avg	1.12	1.03	0.31	-2.56	0.42	0.95	-0.29	-0.07	0.27	-0.30	-0.66	0.46	-0.85	N.A.	98%

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### EXTERNAL EMERGING STOCK MANAGERS

## Risk Factor Exposures Con't. April 1994-June 1997

		Var.			Trad.				Earn	•	For.	Labor	Div.	Mo.	Eq.
	Beta	Mkts.	Suc.	Size	Act.	Growth	E/P	B/P	Var.	Finl.	Inc.	Int.	Yld.	T/O	Alloc.
Winslow Cap	ital														
Minimum	1.15	0.49	0.02	-0.68	0.22	0.82	-0 56	-0.67	0.01	-0.48	-0.39	0.23	-1.02	0.00	86%
Average	1.21	0.69		-0.44	0.47	0.90		-0.51		-0.23	-0.13		-0.83		
Maximum	1.26	0.87		-0.28	0.68	1.07		-0.36		-0.02	0.17			10.77	
Bnmk. Avg	1.18	0.53	0.24	-0.34	0.42	0.73	-0.23	-0.23	0.23	-0.10	0.02	0.38	-0.69	N.A.	98%
Zevenbergen	Capita	վ													
Minimum	1.08	0.27	-0.14	-0.77	0.08	0.46	-0.62	-0.49	-0.02	-0.15	-0.29	0.22	-0.89	0.70	68%
Average	1.16	0.53	0.27	-0.41	0.33	0.72	-0.48	-0.34	0.10	-0.01	-0.12	0.34	-0.66	8.47	97%
Maximum	1.24	0.83	0.61	0.01	0.59	0.95	-0.33	-0.16	0.27	0.21	0.09	0.51	-0.34	25.50	100%
Bnmk. Avg.	1.15	0.49	0.26	-0.34	0.35	0.62	-0.32	-0.42	0.00	-0.10	0.04	0.35	-0.60	N.A.	97%
Aggregate En	nergin	g Mana	gers												
Minimum	1.05	0.22	-0.03	-1.11	0.15	0.32	-0.16	-0.18	-0.03	-0.18	-0.29	0.23	-0.50	2.96	85%
Average	1.07	0.35	0.09	-0.97	0.19	0.39	-0.10	-0.12	0.07	-0.15	-0.24	0.32	-0.40	5.32	96%
Maximum	1.10	0.45	0.24	-0.70	0.25	0.44	0.03	-0.06	0.14	-0.09	-0.19	0.39	-0.30	14.44	98%
Bnmk. Avg.	1.06	0.41	0.10	-1.05	0.16	0.40	-0.09	-0.05	0.01	-0.16	-0.23	0.23	-0.38	N.A.	99%

Aggregate includes data only for managers retained on 6/30/97.

#### EXTERNAL SEMI-PASSIVE STOCK MANAGERS

## Risk Factor Exposures January 1995-June 1997

		Var.			Trad.				Earn	•	For.	Labor	Div.	Mo.	Eq.
	Beta	Mkts.	Suc.	Size	Act.	Growth	E/P	B/P	Var.	Finl.	Inc.	Int.	Yld.	T/O	Alloc.
<b>Barclays</b> Glo															
Minimum	0.90	-0.22		-0.21		-0.31	0.08	0.19	-0.05		-0.24	-0.28	0.18	0.11	99%
Average	0.92	-0.16	-0.01	-0.16	-0.19	-0.25	0.23	0.26	0.01	0.01	-0.20	-0.21	0.24	4.88	99%
Maximum	0.94	-0.12	0.05	-0.13	-0.16	-0.17	0.30	0.32	0.06	0.05	-0.15	-0.14	0.30	11.65	100%
Franklin Por	•tfolio A	ssociate	es												
Minimum	0.90	-0.24		-0.21	-0.27	-0.29	0.14	0.18	-0.07	-0.03	-0.22	-0.25	0.21	0.00	99%
Average	0.92	-0.19		-0.13		-0.24	0.26	0.25	-0.01	0.04	-0.18	-0.20	0.26	5.92	99%
Maximum	0.92	-0.12		-0.07		-0.19	0.32	0.35	0.05	0.09	-0.13	-0.14		12.22	100%
Maximum	0.95	-0.12	-0.01	-0.07	-0.10	-0.19	0.52	0.55	0.05	0.09	-0.15	-0.14	0.55	14.44	100 %
J.P. Morgan															
Minimum	0.90	-0.27	-0.20	-0.13	-0.29	-0.30	0.10	0.13	-0.05	-0.01	-0.25	-0.20	0.19	0.11	99%
Average	0.92	-0.22	-0.14	-0.09	-0.24	-0.24	0.14	0.19	-0.02	0.04	-0.18	-0.18	0.25	5.37	100%
Maximum	0.94	-0.16	-0.08	-0.02	-0.20	-0.18	0.19	0.23	0.02	0.12	-0.11	-0.14	0.33	9.39	100%
Aggregate Se	mi.Pac	sive Eau	nitv												
Minimum	0.90	-0.24	-0.12	-0.17	-0.25	-0.30	0.11	0.18	-0.04	-0.01	-0.23	-0.24	0.21	0.00	99%
Average	0.90	-0.19		-0.13		-0.25	0.21	0.18	-0.01	0.03	-0.19	-0.24	0.21	5.14	99%
Maximum	0.92						0.21								
Maximum	0.94	-0.14	-0.05	-0.10	-0.18	-0.18	0.27	0.29	0.03	0.07	-0.16	-0.15	0.32	1.00	100%
Benchmark A	Average	e*													
	0.91	-0.23	-0.13	-0.09	-0.29	-0.24	0.12	0.17	-0.03	0.07	-0.17	-0.17	0.26	N.A.	100%

\* All semi-passive managers use the same benchmark.

## EXTERNAL ACTIVE STOCK MANAGERS

### Sector Weights Actual Portfolio Less Benchmark Portfolio July 1992-June 1997

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
Alliance Capital									
Minimum	40.40	0.13	0.00	2.36	0.00	2.70	0.00	0.76	13.76
Average	49.18	2.52	1.58	3.79	0.20	13.37	3.71	2.98	22.66
Maximum	67.27	5.97	4.47	7.37	1.26	20.91	6.96	4.93	31.04
Bmrk. Avg.	51.14	4.47	5.93	6.43	1.18	11.23	2.24	3.23	14.16
American Express									
Minimum	14.57	0.31	8.31	4.29	3.47	4.29	0.00	0.00	11.35
Average	26.47	7.54	14.48	7.59	8.00	8.36	6.72	3.18	17.65
Maximum	37.73	13.93	20.67	14.13	12.68	15.85	11.42	8.15	25.36
Bmrk. Avg.	36.78	4.24	8.60	5.69	6.07	8.64	3.18	11.75	15.07
Brinson Partners*									
Minimum	25.48	1.30	5.92	5.31	1.84	4.00	1.98	5.04	17.05
Average	36.21	3.13	8.67	7.50	3.89	7.43	5.04	7.28	20.85
Maximum	42.01	5.21	12.57	11.57	6.38	9.68	9.71	9.88	24.61
Bmrk. Avg.	34.48	3.45	8.36	7.59	5.64	9.45	2.22	12.19	16.63
Forstmann Leff									
Minimum	30.21	0.00	1.60	1.65	4.78	1.90	1.64	1.37	2.99
Average	43.48	4.99	6.89	4.66	9.22	6.91	4.47	5.06	14.32
Maximum	62.05	15.95	14.50	9.75	12.31	16.60	9.75	11.90	26.93
Bmrk. Avg.	40.53	6.39	8.26	6.22	6.19	8.62	3.04	7.31	13.44
Franklin Portfolio									
Minimum	20.50	1.94	2.04	1.56	2.53	7.60	0.00	4.92	14.33
Average	30.92	5.85	6.76	4.79	7.25	10.82	2.81	11.23	19.56
Maximum	37.94	9.22	13.04	11.35	14.15	14.49	5.17	15.14	27.56
Bmrk. Avg.	33.58	4.72	10.55	6.58	5.99	8.31	2.37	10.93	16.97

Bmrk. Avg. = Benchmark average

\* Manager retained as of 7/1/93. Data covers period from 7/1/93-6/30/97 only.

#### EXTERNAL ACTIVE STOCK MANAGERS

### Sector Weights Con't. Actual Portfolio Less Benchmark Portfolio July 1992-June 1997

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
GeoCapital Corp.									
Minimum	56.78	1.12	1.78	0.00	0.00	2.13	0.05	0.00	8.33
Average	64.56	1.98	2.64	0.55	0.02	5.06	1.24	1.96	22.00
Maximum	75.07	4.02	4.43	5.10	0.13	8.89	4.07	4.11	31.52
Bmrk. Avg.	59.21	1.43	2.30	5.44	1.80	13.04	1.13	3.61	12.05
Investment Advisers	5*	1							
Minimum	28.27	0.75	3.52	4.02	1.24	3.30	0.00	0.69	8.23
Average	33.67	5.59	10.65	17.41	2.54	8.78	3.17	3.99	14.21
Maximum	42.85	10.03	15.01	25.59	5.02	15.31	7.45	13.63	23.13
Bmrk. Avg.	37.96	4.44	8.59	11.40	2.59	6.62	2.58	8.56	17.26
Independence Invest	tment Associa	ates**							
Minimum	28.43	2.30	4.69	6.04	7.08	2.28	0.26	7.32	14.41
Average	32.84	5.73	7.64	7.75	8.38	7.00	1.86	12.05	16.75
Maximum	36.72	8.20	11.88	10.46	10.53	11.26	3.71	16.50	20.46
Bmrk. Avg.	35.79	4.25	8.23	6.64	7.84	7.65	1.82	13.52	14.25
Lincoln Capital Mai	nagement*								
Minimum	51.85	0.00	0.90	2.57	0.00	0.58	0.00	0.00	7.72
Average	60.44	1.37	3.97	5.59	0.07	11.20	0.51	3.04	13.81
Maximum	68.62	3.31	7.67	8.69	0.29	18.10	1.08	5.73	25.15
Bmrk. Avg.	60.45	1.72	3.72	5.38	0.54	11.23	0.25	4.04	12.66
<b>Oppenheimer</b> Capita	al*								
Minimum	19.02	2.19	6.25	7.35	0.10	1.64	0.00	2.29	30.40
Average	29.11	3.85	10.32	10.46	1.64	4.68	1.42	3.58	34.94
Maximum	39.54	5.90	14.46	13.20	4.26	7.52	5.06	5.11	39.50
Bmrk. Avg.	35.41	4.07	9.88	6.81	6.17	6.14	2.54	10.96	18.03

Bmrk. Avg. = Benchmark average

\*

\* Manager retained as of 7/1/93. Data covers period from 7/1/93-6/30/97 only.

\*\* Manager retained as of 2/1/92. Data covers period from 2/1/92-6/30/97 only.

#### EXTERNAL ACTIVE STOCK MANAGERS

#### Sector Weights Con't. Actual Portfolio Less Benchmark Portfolio July 1992-June 1997

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
Weiss Peck & Gre	er*								
Minimum	46.99	2.53	1.95	2.03	1.91	8.36	2.80	0.87	5.30
Average	51.76	4.35	4.16	4.16	5.13	14.63	5.24	2.83	7.75
Maximum	58.82	6.42	6.78	7.80	11.15	19.54	7.67	4.91	12.41
Bmrk. Avg.	49.25	4.32	5.95	8.49	4.82	15.16	2.80	2.54	6.67
Active Managers A	Aggregate**								
Minimum	38.05	1.77	4.82	3.18	3.05	4.95	2.33	3.55	13.78
Average	42.95	4.18	6.03	5.73	3.92	10.14	2.95	5.42	18.69
Maximum	47.01	6.32	8.04	8.03	5.36	14.46	3.89	6.97	24.19
Bnmk. Avg.	43.95	4.30	7.45	6.59	4.06	10.75	2.39	6.76	13.74

Bmrk. Avg. = Benchmark average

Aggregate includes data only for active managers retained on 6/30/95.

\* Manager retained as of 7/1/93. Data covers period from 7/1/93-6/30/97 only.

\*\* Includes impact of the Emerging Manager Program. See pages 74-75 for more detail.

## EXTERNAL EMERGING STOCK MANAGERS

# Sector Weights April 1994-June 1997

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
CIC Asset Manager	nent								
Minimum	10.06	2.21	4.50	3.18	5.17	2.71	0.00	2.96	15.34
Average	18.96	7.19	12.40	9.30	8.30	6.66	2.77	10.45	23.96
Maximum	28.24	13.39	22.29	14.81	12.51	11.90	5.14	19.37	31.15
Bnmk. Avg.	29.29	6.95	9.59	8.05	7.39	6.23	1.82	11.69	18.99
Cohen, Davis, & Ma	arks								
Minimum	34.26	2.18	0.26	0.00	0.00	2.69	0.00	0.00	15.91
Average	41.91	7.68	6.48	3.47	0.80	12.82	1.41	0.91	24.52
Maximum	49.56	13.05	13.24	8.31	4.03	22.87	3.14	5.76	30.95
Bnmk. Avg.	42.80	7.08	9.81	8.21	1.25	12.44	1.75	1.76	14.91
<b>Compass Capital</b>									
Minimum	53.56	1.01	2.71	12.30	0.00	3.23	0.00	0.00	0.18
Average	63.08	2.65	7.62	17.76	0.00	4.07	0.00	0.00	4.83
Maximum	71.43	8.72	11.12	23.78	0.00	5.28	0.00	0.00	9.79
Bnmk. Avg.	59.63	4.81	8.83	8.59	0.24	9.92	1.56	0.24	6.18
New Amsterdam									
Minimum	32.86	5.62	2.67	0.00	2.68	5.98	2.11	6.62	13.95
Average	38.91	9.78	7.33	1.35	4.96	9.80	2.40	8.93	16.53
Maximum	44.61	15.05	10.71	4.00	6.74	13.85	2.92	11.22	20.46
Bnmk. Avg.	38.20	4.27	8.72	6.91	5.47	11.87	2.45	8.10	14.01
Valenzuela Capital									
Minimum	33.77	0.00	6.15	5.70	4.38	2.84	0.00	0.00	12.64
Average	39.71	3.38	10.60	14.08	7.26	4.08	1.16	1.46	18.26
Maximum	46.27	8.11	15.95	18.36	10.30	5.78	8.65	5.27	28.85
Bnmk. Avg.	38.08	4.94	10.63	7.73	4.46	6.71	3.50	5.95	18.01
Wilke Thompson									
Minimum	64.68	0.00	0.00	0.86	0.00	7.56	0.00	0.00	0.00
Average	82.90	2.50	2.20	2.89	0.00	8.66	0.00	0.00	0.86
Maximum	90.42	9.22	7.07	6.37	0.00	12.21	0.00	0.00	4.42
Bnmk. Avg.	60.53	8.70	5.39	10.68	1.29	10.82	0.29	0.14	2.16

.

## EXTERNAL EMERGING STOCK MANAGERS

# Sector Weights Con't. April 1994-June 1997

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
Winslow Capital									
Minimum	52.24	0.00	0.00	0.00	0.00	8.86	1.21	1.81	1.73
Average	64.21	1.37	0.49	2.84	0.00	13.44	1.99	8.59	7.08
Maximum	70.37	3.98	2.66	7.32	0.00	22.38	3.98	11.99	17.18
Bnmk. Avg.	51.37	3.65	5.10	7.18	1.85	17.15	1.68	3.58	8.44
Zevenbergen Capita	1								
Minimum	42.91	0.22	0.07	1.82	0.00	6.68	0.00	2.70	1.16
Average	58.82	2.40	1.44	5.49	1.66	11.45	0.97	7.95	9.82
Maximum	67.67	7.02	3.90	12.63	3.62	15.49	4.44	12.90	18.61
Bnmk. Avg.	56.56	1.95	4.57	5.39	2.37	16.73	0.74	4.83	6.87
Aggregate Emerging	g Managers								
Minimum	44.85	2.70	4.46	6.51	2.08	6.79	0.56	3.25	9.96
Average	49.29	4.79	7.06	7.99	2.97	8.72	1.24	4.59	13.35
Maximum	51.76	8.38	9.21	9.73	4.06	10.96	2.62	5.26	16.04
Bnmk. Avg.	46.46	4.81	6.87	6.99	2.31	11.18	2.03	5.88	13.47

Aggregate includes data only for managers retained on 6/30/97.

#### EXTERNAL SEMI-PASSIVE STOCK MANAGERS

## Sector Weights Actual Portfolio Less Benchmark Portfolio January 1995-June 1997

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
Barclays Global Inves	stors								
Minimum	24.63	3.17	7.19	6.44	6.88	3.34	0.44	13.89	18.20
Average	27.03	3.95	9.03	7.46	8.24	4.61	1.00	17.11	21.58
Maximum	30.79	4.71	11.60	9.20	10.16	5.51	1.43	19.45	23.96
Franklin Portfolio As	sociates								
Minimum	26.52	2.66	7.79	5.40	7.32	3.03	0.26	12.45	18.34
Average	28.29	3.63	9.64	7.27	8.31	4.48	0.80	17.03	20.56
Maximum	31.51	4.85	11.82	8.46	9.89	5.63	1.42	18.86	22.72
J.P. Morgan									
Minimum	25.97	3.14	7.38	6.41	7.34	3.74	1.25	14.03	19.06
Average	27.50	3.85	8.53	7.38	8.23	5.18	1.71	16.91	20.72
Maximum	30.19	4.93	9.49	8.02	9.53	6.67	2.04	18.42	22.53
Aggregate Semi-Passi	ve Equity								
Minimum	25.94	3.23	7.56	6.28	7.33	4.09	0.97	13.54	18.74
Average	27.60	3.81	9.06	7.37	8.26	4.76	1.17	17.02	20.96
Maximum	30.80	4.57	10.82	8.28	9.59	5.80	1.48	18.82	22.35
Benchmark Average*	27.87	3.39	8.87	7.45	8.16	4.96	1.79	16.53	20.98

\* All semi-passive managers use the same benchmark.

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#### EXTERNAL DOMESTIC STOCK MANAGERS

#### Annualized Performance Summary Periods Ending June 30, 1997

	1	Year	3 1	rears	5	Years
	Actual	Benchmark	Actual	Benchmark	Actual	Benchmark
Active Managers						
Alliance	41.7%	35.2%	31.4%	28.8%	21.9%	18.8%
American Express	25.4	34.5	23.7	28.9	18.3	21.0
Brinson	32.7	28.6	28.4	25.4		
Forstmann Leff	30.0	26.8	26.9	25.8	18.4	17.5
Franklin	31.6	26.2	26.2	24.7	20.9	18.7
GeoCapital	9.1	5.6	19.1	24.2	15.4	21.1
IAI	15.1	27.5	21.9	25.3		
Independence	28.8	34.8	25.8	29.1	18.8	20.2
Lincoln	32.1	35.8	31.7	31.1		
Oppenheimer	37.1	31.4	30.9	26.3		
Weiss Peck & Greer	1.3	8.5	22.0	21.6		
Emerging Managers (1	)					
CIC Asset	29.0	32.8	25.1	27.2		
Cohen	37.8	32.8	29.5	26.7		
Compass Capital	24.4	32.3	25.8	27.3		
New Amsterdam	34.6	28.2	25.3	23.8		
Valenzuela Capital	42.5	26.8	26.7	23.7		
Wilke/Thompson	-7.2	10.9	15.2	21.0		
Winslow Capital	18.8	28.0	21.9	25.6		
Zevenbergen Capital	25.8	27.5	25.4	26.2		
Semi-Passive Managers	s (2)					
Franklin	33.7	32.5				
J.P. Morgan	32.1	32.5				
Barclays Global	33.1	32.5				
Passive Manager						
Barclays Global	29.9	29.3				
Aggregate (3)	29.7%		26.2%		18.7%	
Capital Markets Data						
Wilshire 5000	29.3%		26.7%		19.1%	
Wilshire 5000 Adj. (4)	29.3		26.7		19.0	
91-Day Treasury Bills	5.3		5.4		4.5	
Inflation	2.3		2.7		2.7	

(1) Emerging Managers were retained on 4/1/94.

(2) Semi-Passive Managers were retained on 1/1/95.

(3) Aggregate of all domestic stock managers retained during the time period shown.

(4) Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and AHP restriction through 10/31/93.

#### 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 the Portfolio Characteristics table that follows this glossary.

#### Average Quality Weightings (Avg. Qual.)

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.

#### Bond Allocation (Bond Alloc.)

The percent of the manager's total portfolio invested in bonds.

#### Coupon

The annual interest payment received on the manager's total portfolio stated as a percent of the portfolio's face value.

#### Current Yield (Cur. Yield)

The annual interest payment produced by the manger's total portfolio stated as a percent of the portfolio's market value.

#### Duration

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.

#### Number of Issues (# of Issues)

The number of different bond issues held in the manager's portfolio.

#### Quarterly Turnover (Qtr. T/O)

The manager's total bond sales during the quarter divided by the average value of the manager's bond portfolio over the quarter.

#### Term to maturity (Term. to Mat.)

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.

#### Yield to Maturity (Yield to Mat.)

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.

# **EXTERNAL ACTIVE BOND MANAGERS Portfolio Characteristics** July 1992 - June 1997

	Qtr T/O	#Of Issues	Bond Alloc.	Coupon	Yield To Mat.	Avg. Qual.	Dur.	Term To Mat.
American Express*								
Minimum	0	21	76%	6.01%	5.88%	AAA/AA	4.67 Yr	rs. 9.54 Yrs.
Average	10	37	93	7.15	6.70	AAA/AA	6.00	11.91
Maximum	35	67	100	7.88	7.28	AAA	7.87	14.94
BEA Associates*								
Minimum	91	54	90%	2.86%	6.00%	AA	4.40	8.00
Average	155	123	96	7.13	7.09	AAA	4.85	8.46
Maximum	367	162	100	9.59	8.60	AAA	5.31	8.84
<b>Investment</b> Advisers								
Minimum	23	20	87	5.41	5.57	AAA	3.68	6.70
Average	101	50	97	6.30	6.64	AAA	5.31	9.27
Maximum	185	80	100	7.42	7.40	AAA	6.68	11.60
Miller Anderson								
Minimum	27	107	87	4.04	6.00	AA+	4.50	8.40
Average	98	151	96	7.80	7.26	AA+	5.62	10.61
Maximum	206	231	100	17.60	8.00	AAA	7.00	13.88
Standish, Ayer & Wood*								
Minimum	23	96	93	6.14	5.90	AA+	4.43	7.39
Average	67	225	98	8.21	7.30	AAA-	4.96	8.47
Maximum	257	321	100	10.72	8.25	AAA	5.70	9.02
Western								
Minimum	56	74	80	5.09	5.50	AA	4.72	8.74
Average	106	136	95	5.93	7.27	AA	5.50	12.81
Maximum	209	197	110	7.40	9.11	AAA	6.10	16.48
Market Index**								
Minimum				7.19	5.48	Agency	4.39	7.96
Average				7.52	6.69	Agency	4.67	8.65
Maximum				8.32	8.21	Agency	5.16	9.10

\* Manager retained as of 7/1/93. Data covers period from 7/1/93 - 6/30/97 only.
\*\* Salomon Broad Investment Grade Bond Index through 6/94. Lehman Brothers Aggregate Bond Index thereafter.

#### EXTERNAL ACTIVE BOND MANAGERS

## Sector Weights July 1992 - June 1997

			(In	Percentages)		II: ab	
	Gov't.	Total Corp.	Mtgs.	Misc.	Int'l.	High Yield	Cash
<b>American Express</b>	*						
Minimum	50	19	0	0	0	8	0
Average	63	28	1	0	0	9	7
Maximum	76	37	14	0	0	10	24
BEA Associates*							
Minimum	19	27	19	0	0	9	0
Average	30	34	34	0	0	10	4
Maximum	36	45	44	0	0	10	10
Investment Advise	ers						
Minimum	34	0	14	0	0	0	0
Average	48	22	26	1	0	0	3
Maximum	77	33	34	20	0	0	13
Miller Anderson							
Minimum	1	14	36	0	3	7	0
Average	20	19	52	5	4	8	4
Maximum	37	26	65	10	5	10	13
Standish, Ayer &	Wood*						
Minimum	4	43	22	0	7	9	1
Average	13	51	34	2	7	9	2
Maximum	33	58	47	5	8	10	7
Western							
Minimum	12	26	18	0	0	4	0
Average	25	36	31	5	0	5	6
Maximum	35	45	44	17	0	7	20
Market Index**							
Minimum	51	17	28				
Average	52	19	29				
Maximum	54	20	30				
Abbreviations:							
	vernmentsecurities			Misc		laneous or oth	er
	porate securities			Int'l.		.S. securities	
Mtgs. Mo	rtgage securities			Hi-Yld	Securit	ties rated belo	w investment grad

\* Manager retained as of 7/1/93. Data covers period from 7/1/93 - 6/30/97 only.

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\*\* Salomon Broad Investment Grade Bond Index through 6/94. Lehman Brothers Aggregate Bond Index thereafter.

# EXTERNAL SEMI-PASSIVE BOND MANAGERS Portfolio Characteristics July 1996 - June 1997

	Qtr T/O	#Of Issues	Bond Alloc.	Coupon	Yield To Mat.	Avg. Qual.	Dur.	Term To Mat.
BlackRock				-				
Minimum	76	612	91%	6.37%	6.75%	AA+	4.45 Yrs	. 7.80 Yrs.
Average	94	668	96	6.65	6.95	AA+	4.63	8.58
Maximum	102	715	100	6.83	7.16	AAA	4.79	9.30
Goldman								
Minimum	88	197	96	5.75	6.84	AAA-	4.55	10.41
Average	106	233	99	5.88	7.20	AA-	4.63	12.72
Maximum	128	288	100	6.07	7.52	AAA-	4.72	13.91
Lincoln								
Minimum	36	1020	99	7.49	6.71	AAA	4.68	8.24
Average	38	1041	99	7.60	6.91	AAA	4.72	8.34
Maximum	40	1056	100	7.67	7.17	AAA	4.76	8.48
Lehman Agg.								
Minimum				7.19	6.38	Agency	4.58	8.68
Average				7.21	6.85	Agency	4.66	8.73
Maximum				7.23	7.18	Agency	4.77	8.79

## Sector Weights

July 1996 - June 1997

	<b>T</b> ( 1		(In	(In Percentages)		
	Gov't.	Total Corp.	Mtgs.	Misc.	Cash	
Blackrock						
Minimum	22	21	30	0	0	
Average	32	31	33	1	5 9	
Maximum	39	39	37	1	9	
Goldman						
Minimum	18	38	35	0	0	
Average	21	41	37	0	1	
Maximum	26	45	41	1	4	
Lincoln						
Minimum	41	23	30	0	0	
Average	43	25	31	0	1	
Maximum	45	28	32	0	1	
Lehman Agg.						
Minimum	50	19	30			
Average	51	19	30			
Maximum	52	20	30			

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#### EXTERNAL BOND MANAGERS

#### Annualized Performance Summary Periods Ending June 30, 1997

	1 Year		3 Years		5 Years	
	Actual	Benchmark	Actual	Benchmark	Actual	Benchmark
Active Managers						
American Express (1)	8.8%	8.2%	8.7%	8.7%		
BEA Associates	10.3	8.2	9.4	8.5		
Investment Advisers	8.3	8.2	7.8	8.5	7.4	7.2
Miller Anderson	10.9	8.2	9.8	8.5	8.3	7.2
Standish Ayer & Wood	10.0	8.2	9.0	8.5		
Western	10.9	8.2	10.4	8.5	8.8	7.2
Semi-Passive Managers		<u> </u>				
BlackRock	8.7	8.2	0.0	0.5		
Goldman Sachs	8.7	8.2	8.9	8.5	<b>7</b> 0	
Lincoln Capital	8.2	8.2	8.6	8.5	7.3	7.2
Aggregate (2)	9.3%	<i>.</i>	9.0%		7.7%	
Capital Markets Data						
Lehman Aggregate (3) 91 Day Treasury Bills Inflation	8.2% 5.3 2.3		8.5% 5.4 2.7		7.1% 4.5 2.7	

(1) Prior to 1/1/96, manager had a government/corporate mandate only.

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(2) Aggregate of all active and semi-passive managers retained during the time period shown.

(3) Lehman Brothers Aggregate Bond Index was used beginning 7/1/94. Prior to that time, the Salomon Broad Investment Grade Bond Index was used.

#### INTERNATIONAL EQUITY MANAGERS ATTRIBUTION EAFE MANAGERS

#### Fiscal Year 1997

Local Returns	State Street	Brinson	Marathon	<b>Rowe Price</b>	Scudder
Country Selection	0.0	2.3	0.9	7.5	10.4
Stock Selection	0.4	-0.4	-5.3	-1.6	2.7
Timing	0.1	0.3	0.7	0.4	-0.5
Currency Returns					
Currency Effect	-0.2	0.0	-0.2	0.1	0.0
Hedging Activity	0.0	2.6	-0.2	0.0	-0.1
Timing	-0.1	0.3	0.9	0.1	-1.8
Base Return Total Value Added	0.2%	5.5%	-2.9%	6.1%	9.4%

Note: All attribution numbers are based on gross returns, not net returns as found in the 'front part of the report'.

#### **Definitions:**

Local Returns - The return in local currency for each country in the portfolio and the benchmark.

Country Selection - The portion of return that can be attributed to over/underweighting countries relative to the benchmark. Country selection will be positive if the manager has overweighted countries that performed well and underweighted countries that did not perform well.

Stock Selection - The portion of return that can be attributed to the selection of securities within a country relative to the benchmark. Stock selection will be positive if a portfolio's local country return is greater than the benchmark.

Currency Returns - The relative difference between the base currency return and the local currency.

Currency Effect - The difference between the currency effect of a manager's unhedged portfolio and the benchmark that is affected by the timing of purchases and sales of securities and spots to cover them.

Hedging Effect - The difference between the currency return of the manager's hedged portfolio and the currency return of the unhedged portfolio.

Base Return - The return after conversion from local currencies to U.S. dollars.

Total Value Added - The difference between the portfolio's base return and the benchmark's base return.

#### INTERNATIONAL EQUITY MANAGERS ATTRIBUTION EMERGING MARKETS MANAGERS

#### Fiscal Year 1997

Local Returns	Genesis	Montgomery
Country Selection	13.4	4.8
Stock Selection	-3.6	5.3
Timing	0.8	-3.0
Currency Returns		
Currency Effect	-0.5	0.7
Hedging Activity	0.0	0.0
Timing	0.6	1.9
Base Return Total Value Added	10.0%	10.0%

Note: All attribution numbers are based on gross returns, not net returns as found in the 'front part of the report'. Attribution data is not applicable for City of London's closed end funds approach.

#### **Definitions:**

Local Returns - The return in local currency for each country in the portfolio and the benchmark.

Country Selection - The portion of return that can be attributed to over/underweighting countries relative to the benchmark. Country selection will be positive if the manager has overweighted countries that performed well and underweighted countries that did not perform well.

Stock Selection - The portion of return that can be attributed to the selection of securities within a country relative to the benchmark. Stock selection will be positive if a portfolio's local country return is greater than the benchmark.

Currency Returns - The relative difference between the base currency return and the local currency.

Currency Effect - The difference between the currency effect of a manager's unhedged portfolio and the benchmark that is affected by the timing of purchases and sales of securities and spots to cover them.

Hedging Effect - The difference between the currency return of the manager's hedged portfolio and the currency return of the unhedged portfolio.

Base Return - The return after conversion from local currencies to U.S. dollars.

Total Value Added - The difference between the portfolio's base return and the benchmark's base return.

#### EXTERNAL INTERNATIONAL STOCK MANAGERS

#### Annualized Performance Summary Periods Ending June 30, 1997

	1 Year		3 Years	
	Actual	Benchmark	Actual	Benchmark
Active EAFE				
Brinson (1)	18.1%	12.8%	14.4%	9.2%
Marathon (2)	9.6	12.8	8.7	9.2
Rowe Price (2)	18.4	12.8	13.9	9.2
Scudder (2)	21.3	12.8	16.0	9.2
Active Emerging Mark	ets			
City of London (3)	23.1	20.3		
Genesis (4)	22.0	12.8		
Montgomery (4)	21.8	12.8		
Passive EAFE				
State Street (5)	13.0	12.8	9.5	9.2
Equity Only*	15.6	13.2	11.6	9.3
Total Program**	18.2%	13.2%	12.4%	9.3%

\* Equity managers only. Includes impact of terminated managers. Aggregate benchmark weighted 87% EAFE Free/13% emerging Markets Free as of 12/30/96. 100% EAFE Free prior to 5/1/96.

\*\* Includes impact of currency overlay unrealized gain/loss. Aggregate benchmark weighted 87% EAFE Free/13% Emerging Markets Free as of 12/30/96. 100% EAFE Free prior to 5/1/96.

(1) Active country/passive stock manager. Retained April 1, 1993.

(2) Fully active manager. Retained November 1, 1993.

(3) Manager retained November 1, 1996.

(4) Manager retained May 1, 1996.

(5) Manager retained October 1, 1992.

#### **Impact of Currency Overlay Program**

	Yr.	Since Dec. 95
Index Fund*	13.0%	14.3%
Index Fund + Overlay**	18.1	17.5

\* EAFE index fund managed by State Street Global Advisers.

\*\* Index Fund with currency overlay program implemented by Record Treasury Management. Program was phased-in from Dec. 95-Nov.96.

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#### ALTERNATIVE INVESTMENTS - REAL ESTATE June 30, 1997

	TOTAL	FUNDED	UNFUNDED	PERIOD
BASIC FUNDS	COMMITMENT	COMMITMENT	COMMITMENT	(YEARS)
AETNA	\$42,376,529	\$42,376,529	\$0	15.2
AEW				
Fund III	\$20,000,000	\$20,000,000	\$0	11.8
Fund IV	\$17,400,000	\$15,000,000	\$2,400,000	10.8
Fund V	\$15,000,000	\$15,000,000	\$0	9.5
AMERICAN REPUBLIC	\$1	\$1	\$0	7.4
COLONY INVESTORS II	\$40,000,000	\$24,494,600	\$15,505,400	2.2
EQUITABLE	\$40,000,000	\$40,000,000	\$0	15.7
FIRST ASSET REALTY	\$916,185	\$916,185	\$0	3.2
HEITMAN				
Fund I	\$20,000,000	\$20,000,000	\$0	12.9
Fund II	\$30,000,000	\$30,000,000	\$0	11.6
Fund III	\$20,000,000	\$20,000,000	\$0	10.4
Fund V	\$20,000,000	\$20,000,000	\$0	5.6
LASALLE	\$15,000,000	\$14,644,401	\$355,599	5.8
TA REALTY ASSOCIATES				
Fund III	\$40,000,000	\$38,000,000	\$2,000,000	3.1
Fund IV	\$50,000,000	\$16,500,000	\$33,500,000	0.4
RREEF	\$75,000,000	\$75,000,000	\$0	13.2
TCW				
Fund III	\$40,000,000	\$40,000,000	\$0	11.9
Fund IV	\$30,000,000	\$30,000,000	\$0	10.7
ZELL/MERRILL LYNCH				
Fund II	\$40,388,854	\$40,388,854	\$0	5.6
Fund III	\$50,000,000	\$50,000,000	\$0	3.4
Fund IV	\$50,000,000	\$50,000,000	\$0	1.2
TOTAL REAL ESTATE (BASICS)	\$656,081,569	\$602,320,570	\$53,760,999	

POST FUND	TOTAL COMMITMENT	FUNDED COMMITMENT	UNFUNDED COMMITMENT	PERIOD (YEARS)
COLONY INVESTORS II WESTMARK COMMERCIAL	\$40,000,000	\$24,494,600	\$15,505,400	2.2
Mtg. Fund II	\$13,500,000	\$13,193,130	\$306,870	1.8
Mtg. Fund III	\$21,500,000	\$5,386,000	\$16,114,000	0.6
TOTAL REAL ESTATE (POST)	\$75,000,000	\$43,073,730	\$31,926,270	
TOTAL REAL ESTATE	\$731,081,569	\$645,394,300	\$85,687,269	

#### ALTERNATIVE INVESTMENTS - PRIVATE EQUITY June 30, 1997

BASIC FUNDS	TOTAL COMMITMENT	FUNDED COMMITMENT	UNFUNDED COMMITMENT	PERIOD (YEARS)
ALLIED	\$5,000,000	\$5,000,000	\$0	11.8
BANK FUND				
Fund III	\$20,000,000	\$20,000,000	\$0	4.7
Fund IV	\$25,000,000	\$12,500,000	\$12,500,000	1.4
BLACKSTONE PARTNERS II	\$50,000,000	\$30,325,232	\$19,674,768	3.6
BRINSON PARTNERS				
VPAF I	\$5,000,000	\$5,000,000	\$0	9.1
VPAF II	\$20,000,000	\$18,579,998	\$1,420,002	6.6
CHURCHILL CAPITAL PARTNERS II	\$20,000,000	\$20,000,000	\$0	4.7
CONTRARIAN CAPITAL FUND II	\$37,000,000	\$7,449,426	\$29,550,574	0.1
CORAL PARTNERS	<b>#1 146 000</b>	<b>#1 146 000</b>	*0	6.0
IAI Ventures I	\$1,146,890	\$1,146,890	\$0 \$0	6.3
Fund I (Superior)	\$7,011,923	\$7,011,923	\$0 \$0	11.0
Fund II	\$10,000,000 \$15,000,000	\$10,000,000	\$0 \$7,480,890	6.9 2.9
Fund IV	\$10,000,000	\$7,519,110 \$10,000,000	\$7,480,890 \$0	12.9
DSV FIRST CENTURY	\$10,000,000	\$10,000,000	\$0 \$0	12.2
GOLDER THOMA	\$10,000,000	\$10,000,000	φŪ	12.0
Fund III	\$14,000,000	\$14,000,000	\$0	9.7
Fund IV	\$20,000,000	\$19,200,000	\$800,000	3.4
Fund V	\$30,000,000	\$8,400,000	\$21,600,000	1.0
HELLMAN & FRIEDMAN III	\$40,000,000	\$21,153,483	\$18,846,517	2.8
IAI U.S. VENTURE FUND II	\$15,000,000	\$5,244,773	\$9,755,227	0.5
IMR PARTNERSHIP	\$15,000,000	\$1,524,900	\$13,475,100	4.9
INMAN BOWMAN	\$7,500,000	\$7,500,000	\$0	12.1
KOHLBERG KRAVIS ROBERTS	4.,	, . , ,		
1984 Fund	\$25,000,000	\$25,000,000	\$0	13.1
1986 Fund	\$18,365,339	\$18,365,339	\$0	11.2
1987 Fund	\$145,950,000	\$145,950,000	\$0	9.6
1993 Fund	\$150,000,000	\$150,000,000	\$0	3.5
1996 Fund	\$200,000,000	\$20,354,723	\$179,645,277	0.8
MATRIX				
Fund II	\$10,000,000	\$10,000,000	\$0	11.9
Fund III	\$10,000,000	\$10,000,000	\$0	7.2
NORWEST VENTURE CAPITAL	\$10,000,000	\$10,000,000	\$0	13.5
PIPER JAFFRAY HEALTHCARE FUND	\$10,000,000	\$900,000	\$9,100,000	0.3
SUMMIT PARTNERS				
Fund I	\$10,000,000	\$10,000,000	\$0	12.5
Fund II	\$30,000,000	\$28,500,000	\$1,500,000	9.1
T. ROWE PRICE	\$146,952,471	\$146,952,471	\$0	9.6
WARBURG PINCUS	\$50,000,000	\$32,500,000	\$17,500,000	2.5
ZELL/CHILMARK	\$30,000,000	\$30,000,000	\$0	7.0
TOTAL PRIVATE EQUITY (BASICS)	\$1,222,926,623	\$880,078,269	\$342,848,354	
POST FUND	TOTAL COMMITMENT	FUNDED COMMITMENT	UNFUNDED COMMITMENT	PERIOD (YEARS)
	<b># 40,000,000</b>	¢15 441 505	604 CC0 475	25
CITICORP MEZZANINE	\$40,000,000	\$15,441,525	\$24,558,475	2.5
KLEINWORT BENSON	\$25,000,000	\$6,584,775	\$18,415,225	1.7
SUMMIT PARTNERS	¢00 000 000	¢10 000 000	¢2 000 000	
Sub-Debt Fund I	\$20,000,000 \$45,000,000	\$18,000,000	\$2,000,000 \$45,000,000	3.3
Sub-Debt Fund II	\$45,000,000 \$40,000,000	0 \$17,341,770	\$45,000,000 \$22,658,230	0.6 1.2
TCW/CRESCENT MEZZANINE T. ROWE PRICE	\$40,000,000 \$478,375	\$17,341,770 \$478,375	\$22,658,230	0.3
I. RUWE I RIVE	φ+/0,J/J	ψτ/0,3/3	0	0.5
TOTAL PRIVATE EQUITY (POST)	\$170,478,375	\$57,846,445	\$112,631,930	
TOTAL PRIVATE EQUITY	\$1,393,404,998	\$937,924,714	\$455,480,284	

#### ALTERNATIVE INVESTMENTS - RESOURCE June 30, 1997

BASIC FUNDS	TOTAL COMMITMENT	FUNDED COMMITMENT	UNFUNDED COMMITMENT	PERIOD (YEARS)
FIRST RESERVE CORP.				
AMGO I	\$15,000,000	\$15,000,000	\$0	15.8
AMGO II	\$7,000,000	\$7,000,000	\$0	14.4
AMGO IV	\$12,300,000	\$12,300,000	\$O	9.1
AMGO V	\$16,800,000	\$16,800,000	\$0	7.2
First Reserve Fund VII	\$40,000,000	\$13,936,358	\$26,063,642	1.0
APACHE III	\$30,000,000	\$30,000,000	\$O	10.5
MORGAN OIL & GAS	\$15,000,000	\$15,000,000	\$0	8.9
SIMMONS				
OFS II	\$17,000,000	\$14,847,529	\$2,152,471	5.9
OFS III	\$25,000,000	\$11,653,695	\$13,346,305	2.0
TOTAL RESOURCE (BASICS)	\$178,100,000	\$136,537,582	\$41,562,418	

POST FUND	TOTAL COMMITMENT	FUNDED COMMITMENT	UNFUNDED COMMITMENT	PERIOD (YEARS)
MERIT ENERGY	\$24,000,000	\$6,846,012	\$17,153,988	1.0
TOTAL RESOURCE (POST)	\$24,000,000	\$6,846,012	\$17,153,988	
TOTAL RESOURCE	\$202,100,000	\$143,383,594	\$58,716,406	

#### Time-Weighted Rate of Return

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

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

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

Where:

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

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

- $C_i$  = Net cash flow on the ith day of the month
- n = Number of cash flows in the month
- R = Internal rate of return
- ti = Time from cash flow i to the end of the period, expressed as a percentage of the total number of days in the month

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

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

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

State Street's performance methodology is also in compliance with the mandatory requirements of the Association for Investment Management and Research (AIMR).

# Calculation of January 1, 1998 Benefit Increase

Actuarial value of required reserves at Jan. 1, 1998 Less: Reserves not eligible for increase Actuarial eligible reserves at Jan. 1, 1998	\$10,877,444,000 <u>525,127,000</u> 10,352,317,000
FY97 CPI inflation rate capped at 3.5% Dollar cost of inflationary increase	2.100% 217,398,657
June 30, 1997 total required reserves	11,061,171,000
June 30, 1997 total required reserves adjusted for inflationary increase	11,278,569,657
Market value of Assets at June 30, 1997 Less: Inflation adjusted required reserves Current year excess market value Negative balance carry forward	14,323,457,800 <u>11,278,569,657</u> <u>3,044,888,143</u> <u>1,327,756,117</u>
Excess market value available for investment based benefit increase Divided by 5 year pay out period	<u>1,717,132,026</u> 5
Current year portion of excess market value Second year portion Third year portion Fourth year portion Fifth year portion Total five year excess market value	343,426,405 206,727,061 155,162,710 -86,222,761 <u>207,805,264</u> 826,898,679
Greater of current year excess market value or cost of transition adjustment Divided by eligible required reserves at Jan. 1, 1998 Investment based increase for FY97	<u>826,898,679</u> 10,352,317,000 7.9876%
Summary:	
Investment Based Benefit Increase Inflation Based Benefit Increase Total Benefit Increase	7.9876 <i>%</i> <u>2.1000<i>%</i></u> 10.0876 <i>%</i>
Total Dollar Value of January 1, 1998 Benefit Increase	\$1,044,297,336

### COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
A.G. BECKER & CO.	4,922	3	0	0	0
ABACUS SECURITIES	391,152	151	0	0	0
ABD SECURITIES	0	0	4,298,750	0	0
ABEL/NOSER CORP.	1,387,656	1,045	0	0	0
ABN AMRO SECURITIES	644,777	956	23,921,301	0	0
ABNER HERRMAN & BROCK	2,118,073	1,315	30,000	0	0
ACCIONES Y VALORES	2,591,527	1,693	0	0	0
ADAMS HARKNESS & HILL	10,721,786	3,368	0	0	0
ADVEST CO.	718,378	0	2,142,045	0	0
AGORA AIG CAPITAL	657,335	1,538	0	0	0
AIG CAPITAL AISEL & CO	0	0	8,552,059 0	0	0 84,872
ALBIN J RADAWIEC CO.	4,712,145	4,965	0	0	84,872 0
ALEXANDERS	4,712,145	4,90J 0	179,509	0	0
ALFRED BERG	3,425,374	2,244	0	0	0
ALLEN & COMPANY	1,762,368	2,244 504	0	0	0
ALPHA MANAGEMENT INC	26,335,826	33,337	Ő	ů 0	. 0
AMADON CORPORATION	49,151	23	ů 0	ů 0	0
AMERICAN EXPRESS CREDIT	0	0	0	0	340.385,613
AMERICAN GENERAL FINANCE	Ő	0	0	Ő	243,920,704
AMIVEST CORP	2,354,772	2,690	0	0	0
ANGPING AND ASSOC	435,563	164	0	0	0
ANVIL INST	445,732	543	0	0	0
ARAB-MALAYSIÀN SECS.	297,700	714	0	0	0
ARBOR TRAD	0	0	81,487,268	0	0
ARCADIA INVESTMENT MANAGEMENT	743,274	545	0	0	0
ARNHOLD	148,755,141	89,959	0	0	0
ARTHUR W. WOOD CO.	0	0	248,232	• 0	0
ASESORES BURSATILES	2,015,990	64	0	0	0
ASIA EQUITY	4,087,466	3,324	0	0	0
ASSOC CORP OF N AMER	0	0	0	0	672,978,281
ASSOC. FIRST CAPITAL	0	0	0	0	9,901,156
AUBREY G LANSTON	75,829	102	155,225,156	· 0	0
AUTRANET	13,176,498	20,190	0	0	0
AVCO FINANCIAL SERVICES	0	0	0	0	81,159,656
B & L SECURITIES	0	0	730,493	0	0
B.V. CAPITAL MARKETS	135,522	91	0	0	0
BA SECURITIES, INC.	0	0	236,569,451	0	1,909,045,752
BAIN SECURITIES	178,947	563	14,632,741	0	0
BAIRD PATRICK AND CO	54,541	94	0	0	0
BALANCED SECURITY PLANNING INC.	15,863	0	0	0	0
BANCO PACTUAL S.A.	459,019	1,523	0	0	0
BANCO SANTANDER DE NEGOCIOS	440,253	205	0	0 0	0
BANK IN LIECHTENSTEIN	2,751,902	6,277	0	0	0
BANK INDOSUEZ	654,965 0	1,561 0	5,725,108	0	37,446,251
BANK OF AMERICA BANK OF NY SECURITIES INC	351,111	736	10,907,081	0	0 0
BANKERS SECURITY CORP.	0	0	42,991,635	0	ŏ
BANKERS TRUST	0	0	233,164,952	0	0
BANKERS TRUST SEC INC	0	õ	217,326	ů 0	ő
BANQUE NATIONALE DE PARIS	410,522	211	0	Ő	Ő
BANQUE PARIBAS	1,216,404	725	0	ů 0	Ő
BARCLAYS AMERICAN CORP	4,109	3	5,399,438	Ő	ŏ
BARCLAYS BANK	517,823	373	63,945,000	0	0
BARCLAYS DEZOETE WEDD	3,841,947	6,345	64,650,353	0	4,880,490
BARING SECURITIES	50,531,956	51,884	5,377,250	0	0
BARRETT & CO.	0	0	289,734	0	0
BARRINGTON TRADING CO	6,112,104	7,710	0	0	0
BEAR, STEARNS & CO.	486,068,420	430,964	849,717,462	3,075	352,117,000
BENEFICIAL CORP	0	0	0	0	337,744,567

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#### COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
BEREAN CAPITAL INC	0	0	11,481,830	0	97,795,347
BERNSTEIN SANFORD	94,928,718	94,944	0	0	0
BHF SECURITIES	10,985,483	31,551	7,858,252	0	0
BISHOP ROSEN + CO. INC.	382,186	650	0	0	0
BLAIR & COMPANY	37,991,316	20,439	2,502,587	0	0
BLAYLOCK	0	0	63,087,335	0	0
BMA CAPITAL MGMT	921,500	178	0	0	0
BNP SECURITIES	1,123,501	597	0	0	0
BNY JAMES	291,290	1,200	0	0	0
BODELL OVERCASH ANDERSON	0	0	3,731,568 0	0	0
BOSTON INST. SERVICES BOWLING GREEN SECURITIES	12,345,322	14,595	0	0	0
BRANDT (ROBERT) & CO	1,689,060 59,922,788	5,000 62,736	0	0	0
BRICK SECURITIES	983,923	1,110	0	0	0
BRIDGE DATA	1,350,200	1,781	0	0	0
BRIDGE TRADING CO.	86,003,577	113,923	Ő	ő	0
BRIMBERG	39,478	64	0	0	ů 0
BROADCORT CAPITAL	393,244,055	460,860	0	0	ů 0
BROWN (ALEX) & SONS INC.	399.046.938	513.763	2,495,550	0	0
BROWN BROS. HARRIMAN	14,935,918	14,341	0	0	0
BRUNSWICK	2,113,750	0	0	0	0
BT SECURITIES CORP	6,893,465	10,954	6,960,964	0	51,647,298
BTRST-BANKERS TR. CO. CUSTODY	0	0	35,961	0	0
BUCKINGHAM RESEARCH GRP	8,496,687	12,565	0	0	0
BUNTING WARVURGER SEC	12,750,314	14,577	0	0	0
BURNS FRY & TIMMINS	30,312	47	2,222,698	0	0
BV CAPITAL	350,045	603	0	0	0
BYORK-BONY CO. CUSTODY	0	0	24,316	0	0
BZW AMERSTERDAM	47,802	0	0	0	0
BZW SECS	18,323,594	26,124	8,125,156	0	0
C.L. KING & ASSOC.	42,972	135	0	0	0
C.S.F.B.	629,234	125	0	0	0
CAMBRIDGE INTERNATIONAL	0	0	10,288,056	0	0
CANTELLA & CO	5,700	0	0	0	0
CANTOR FITZGERALD	150,722,196	169,160	371,757	0	0
CAPEL, JAMES	199,478,488	604,509	0	0	0
CAPITAL INST. SERVICES	188,011,575	250,088	0	0	0
CAPITAL INVESTMENTS	123,298	177	0	0	0
CAPITAL RESOURCES, INC.	151,560	360	0	0	0
CAPITALISATION	0	0	0	0	0
CARNEGIE	2,618,125	364	19 284 567	0	0
CAROLINA OPTIONS COMPANY	0	0 504	18,384,567 0	0	0
CARR & THOMSON INC CARROLL MCENTEE & MCG	160,552 0	0	8,924,688	0	0
CARROLL MCENTEE & MCG	6,294,931	33,792	8, <i>92</i> 4,088 0	0	0
CATHAY FINANCIAL	551,971	399	0	0	0
CAZENOVE & CO.	11,373,645	15,319	0	0	ő
CENTRAL INVESTMENT	10,975,387	2,350	0	0	õ
CENTURY INVESTMENTS INC	99,351	2	0	0	0
CHARLES SCHWAB & CO., INC.	24,345	43	0	0	0
CHASE MANHATTAN BANK	0	0	35,440,875	0	Ő
CHASE SECURITIES INC	0	0	23,290,255	0	48,181,073
CHEMICAL BANK	323,717	1,137	156,959,621	0	0
CHEUVREUX	6,350,132	4,345	0	0	0
CHEVRON OIL FIN. CO.	0	0	0	0	195,203,014
CHICAGO CORP	37,152,867	23,839	0	0	0
CHICAGO MATCH	1,463	0	0	0	0
CIAGRAL	1,222,308	6,080	0	0	0
CIBC/WOOD GUNDY	0	0	13,028,906	0	184,880,437
CIMB SEC. SDN	6,678,854	23,117	0	0	0

## COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
CIT GROUP HOLDINGS	0	0	0	0	322,369,918
CITATION GROUP	281,229,876	382,889	0	0	0
CITIBANK	1,982,359	7,503	1,790,213	0	0
CITICORP	0	0	19,576,185	0	0
CITICORP SECURITIES INC	0	0	9,961,719	0	1,172,504,939
CL GLAZER INC.	0	0	3,687,953	0	0
CLARKE & CO	3,373,027	5,370	1,825,367	0	0
CLARKE GX & CO.	0	0	5,257,266	0	190,049
CLEARY GULL REILAND	2,474,797	2,867	0	0	0
COMMERCIAL CREDIT CO.	0	0	0	0	302,220,062
COMMERZBANK AG	656,968	1,139	0	0	0
CONNING & COMPANY	35,246,551	25,563	0	0	0
CORESTATES CAP MKTS INC	0	0	0	0	114,027,092
CORESTATES FINANCIAL	0	0	500,500	0	9,679,556
CORNA AND CO. INC.	0	0	688,800	0	0
COUNTRYWIDE	0	0	19,631,691	0	0
COUNTY NATWEST SEC CORP USA	172,708,269	250,623	7,006,683	0	0
COVATO LIPSITZ INC.	241,690	185	0	0	0
COWEN&CO	76.807.423	73,344	0	0	0
CREDIT AGRICOLE	0	0	0	0	9,715,038
CREDIT ANSTALT	43,825	14	0	0	0
CREDIT LYONNAIS	16,856,878	13,854	0	0	0
CREDIT RESEARCH & TRADING	423,900	0	0	0	0
CREDIT SUISSE	3,588,272	1,208	40,921,177	0	0
CREDIT SUISSE FIRST BOSTON LTD	758,277	1,322	2,240,625	0	0
CREDITANSTALT BANK	467,848	163	0	0	0
CREWS & ASSOCIATES	0	0	4,314,417	0	0
CROSBY CAPITAL MARKETS	371,648	111	0	0	0
CROSBY CORP, THE	187,974	500	0	0	0
CROSBY SECURITIES	12,974,715	25,963	0	0	0
CRUTTEDEN GUST & MERH	392,418	0	0	0	0
CYRUS J. LAWRENCE	1,154,211	2,000	1,403,580	0	0
D E SHAW SECURITIES	247,842	440	0	0	0
D.A. CAMPBELL	426,228	1,972	0	0	0
DAI ICHI SECURITIES	4,594,442	174	0	0	0
DAIN BOSWORTH INC	32,385,573	16,089	53,993,520	0	0
DAIWA AMERICA CORP	0	0	6,052,740	0	0
DAIWA SEC. AMERICA	5,171,533	2,105	20,052,820	30	0
DAVENPORT & CO	330,000	0	0	0	0
DAVIS	175,500	1,125	0	0	0
DAVY STOCKBROKERS	3,321,091	35,355	0	0	0
DEAN WITTER REYNOLDS	53,334,591	27,543	70,158,793	0	923,000,000
DEERE & COMPANY	0	0	0	0	71,811,243
DELAFIELD HAR. TABELL	13,385,689	21,463	0	0	0
DESCAP SEC. INC.	0	0	13,348,125	0	0
DEUTCHE WESTMINSTER BANK	0	0	242,493	0	0
DEUTSCHE B	23,725	26	0	0	0
DEUTSCHE BANK CAPITAL	18,345,060	24,518	17,668,528	0	0
DEUTSCHE BANK CUSTODY SERVICE	0	0	1,852,449	0	0
DEUTSCHE BANK GOVT SEC INC	87,541,572	78,285	1,242,563,830	0	1,046,673,608
DEUTSCHE MORGAN GREINFELL	15,940,960	24,103	62,994,677	0	0
DILLON, READ	24,779,192	21,222	13,951,404	0	886,000,000
DIRECT BROKERAGE SVCS.	1,131	6	0	0	140,003,717
DLJ FIXED INCOME	0	0	779,166,041	0	0
DMG AND PARTNERS SECS.	0	0	501,506	0	0
DONALDSON LUFKIN	8,694,567	7,073	65,143,353	0	12,050,000,000
DONGWON SECURITY	3,359,123	18	0	0	0
DOYLE, PATERSON, & BROWN	3,003,804	8,296	0	0	0
DRESDNER SEC (USA) INC	0	0	0	0	34,037,597
DREXEL BURNHAM LAMBERT	0	0	8,611,266	0	0

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## COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
DUNLEVY	1,955	5	0	0	0
DYNABOURSE SA PARIS	38,070	115	0	0	0
EDGE SECURITIES	148,908	262	0	0	0
EDWARDS & CO	880,997	780	0	0	0
EDWARDS A.G. & SONS	332,808	420	2,467,813	0	0
EGS SECURITIES	47,939	92	0	0	0
ENSKILDA SECURITIES	4,473,758	2,549	0	0	0
EPPLER	1,010,928	0	0	0	0
EQUITABLE SECURITIES	1,522,131	1,065	0	0	0
EQUITY SECURITIES TRADING	418,975	0	. 0	0	0
ERNST & CO.	21,418,895	25,686	0	0	0
EXANE, PARIS	3,881,061	2,278	0	0	0
EXCHANGE CO.	332,125	287	0	0	0
EXECUTION SERVICES INC	72,490,149	108,287	0	0	0
FACTSET DATA	32,090,253	67,348	0	0	0
FAGENSON & CO FAHNESTOCK AND CO.	75,131	103 160	0	0	0
FATOR	131,325 1,535,771	3,616	0	0	0
FBS INVESTMENT SERV. INC.	1,555,771	5,010	0	0	41,450,828
FECHTOR	379,371	0	Ő	0	41,450,628 0
FEDERAL HOME LOAN BANK	0	0	293,584,141	0	Ő
FELDMAN INVESTMENT GROUP	130.000	0	255,504,141	ů 0	ů 0
FERRI FERRI GERME	746,998	421	ů 0	0	0
FHLMC	0	0	458,157,771	0	0
FIBA NORDIC SEC	666,699	517	0	0	0
FIDELITY BROKERAGE	684,807	878	0	0	0
FIDELITY	187,713,031	223,953	0	0	0
FIDELITY SEC	15,756	39	0	0	0
FINACOR RABE & PARTNERS	112,442	149	0	0	0
FINANCIAL RESEARCH CO.	179,070	470	0	0	0
FIRST ALBANY	21,135,230	20,157	0	0	0
FIRST ANALYSIS SEC. CORP.	2,612,569	3,013	0	0	0
FIRST BOSTON CORPORATION	320,356,614	374,454	2,492,691,451	0	5,119,423,268
FIRST CHICAGO CAP MKTS INC	0	0	2,709,633	0	143,245,172
FIRST GUARDIAN FINANCIAL, INC.	503,518	0	0	0	0
FIRST MANHATTAN COMPANY	705,012	2,167	0	0	0
FIRST OPTIONS OF CHICAGO	250,575	255	0	0	0
FIRST SOUTHWEST CO.	1,460,290	0	12,693,516	0	0
FIRST TENN BANK, NA	0	0	2,446,256	0	0
FIRST TRUST	57,500	0	0	0	313,862,726
FIRST UNION CAP MKTS	0	0	21,766,807	0	22,820,448
FITZGERALD & CO. INC.	301,963	0	0	0	0
FLEMING (ROBERT) INC	5,363,839	8,351	865,388	0	0
FLEMING RESEARCH, NY	297,479	795	0	0	0
FLEMING SECURITIES LTD.	8,474,801	11,214	784,685 0	0	0
FONDSKOMMISION STOCKHOLM FORD FINANCIAL SERVICES	11,860 0	5 0	0	0	603,796,676
FORD MOTOR CREDIT	47,597	130	0	0	003,790,070
FOURTEEN RESEARCH CORP.	4,708,808	7,734	0	0	0
FOX PITT KELTON INC	9,759,732	13,379	ů 0	0	0
FRANK RUSSEL	9,133,681	14,482	ů 0	ů 0	0
FRASER & CO. (GLOBAL)	211,347	830	0	ő	Ő
FRASER SECURITIES	850,612	2,715	0	0	0
FREDDIE MAC SECS AND TRADE	000,012	2,715	435,644,688	ő	Ő
FREIMARK BLAIR	1,338,159	4,039	455,011,000	Ő	0
FRIEDMAN, BILLINGS & RAMSEY	6,017,429	1,116	1,300,425	ő	ů 0
FURMAN SELZ LLC	115,338	223	0	0	19,417,333
FURMAN SELZ MAGER	26,934,874	16,156	1,055,349	0	0
G.K. GOH	1,403,786	4,095	64,844	145	0
GABELLI & COMPANY	5,901	7	0	0	. 0

### COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
GAINS BERLAND	1,210,100	405	0	0	0
GARANTIA INC.	181,925	888	0	0	0
GARANTIA INVESTMENTOS	4,789,035	23,037	0	0	0
GARDNER RICH & COLE	253,591	964	0	0	0
GENA, NEW	25,240,023	5,515	0	0	0
GENERAL ELEC CAPITAL CORP	0	0	0	0	1,008,457,201
GENESIS	2,034,695	0	0	0	0
GERARD KLAVER MADISO	419,609	386	0	0	0
GLAZER C.L.	13,018	17	0	0	0
GLOBAL SECURITIES	1,398,056	0	0	0	0
GMAC FINANCIAL SERVICES	0	0	0	0	68,237,507
GMS GROUP	0	0	1,239,531	0	0
GOLDMAN SACHS & COMPANY	752,485,138	550,386	3,765,974,086	153,910	2,719,980,839
GOLDSMITH & HARRIS	1,785,177	2,502	0	, 0	0
GOODBODY STOCKBROKERS	1,180,744	20,538	0	0	0
GORDON CP	1,135,097	1,644	0	0	0
GORDON HASKETT & CO.	297,941	204	0	0	0
GRANTCHESTER SECS. INC.	0	0	25,064,818	0	0
GREAT PACIFIC SECS. CORP.	155.328	90	569,640	0	0
GREEN STREET	210,989	260	0	0	0
GREENFIELD ARBITRAGE PARTNERS	210,989	200	50,663,580	0	ů 0
GREENLINE INVESTORS SVCS. INC.	1,722,498	9,607	0	0	0
GREENSTREET ADVISORS		81	0	0	0
	58,730 0	0	2,694,463,851	0	-
GREENWICH CAPITAL MARKETS INC GROSS & CO. INC.		24	2,094,403,851	0	16,873,620,362 0
	19,858			0	0
GRUNTAL & COMPANY	7,320,537	715	6,964,557	-	-
GUZMAN & CO.	15,349,079	19,310	0	0	0
GX CLARKE	0	0	2,425,391	0	7,200,365
HALL INTER	31,536,846	13,235	0	0	0
HAMBRECHT & QUIST	1,830,522	1,713	0	0	0
HAMPSHIRE SEC. INC.	1,054,933	0	0	0	0
HANIFIN	18,975	0	0	0	0
HARTLEY POYNTON	1,562,163	4,922	0	0	0
HBSC SECURITIES	3,230,941	6,084	3,273,897	0	0
HENDERSON BROTHERS	1,737,967	1,770	0	0	0
HENDERSON CROSTHWAIT	87,640	290	0	0	0
HENNINGS & ASSOCIATES	0	0	4,639,052	0	0
HERZOG HEINE GEDVID	15,199,637	1,521	0	0	0
HG ASIA SECURITIES	18,615,886	25,174	0	0	0
HOARE GOVETT	8,946,990	17,041	0	0	0
HOENIG & CO.	37,064,564	93,059	0	0	0
HONG KONG BANK	1,124,156	0	10,361,781	0	0
HOUSEHOLD INTERNATIONAL	0	0	0	0	372,415,596
HOWARD WEIL LABOUISSE FRIEDRIC	61,932	69	0	0	0
HOWE BARNES INVESTMENTS INC	0	0	187,727	0	0
HSBC JAMES CAPEL	5,797,331	10,638	0	0	0
HSBC SECURITIES INC	0	0	110,041,408	0	0
HUNTLEIGH SECYRUTUES CORP	598,644	0	0	0	0
IBES	61,448	135	0	0	0
IBJ INTL LTD	0	0	11,735,432	0	0
IBM CORP	0	0	0	0	562,373,878
IBM CREDIT CORP	0	0	0	0	57,567,974
INCOME REINVESTMENT	0	0	257,728,412	0	0
INDEPENDENCE INSTITUTION	739,063	1,011	0	0	0
INDUSVAL	1,243,415	3,008	0	0	0
ING BANK BRAZIL	1,2 12,110	0	2,357,530	0	0
INGALLS & SNYDER	559,332	1,483	0	0	0
INSTINET	1,173,320,991	750,647	0	0	0
INTERMOBILIARE SEC.	1,917,417	4	0	0	0
INTERNATIONAL SECURITIES CORP	0	0	1,828,750	0	0
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## COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
INTERSTATE	56,772,187	71,226	5,187,276	0	0
INTERSTATE PCS	153,035	328	0	0	0
INVEMED ASSOCIATES	2,028,502	3,722	0	0	0
INVESTMENT & INSURANCE CONSULTA	9,032,953	43,806	0	0	0
INVESTMENT PLANNING	0	0	Ó	0	9,969,492
INVESTMENT TECHNOLOGY CORP	2,618,705,609	1,726,875	0	0	0
INVESTMENT TECHNOLOGY GRP INC	5,085,758	2,199	0	0	0
INVESTORS SECURITY CORP	1,962,612	5,557	0	0	0
ISI GROUP	23,095,080	33,158	29,625,000	0	0
ITEC SECURITIES CORP.	0	0	7,997,520	0	0
J C BRADFORD & CO	4,699,899	1,456	3,178,904	0	0
J P MORGAN SECURITIES INC	124,124,706	94,930	1,079,503,544	0	800,219,935
J. UONTOBEL	319,278	669	0	0	0
J.B. WERE & SON	1,372,611	3,987	0	0	0
JAMES CAPE	12,156,162	24,186	0	0	0
JANNEY MONTGOMERY SCOTT	6,236,551	5,482	0	0	0
JARDINE FLEMING	7,277,693	4,512	0	0	0
JAVELIN SECS.	3,204,906	7,242	0	0	0
JEAN PIERRE PINATTON	4,281,812	238	0	0	0
JEFFERIES & CO	181,972,315	243,056	10,104,740	0	0
JOHN HANCOCK	1,738	0	0	0	0
JOHNSON RICE & CO	1,995,473	4,534	0	0	0
JONES & ASSOCIATES	18,529,147	13,013	0	0	0
JOSEPH MILLER	0	0	0	0	4,977,083
JOSEPHTHAL & CO.	12,728,624	11,228	0	0	0
KALB VOORHIS & CO	4,190,523	6,927	0	0	0
KEANE SECURITIES	1,701,030	1,961	0	0	0
KEEFE BRUYETTE & WOOD	7,932,551	4,556	0	0	0
KEMPER CAP	1,977,814	1,686	0	0	0
KIM. ENG. SEC. KINNARD (JOHN G.) & CO	5,642,045	14,155 1,008	342,563	0	0
KLEINWORTH BENSON INC	1,354,740	22,011	342,505	0	0
KNIGHT SECURITIES	24,174,402 175,500	22,011	ő	ő	ů O
KOONCE SEC., INC.	114,096	1,400	ů 0	0	Ő
LADENBURG THALMANN	330,327	967	ů 0	Ő	ů 0
LAMBERSON KNIGHT	0	0	0	0	14,918,067
LAMSON BROTHERS & COMAPNY	173,708	248	0	0	0
LANSTON CO	0	0	37,037,674	ů 0	Ő
LARCO	436,687	2,178	0	0	0
LASKER STONE AND STERN	502,483	2,1/0	0	0	0
LATIN AMERICA	3,375,583	19,792	0	0	0
LATINVEST	652,773	2,402	0	0	0
LAWRENCE	529,950	560	0	0	9,943,000
LAZARD FRERES & CO	1,207,213	2,124	10,148,740	168	0
LAZARD W.R. LAIDLAW	69,388	116	0	0	0
LEGG MASON	332,008	1,108	0	0	0
LEGG MASON WOOD WALK	40,908	51	0	0	0
LEHMAN BROTHERS INC	1,121,383,087	1,143,800	3,921,000,702	128	1,149,868,797
LEHMAN GOVT SECURITIES	0	0	1,273,809,797	0	276,000,000
LEVESQUE & BEAUBIEN	1,114,650	900	0	0	0
LEWCO SECURITIES INC.	166,538,900	139,213	0	0	0
LEWIS	1,055,567	1,520	0	0	0
LIM & TAN	0	0	0	0	24,985,666
LIPPER ANALYTICAL DIST	1,748,124	1,278	0	0	0
LORRAINE L BLAIR INC	0	0	6,454,958	0	9,234,728
LUMMIS & CO	0	0	0	0	9,970,944
LYNCH, JONES & RYAN	284,692,697	379,613	63,073,653	0	0
M L PIERCE FENNER	0	0	4,000,000	0	0
MACQUARIE EQUITIES	0	0	24,606,267	0	0
MALONEY & CO	- 7,129,161	5,881	0	0	0

## COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
MARUKOH SECURITIES	1,255,444	3,453	0	0	0
MASTERLINK SECURITIES CO LTD	144,344	8	0	0	0
MAXIME CAPITAL	0	0	54,489	0	0
MAXUS CORP.	19,146,373	16,764	0	0	0
MAXWELL Y ESPINOSA	25,760	1	0	0	0
MAY FINANCING	3,427,065	3,489	0	0	0
MAYER & SCHWEITZER INC	4,967,136	0	0	0	0
MCDONALD & COMPANY	12,855,173	17,944	45,368,905	0	0
MCFADDEN FARRELL + SMITH	0	0	83,853	0	0
MCINTOSH & CO. MELLON CAPITAL MKTS	189,588 0	607 0	0	0	0
MELLON CAPITAL MARKETS MERIDIAN CAPITAL MARKETS	0	0	10,230,190	0	41,308,730 0
MERIT INVESTMENT CORP.	0	0	7,139,071	0	0
MERRILL LYNCH P F & S	834,595,348	839,694	3,845,264,254	3,633	2,046,465,391
MESIROW AND COMPANY	3,124,912	3,685	1,456,092	0	9,860,972
MHBDC-MHT BROKER - DEALER	0	0	3,959,208	0	0
MIDAS CORR	3,604,382	69	0	0	0
MIDDLEFIELD	2,776,357	10,204	0	0	0
MIDWOOD SECURITIES	930,357	1,326	0	0	0
MILDESA SERVICIOS BURSATILES	4,478,673	22,292	0	0	0
MILLER JOHNSON & KEANE	344,225	0	0	0	0
MILLER SEC. INC.	158,400	0	0	0	0
MILLER TABAK HIRCH	19,906	138	0	0	0
MITCHELL HUTCHINS & COMPANY	1,719,974	0	2,880,936	0	749,798
MONNES WILLIAMS CRE	31,023	52	0	0	0
MONTGOMERY SECURITIES	127,076,920	122,117	0	0	0
MORAN + ASSOC	10,125	12	0	0	0
MORGAN GRENFELL	11,712,198	21,867	0	0	0
MORGAN GUARANTY	963,329	135	1,149,375	0	0
MORGAN KEGAN INC.	6,608,340	6,566	0	0	0
MORGAN STANLEY & CO	918,184,956	440,796	2,431,868,715	1,755,225	2,016,286,065
MSPRO-MORGAN STANLEY & CO. MURPHY, MARSEILLES, SMITH & NA	0	0	373,446 0	0	0
MYERBERG & CO L.P.	2,101,605 0	2,806 0	2,496,289	0	0
NATIONAL FINANCIAL	4,532,269	19,104	2,490,289	0	0
NATIONAL WESTMINSTER	4,552,209	0	647,538	0	ů 0
NATIONS BANK	ů 0	õ	34,460,675	ů 0	ů 0
NATIONSBANC CAPITAL MKTS INC	ů 0	Ő	88,368,793	0	10,909,454,904
NATWEST SECURITIES	16,131,300	25,975	5,245,671	0	0
NCL INVESTMENTS LTD.	1,381,209	4,004	0	0	0
NEEDHAM SECURITIES	122,663	191	0	0	0
NESBITT BURNS	83,178	107	0	0	0
NESBITT BURNS INC.	0	0	1,427,428	0	0
NEUBERGER & BERMAN	39,433,110	44,159	0	0	0
NEWBRIDGE SECURITIES	98,399,923	108,820	0	0	0
NIKKO SECURITIES	7,467,028	174	263,405,638	0	7,507,628,531
NOMURA BANK	235,407	470	2,992,500	0	17,516,146
NOMURA SECURITIES INTL	15,435,560	4,855	200,970,338	0	21,864,480
NORWEST BANK	0	0	222,180	0	0
NORWEST FINANCIAL INC	0	0	0	0	242,867,129
NORWEST INVESTMENT SERV INC	0	0	4,900	0	26,420,352
NUTMEG SECURITIES	3,021,635	7,575	0	0	0
NYKREDIT	0	0	7,525,017	0	0
O'NEIL (WM COMPNY INC	14,476,802 443,332	30,883 199	0	0	0
OHMAN SECURITIES	•	3,651	3,049,547	0	0
OLDE & CO OPPENHEIMER & CO	4,634,330 201,234,437	254,072	2,473,277	0	0
OPPENHEIMER & CO ORD MINNETT	11,643,722	27,562	2,473,277	0	0
ORMES CAPITAL	172,914	694	0	0	0
OSCAR GRUSSMAN	618,070	570	0	0	ů 0
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## COMMISSIONS AND TRADING VOLUME

In-oker         \$ Volume         \$ Commissions         \$ Volume         \$ Commissions         \$ Volume           OVEREAS LANKING CORP         44.2/5         1         0         0         0           PACIFUC CR         4.7.1/1.65         4.383         0         0         0           PARTE WEBRE INC         3.839.042         3.9792         80.544.811         0         6.203.000.000           PARTE WEBRE INC         4.839.24         2.255         1.0173.83         0         0         0           PARE MSEBRE INC         4.639.24         2.1256         1.0173.83         0		Stock	Stock	Bond	Bond	Short-Term
OVERSEAS BANKING CORP         I. 4.276         I.         0         0         0           PACIFIC CR         4.731.965         4.383         0         0         0           PANE WEBBER INC         3.715.131         10.478         0         0         0           PAINE WEBBER INC         3.725.042         2.955.270.227         0         3.813.403           PARLBAS CAPTLA, MARKETS         4.654.924         2.1256         1407.785.55         0         0           PARLBAS CAPTLA, MARKETS         4.654.924         1.100         0         0         0           PARLBAS CAPTLA, MARKETS         4.654.924         1.100         0         0         0           PARLBAS CAPTLA, MARKETS         4.63.924         1.000         0         0         0           PARLBAS CAPTLA, MARKETS         4.53.93         0.010         0         0         0           PARLBAS CAPTLA, MARKETS         4.53.93         4.11.973         0         0         0         0           PARLBAS CAPTLA, MARKETS         1.43.94         8.77         0         0         0         0           PARLENDER         1.43.94         8.77         0         0         0         0           PENSIDN C	Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
PACITUAL         4/71/955         4/833         0         0         0           PACITUAL         3/715/131         10/478         0         0         0           PAINE WEBBER NC         3.829/042         9/722         80.548.811         0         6.200.0000           PAINE WEBBER NC         4.634 924         21.395         140.785.955         0         0           PARENAS CAPITAL MARKITS         4.634 924         21.395         140.785.955         0         0         0           PARENAS CAPITAL MARKITS         4.634 924         21.395         140.785.955         0         0         0         0           PARENAS CAPITAL MARKETS         4.634 924         21.395         140.785.955         0         0         0         0           PARLISEN, DOWLING         747.864         1.100         0	OTA LTD PARTNERSHIP	1,666,935	1,645	0	0	0
PACTUAL         3,715,131         10,478         0         0         0           PAINE WEBRER IX C         3,715,131         10,478         0         6,203,000,000           PAINE WEBRER IX C         416,947,058         442,253         2,255,702,277         0         38,132,403           PARIBAS CATTLA MARKETS         4,654,924         2,1356         140,788,557         0         0         0           PARKINK CTD         9,5922         0	OVERSEAS BANKING CORP	44,276	1	0	0	0
DATE WEBBER INC         1 x 20 m2         9 y 92         80.548.811         0         6.203,000.000           PARE WEBBER IA C         41.6967/058         442.25         22557/40.27         0         38,100.000           PARE WEBBER IA C         41.6967/058         443.225         22557/40.27         0         38,100.000           PAREAS COMPTAL MARKETS         44.594.942         12.356         140,788.595         0         0           PARKANG LTD         59522         0         0         0         0         0           PARKANG LTD         9.318.410         20,718         0         0         0         0           PENSTYL-VANA MERCHART GROUP         9.13.84.10         20,718         0         0         0         0           PERSCHINE SCURTTES         15.301.860         80.068         1.187.073         0 <td>PACIFIC CR</td> <td>4,731,965</td> <td>4,383</td> <td>0</td> <td>0</td> <td>0</td>	PACIFIC CR	4,731,965	4,383	0	0	0
PARIS WEBBER JA C         41 (297) 08         44 225         2.255/90.227         0         38,132,403           PARIBAS COTTAL MARKETS         4.649,474         11,367         1100         0         0           PARIBAS COTTAL MARKETS         4.649,474         11,00         0         0         0           PARISKI LTD         95,922         0         0         0         0         0           PALUSEN, DOWLING         747,864         11,00         0	PACTUAL	3,715,131	10,478	0	0	0
PARIAS CAPTAL MARKETS         4 (34 924)         12.96         140.785.95         0         0           PARIAS CA         159.70         15.412.483         0         0           PARIAS CO         \$192.01         15.97         15.412.483         0         0           PARLESEN DOWING         747.864         1.00         0         0         0           PENSTUANM MERCHANT GROUP         412.590         0         0         0         0           PENSTUANM MERCHANT GROUP         412.590         0.0         0         0         0           PENSTUANM MERCHANT GROUP         394.746.739         411.599         1.776.374.487         0         0         0           PERGRING SECURITIES         1.530.303         44.65         0	PAINE WEBBER INC	3,829,042	9,792	80,548,811	0	6,203,000,000
PARMAX CTD         8,192,101         15,776         15,412,488         0         0           PARKMX LTD         55,922         15,976         15,412,488         0         0         0           PARKMX LTD         55,922         0         0         0         0         0           PSISENCONDUTING SERV         9,318,410         20,718         0         0         0         0           PENSINCONDUTING SERV         24,672         22         0         0         0         0           PENSINCONDUTING SERV         24,672         92         0         0         0         0           PERSINCONDUTINO SERV         344,763         41,599         1,775,574,487         0         0         0           PETES & COL         1,435,004         4,579         0         0         0         0         0         0           PULLED ALLED SECURITES         15,255,10         26,89         0 <td>PAINE WEBBER J &amp; C</td> <td>416,967,058</td> <td>484,225</td> <td>2,255,740,227</td> <td>0</td> <td>38,132,403</td>	PAINE WEBBER J & C	416,967,058	484,225	2,255,740,227	0	38,132,403
PARKINK LTD         B 5922         0         0         0         0           PAULSEN, DOWING         747 864         1.100         0         0         0           PRUSEN, DOWING         747 864         1.00         0         0         0           PENSIDN, CONSULTING SERV         2318,410         20,718         0         0         0           PENSIDN, CONSULTING SERV         234,672         292         1,187,073         0         0           PENSIDN, CONSULTING SERV         234,672         24         0         0         0           PERSIDN, CONSULTING SERV         234,767,39         411,599         1,765,744,877         0         0           PERSIDN, CONSULTING SERV         235,800         44,665         0         0         0         0           PHILLIPS & DEW         8,565,519         26,849         0         0         0         0           PHILLIPS & DEW         8,565,519         26,847         112,478,956         0         0         0           PULY STELIS FINANCE CORP         620,443         1,213         0         0         0         0           PULY STELIS LEFINANCE CORP         620,443         1,214,73,452         0         0         0 </td <td>PARIBAS CAPITAL MARKETS</td> <td>4,634,924</td> <td>21,296</td> <td>140,788,595</td> <td>0</td> <td>0</td>	PARIBAS CAPITAL MARKETS	4,634,924	21,296	140,788,595	0	0
PARKINK LTD         95,922         0         0         0           PAULSEN, DOVLING         747,864         1,100         0         0           PENSTLYANDA MERCHANT GROUP         412,500         0         0         0           PENSTLYANDA MERCHANT GROUP         242,500         0         0         0           PENSTLYANDA MERCHANT GROUP         242,502         0         0         0           PERSTRUNA MERCHANT GROUP         241,593         1,776,374,487         0         0           PERSTRUNA SECURITES         15,513,03         44,605         0         0         0           PHILLPS & LOEW         82,655,19         26,847         11,2478,956         0         0         0           PHILLPS & LOEW         43,002,244         26,447         11,2478,956         0         0         0           PHER CARTEL SFUNCTIC CORP         620,443         1,218         0         0         0         0           PRUDENTIAL ENFANCE CORP         620,443         1,218         0         0         0         0           PRUDENTIAL SECURTES INC         341,611,898         0         0         0         0         0           PRUDENTIAL ENENNC         451,613,73         402 <td>PARIBAS CO</td> <td>8,192,101</td> <td>15,976</td> <td>15,412,488</td> <td>0</td> <td>0</td>	PARIBAS CO	8,192,101	15,976	15,412,488	0	0
PAULSEN, DOWLING         77/364         1,100         0         0           PCSS SECURTIES INC.         9.318,410         20,118         0         0           PENSIDN CONSULTINO SERV         204,672         292         0         0           PENSIDN CONSULTINO SERV         204,672         292         0         0           PERSIDN CONSULTINO SERV         204,672         292         0         0         0           PERSIDN CONSULTINO SECURTIES         15.013,803         80,808         1.147,073         0         0           PERSING CONSULTIES         15.253,100         44,655         0         0         0         0           PHILLIPS A DREW         8.55,519         26.893         0 <td>PARKMIX LTD</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>0</td>	PARKMIX LTD			0	0	0
PCS SECURTITIES INC.         9.18.410         20.718         0         0         0           PENNSYLVANA MERCHANT GROUP         141.250         0         0         0         0           PENNSYLVANA MERCHANT GROUP         15.013.303         80.088         1.187.073         0         0         0           PERSERING SECURTIES         15.013.303         80.088         1.187.073         0         0         0         0           PERSERING SECURTIES         15.253.130         44.603         0         0         0         0         0         0           PHILLIPS A DREW         8.656.19         2.66.89         0	PAULSEN, DOWLING		1.100	0	0	0
PENSIVLVANIA MERCHANT GROUP         112.500         0         0         0         0           PENSION CONSULTING SEAV         206,672         292         0         0         0           PERSION CONSULTING SEAV         394,736,739         81,1599         1,776,374,487         0         0           PETERS & CO.         1,458,054         8,579         0         0         0           PHERS ALCO.         1,458,054         8,579         0         0         0           PHILEO ALLED SECURITIES         15,255,130         44,605         0         0         0           PHILEO ALLED SECURITIES         15,255,130         44,605         0         0         0         0           PHILEO ALLED SECURITIES         15,255,130         44,605         0				0	0	0
PENSION CONSULTING SERV         204,672         292         0         0         0           PERSERING SECURITIES         15/013.803         80.808         1.187/073         0         0           PERSERING CORD         344,736,739         411.599         1.776,374,487         0         0         0           PETERS & CO.         1.458,054         8.579         0         0         0         0           PERCERIENER CALL         238,200         462         0         0         0         0           PHILLIPS & DREW         8.556,519         26,889         0         0         0         0           PIER CAPITAL MOMT         0         0         1,344,020         0         0         0           PIER CAPITAL MOMT         0         0         0         0         0         0         0           PRUDENTIAL FUNDING CORP         0         0         0         0         275,670.335         0         3,303,768,280           PRUDENTIAL FUNDING CORP         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td></td>				0	0	
PERECREME SECURITIES         15/013/03         80,808         1,187/073         0         0           PERSHINO         394,736,739         411,599         1,776,374,487         0         0           PETERS & CO.         1,458,054         8,779         0         0         0           PROZALENMER CARL H.         238,200         462         0         0         0           PHILEO ALLID SECURITIES         15,255,130         44,605         0         0         0           PHILEO ALLID SECURITIES         15,255,130         44,605         0         0         0           PICITET & CO         292,163         536         0         0         0         0           PICITET & CO         292,163         13,45         0         0         0         0           PICITET & CO         292,163         12,18         0         0         0         0           PICITET ALCO         48,002,264         26,847         11,247,895         0         26,35999           POLYVEST BILLS FINANCE CORP         0         0         0         0         0         0           PRUDENTIAL FUNDING CORP         0         0         0         245,143,233         0         0				0	0	
PERSING         394,736,739         411,539         1,776,374,487         0         0           PETERS & CO.         1,458,054         8,579         0         0         0           PETERS & CO.         1,458,054         8,579         0         0         0           PHILLIPS & LORDEW         13,255,130         44,005         0         0         0           PHILLIPS & DREW         8,865,619         26,849         0         0         0           PITER LAFTRAY INC         48,002,264         26,847         112,478,896         0         205009           POLVYEST BLLS FINANCE CORP         620,443         1,218         0				1 187.073	0	-
PETERS & CO.         1.458,054         8,379         0         0         0           PFORZHEIMER CARL H.         238,200         462         0         0         0           PHILEO ALLED SECURITIES         13,255,110         44,605         0         0         0           PHILEO ALLED SECURITIES         13,255,110         44,605         0         0         0           PHILE ALLED SECURITIES         12,251,310         44,605         0         0         0           PICTET & CO         292,163         536         0         0         0         0           PICTET ACO         48,002,264         26,847         11,2478,895         0         0         0         0           PRUDENTIAL FUNDING CORP         0         0         0         0         0         0         0         0           PRUDENTIAL SECURTIES INC         96,16,11476         0         0         0         0         4,953,975           PUNK ZIEGE         11,419,88         0         0         0         0         0         0         0           QAR CLEARING CORP         0         0         0         0         0         0         0         0           QUANITTATI					-	
PFORZHEMER CARL H.         238,200         442         0         0           PHILDR ALLIED SECURITIES         15,255,130         44,665         0         0           PHILLIPS ADREW         8,656,519         26,849         0         0         0           PICTET & CO         292,163         536         0         0         0           PICTE & CO         292,163         536         0         0         0           PIERE LAFTRAY INC         48,002,264         26,847         112,478,896         0         0         0           PRUDENTIAL         STI7,573         402         0 <td< td=""><td></td><td></td><td></td><td></td><td>-</td><td>-</td></td<>					-	-
PHILLED ALLED SECURITIES         15.255,130         44.605         0         0           PHILLIPS & DREW         8.565,519         26.889         0         0         0           PICTET & CO         222,163         356         0         0         0           PIPER LAFRAV INC         48.002,264         26.847         11.24.78,896         0         2635099           POLYVEST BILLS FINANCE CORP         620,443         1.218         0         0         0           PRE PER NATH LOWNING CORP         1.141,898         0         0         0         0         0           PRUDENTIAL LEVINDING CORP         0         0         0         0         277.670.335         PRUDENTIAL LEVINDING CORP         0         0         0         277.670.335           PRUDENTIAL CUNDING CORP         103,996         145         0					-	
PHILLIPS & DREW         8.556.519         26.889         0         0         0           PICTET & CO         292,163         336         0         0         0           PIPER CAPTAL MGMT         0         1,344,020         0         0           PIPER LAFFRAY INC         48,002,264         26,847         112,478,896         0         0           PIPER LAFFRAY INC         48,002,264         26,847         112,478,896         0         0         0           PRUEPERTIAL         STANCE CORP         60         0         0         0         0         0           PRUDENTIAL         STA,5733         402         173,452,826         0         0         77,670,335           PRVDENTIAL         SCUMPTIS & CONC         0         0         0         4,953,975           PUNCE CLENDON COUNTS & CONC         0         0         0         4,953,975           PUNCE CLENDON COUNTS & CONC         0         0         0         0         0           QUANTITATIVE ANALYSIS         1,266,508         4,225         0         0         0           RAYMOND MASE & ASSOCIATES         3,31,341         2,837         0         0         0           RAYMOND MASE & ASOCIATES					-	
PICTET & CO         292,163         536         0         0         0           PIPER LAFTAL MGMT         0         0         1,344,020         0         0           PIPER LAFTAL INC         48,002,264         26,847         112,478,896         0         2055099           POLYVEST BILLS FINANCE CORP         620,443         1,218         0         0         0         0           PREFERRED TECKINOLOGY         1,141,988         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         277,570,335         0         3,303,768,280         PRVDOR MCCLENDON COUNTS & CO INC         0				•	-	-
PIPER CAPITAL MGMT         0         0         1,344,020         0         0           PIPER JAFRAY INC         48,002,264         26,847         112,478,96         0         0         0           PREPERRED TECHNOLOGY         1,141,988         0         0         0         0         0           PRUDENTIAL         S17,573.3         402         173,452,826         0         0.0         277,670.335           PRUDENTIAL FUNDING CORP         0         0         0.0         237,670.335         0         3,303,768,280           PRUOR MCCLENDON COUNTS &CO INC         0         0         0         0         0         0         3,303,768,280           PRYOR MCCLERING CORP         103,996         145         0		2		•	-	
PIPER JAFFRAY INC         48,002,264         26,847         112,478,896         0         2635099           POLYVEST BILLS FINANCE CORP         620,443         1,218         0         0         0           PREPERRED TECHNOLOGY         1,141,988         0         0         0         0         0           PRUDENTIAL EVIDING CORP         0         0         0         0         277,670,335           PRUDENTIAL SECURTIES INC         361,611,429         358,110         245,143,233         0         3,303,768,280           PRYOR MCCLENDON COUNTS &CO INC         0				-	-	-
POLYVEST BILLS FINANCE CORP         620,443         1,218         0         0         0           PREFERRED TECHNOLOGY         1,141,988         0         0         0         0         0         0           PRUDENTIAL         517,533         402         173,452,826         0         0         3,303,768,280           PRUDENTIAL FUNDING CORP         0         0         0         0         0         3,303,768,280           PRUDENTIAL SECURTITES INC         361,611,429         358,110         245,143,233         0         3,303,768,280           PRYOR MCCLENDON COUNTS &CO INC         0         0         0         0         0         0           QUANTITATIVE ANALYSIS         1,266,508         4,225         0         0         0         0           RASHID HUSSAIN         1226,245         377         0         0         0         0         0           RAYMOND JAMES & ASSOCIATES         3,113,822         3,073         740,977         0         0         0         0           RAYAOND JAMES & ASSOCIATES         3,113,822         3,073         740,977         0         0         0         0           RAYAOND JAMES & ASSOCIATES         3,113,822         3,073         0 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>•</td>					-	•
PREFERRED TECHNOLOGY         1,141,988         0         0         0         0           PRUDENTIAL         \$17,53         402         173,452,826         0         0           PRUDENTIAL FUNDING CORP         0         0         0         277,670,353           PRUDENTIAL SECURTIES INC         361,611,429         358,110         245,143,233         0         3,303,768,280           PRYOR MCCLENDON COUNTS &CO INC         0         0         0         0         0         4,953,975           PUNK ZIEGE         4,118,476         0         0         0         0         0           QUANTITATIVE ANALYSIS         1,266,508         4,225         0         0         0         0           RASHID HUSSAIN         125,245         377         0         0         0         0           RASHID HUSSAIN         125,245         377         0         0         0         0           RASHID HUSSAIN         125,245         377         0         0         0         0           RASHID HUNSAINN         125,245         377         0         0         0         0           RASHID HUNSAINN         125,474         240         0         0         0					-	
PRUDENTIAL         Interval         402         173,452,826         0         0           PRUDENTIAL FUNDING CORP         0         0         0         277,570,335           PRUDENTIAL SECURITIES INC         351,11,429         358,110         2451,143,233         0         3,303,768,280           PRUDENTIAL SECURITIES INC         361,611,429         358,110         2451,432,333         0         3,303,768,280           PUNK ZIEGE         4,118,476         0         0         0         0         0           QUANTITATIVE ANALYSIS         1,266,508         4,225         0         0         0         0           QUANTITATIVE ANALYSIS         1,256,508         4,225         0         0         0         0           RAUSCHER & COMPANY         150,000         0         0         0         0         0           RAUSCHER & ASSOCIATES         3,113,822         3,073         740,977         0         0         0           REYNDERS GRAY & CO         751,671         1,120         0         0         0         0           RIADA & CO         0         0         2,995,968         0         0         0         0           REYNDERS GRAY & CO         7,516,673					-	
PRUDENTIAL FUNDING CORP         0         0         0         277,670,335           PRUDENTIAL SECURITIES INC         361,611,429         358,110         245,143,233         0         3,303,768,280           PRYOR MCCLENDON COUNTS &COINC         0         0         0         0         4,953,975           PUNK ZIEGE         4,118,476         0         0         0         0         0           Q&R CLEARING CORP         103,996         145         0         0         0         0           QUANTITATIVE ANALYSIS         1,266,508         4,225         0         0         0         0           RASHID HUSSAIN         125,245         377         0         0         0         0           RAUSCHER P         3,351,341         2,837         0         0         0         0           RADO DIAMES & ASSOCIATES         3,113,822         3,073         740,977         0				-	-	
PRUDENTIAL SECURITIES INC         361,611,429         358,110         245,143,233         0         3,303,768,280           PRYOR MCCLENDON COUNTS &CO INC         0         0         0         0         0         0         4,953,975           PUNK ZIEGE         4,118,476         0						-
PRYOR MCCLENDON COUNTS &CO INC         0         0         0         0         0         4,953,975           PUNK ZIEGE         4,118,476         0         0         0         0         0           Q&R CLEARING CORP         103,996         145         0         0         0         0           QUANTITATIVE ANALYSIS         1,266,508         4,225         0         0         0         0           RASHID HUSSAIN         125,245         377         0         0         0         0         0           RASHID HUSSAIN         125,245         377         0			-	-	-	
PUNK ZIEGE         4,118,475         0         0         0           Q&R CLEARING CORP         103,996         145         0         0         0           QUANTTATVE ANALYSIS         1,266,508         4,225         0         0         0           R J STREICHEN & COMPANY         150,000         0         0         0         0           RAUSCHERP         3,351,341         2,837         0         0         0           RAUSCHERP         3,351,341         2,837         0         0         0           REYNDERS GRAY & CO         751,671         1,120         0         0         0           REYNDERS GRAY & CO         751,671         1,120         0         0         0           REVNDERS GRAY & CO         21,6747         240         0         0         0           ROBBINS         216,747         28         0         0         0           ROBERT FLEMING         7,518,633         4,582         22,303         0         0           ROBERT FLEMING         7,581,633         4,582         22,303         0         0         0           ROBERT WARD & CO         15978.975         5,536         0         0         0		361,611,429	,	245,143,233		
Q&R CLEARING CORP         103,996         145         0         0           QUANTITATIVE ANALYSIS         1,266,508         4,225         0         0         0           R J STREICHEN & COMPANY         150,000         0         0         0         0           RASHID HUSSAIN         125,245         377         0         0         0           RAVMOND JAMES & ASSOCIATES         3,113,822         3,073         740,977         0         0           REC DOMINION SECURITIES         0         0         1,516,875         0         0           RECA COMINION SECURITIES         0         0         1,516,875         0         0           REA CO         751,671         1,120         0         0         0         0           REZAL COMMERCIAL BANKING         4,615,133         4,178         0         0         0         0           ROBERT BRANDT & CO         216,747         240         0         0         0         0           ROBERT FLEMING         7,518,633         4,582         2,303         0         0         0           ROBERT FLEMING         2,214,71         28         0         0         0         0         0         0 <t< td=""><td></td><td>0</td><td>0</td><td>0</td><td></td><td>4,953,975</td></t<>		0	0	0		4,953,975
QUANTITATIVE ANALYSIS         1,266,508         4,225         0         0         0           R J STREICHEN & COMPANY         150,000         0         0         0         0         0           RASHID HUSSAIN         125,245         377         0         0         0         0           RAUSCHER P         3,351,341         2,837         0         0         0         0           RAC DOMINION SECURITIES         3,113,822         3,073         740,977         0         0         0           REC DOMINION SECURITIES         0         0         1,516,875         0         0         0           REXA & CO         751,671         1,120         0         0         0         0           RIZAL COMMERCIAL BANKING         4,615,133         4,178         0         0         0         0           ROBERT FLEMING         216,747         240         0	PUNK ZIEGE	4,118,476	0	0	0	0
R J STREICHEN & COMPANY       150,000       0       0       0       0         R J STREICHEN & COMPANY       150,000       0       0       0       0         RAUSCHER:P       3,351,341       2,837       0       0       0         RAUSCHER:P       3,351,341       2,837       740,977       0       0         RATMOND JAMES & ASSOCIATES       3,113,822       3,073       740,977       0       0         RACKANDE ECURITIES       0       0       1,516,875       0       0         RADA & CO       0       0       2,995,968       0       0         RIZAL COMMERCIAL BANKING       4,615,133       4,178       0       0       0         ROBERT BRANDT & CO       21,247       240       0       0       0         ROBERT FLEMING       7,581,653       4,582       22,303       0       0         ROBERT V. BAIRD & CO       15,978,975       5,555       0       0       0       0         ROBERTSON COLMAN & STEPHENS       42,281,418       14,416       0       0       0       0         ROBENSON-HUMPHREY CO       20,288,279       2,2559       0       0       0       0       0       0	Q&R CLEARING CORP	103,996	145	0	0	0
RASHID HUSSAIN         125,245         377         0         0         0           RAUSCHER*P         3,351,341         2,837         0         0         0           RAYMOND JAMES & ASSOCIATES         3,138,22         3,073         740,977         0         0           RBC DOMINION SECURITIES         0         0         1,516,875         0         0           REYNDERS GRAY & CO         751,671         1,120         0         0         0           RIZAL COMMERCIAL BANKING         4,615,133         4,178         0         0         0           ROBBINS         216,747         240         0         0         0         0           ROBERT FRANDT & CO         21,247         28         0         0         0         0           ROBERT VE BRANDT & CO         15,978,975         5,536         0         0         0         0           ROBERTSON COLMAN & STEPHENS         42,281,418         14,416         0         0         0         0           RODMAN & RENSHAW         2,225,715         1,930         0         0         0         0           SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         7,965,461,072         SA	QUANTITATIVE ANALYSIS	1,266,508	4,225	0	0	0
RAUSCHER P         3,351,341         2,837         0         0         0           RAYMOND JAMES & ASSOCIATES         3,113,822         3,073         740,977         0         0           RBC DOMINION SECURITIES         0         0         1,516,875         0         0           REYNDERS GRAY & CO         751,671         1,120         0         0         0           RIADA & CO         0         0         2,995,968         0         0           ROBBINS         216,747         240         0         0         0           ROBERT BRANDT & CO         21,247         28         0         0         0           ROBERT FLEMING         7,581,633         4,582         22,303         0         0         0           ROBERT W. BAIRD & CO         15,978,975         5,566         0         0         0         0         0         0           ROBERT NO. COLMAN & STEPHENS         42,281,418         14,416         0         <	R J STREICHEN & COMPANY	150,000	0	0	0	0
RAYMOND JAMES & ASSOCIATES         3,113,822         3,073         740,977         0         0           RBC DOMINION SECURITIES         0         0         1,516,875         0         0           REYNDERS GRAY & CO         751,671         1,120         0         0         0           RIADA & CO         0         0         2,995,968         0         0           RIZAL COMMERCIAL BANKING         4,615,133         4,178         0         0         0           ROBERT BRANDT & CO         216,747         240         0         0         0           ROBERT BRANDT & CO         21,247         28         0         0         0           ROBERT FLEMING         7,581,633         4,582         22,303         0         0           ROBERT N. BAIRD & CO         15,978,975         5,536         0         0         0           ROBERTSON COLMAN & STEPHENS         42,281,418         14,416         0         0         0           ROCHDALE SECURTITES CORP         4,902,855         5,481         0         0         0           RODMAN & RENSHAW         2,225,716         1,930         0         0         0         0           SANORD BERINSTEIN         2,218,370	RASHID HUSSAIN	125,245	377	0	0	0
RBC DOMINION SECURITIES         0         1,516,875         0         0           REYNDERS GRAY & CO         751,671         1,120         0         0         0           RIZAL COMMERCIAL BANKING         4,615,133         4,178         0         0         0           ROBBINS         216,747         240         0         0         0         0           ROBERT BRANDT & CO         21,247         28         0         0         0         0           ROBERT BRANDT & CO         21,247         28         0         0         0         0           ROBERT W. BAIRD & CO         15,978,975         5,536         0         0         0         0         0           ROBERT W. BAIRD & CO         15,978,975         5,536         0<	RAUSCHERP	3,351,341	2,837	0	0	0
REYNDERS GRAY & CO         751,671         1,120         0         0         0           RIADA & CO         0         0         2,995,968         0         0           RUNDERS GRAY & CO         1,1120         0         0         0         0           RIADA & CO         0         0         2,995,968         0         0         0           ROBBINS         216,747         240         0         0         0         0         0           ROBERT BRANDT & CO         21,247         28         0         0         0         0         0           ROBERT FLEMING         7,581,633         4,582         22,303         0         0         0         0           ROBERT SON COLMAN & STEPHENS         42,281,418         14,416         0	<b>RAYMOND JAMES &amp; ASSOCIATES</b>	3,113,822	3,073	740,977	0	0
RIADA & CO         0         0         2,995,968         0         0           RIZAL COMMERCIAL BANKING         4,615,133         4,178         0         0         0           ROBBINS         216,747         240         0         0         0         0           ROBERT BRANDT & CO         21,247         28         0         0         0         0           ROBERT FLEMING         7,581,633         4,582         22,303         0         0         0           ROBERT V. BAIRD & CO         15,978,975         5,536         0	<b>RBC DOMINION SECURITIES</b>	0	0	1,516,875	0	0
RIZAL COMMERCIAL BANKING         4,615,133         4,178         0         0         0           ROBBINS         216,747         240         0 <t< td=""><td>REYNDERS GRAY &amp; CO</td><td>751,671</td><td>1,120</td><td>0</td><td>0</td><td>0</td></t<>	REYNDERS GRAY & CO	751,671	1,120	0	0	0
ROBBINS         116,747         240         0         0         0           ROBERT BRANDT & CO         21,247         28         0         0         0           ROBERT FLEMING         7,581,633         4,582         22,303         0         0           ROBERT W. BAIRD & CO         15,978,975         5,536         0         0         0           ROBERTSON COLMAN & STEPHENS         42,281,418         14,416         0         0         0           ROBINSON-HUMPHREY CO         20,288,279         22,559         0         0         0           RODMAN & STEPHENS         42,281,418         14,416         0         0         0           ROBINSON-HUMPHREY CO         20,288,279         22,559         0         0         0           RODMAN & RENSHAW         2,225,716         1,930         0         0         0           SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         0         7,965,461,072           SANDLER O NEIL         331,114         0         0         0         0         0           SANVA-BGK         0         0         2,183,70         2,886         0         0         0           SANDLER O NEIL<	RIADA & CO		0	2,995,968	0	0
ROBBINS         216,747         240         0         0         0           ROBERT BRANDT & CO         21,247         28         0         0         0           ROBERT FLEMING         7,581,633         4,582         22,303         0         0         0           ROBERT W. BAIRD & CO         15,978,975         5,536         0         0         0         0           ROBERTSON COLMAN & STEPHENS         42,281,418         14,416         0         0         0         0           ROBINSON-HUMPHREY CO         20,288,279         22,559         0         0         0         0         0           ROCHDALE SECURITIES CORP         4,902,855         5,481         0	RIZAL COMMERCIAL BANKING	4,615,133	4,178	0	0	0
ROBERT BRANDT & CO         21,247         28         0         0         0           ROBERT FLEMING         7,581,633         4,582         22,303         0         0         0           ROBERT W. BAIRD & CO         15,978,975         5,536         0         0         0         0           ROBERTSON COLMAN & STEPHENS         42,281,418         14,416         0         0         0         0           ROBINSON-HUMPHREY CO         20,288,279         22,559         0         0         0         0           ROCHDALE SECURITIES CORP         4,902,855         5,481         0         0         0         0           RODMAN & RENSHAW         2,225,716         1,930         0 <t< td=""><td>ROBBINS</td><td></td><td></td><td>0</td><td>0</td><td>0</td></t<>	ROBBINS			0	0	0
ROBERT FLEMING         7,581,633         4,582         22,303         0         0           ROBERT W. BAIRD & CO         15,978,975         5,536         0         0         0           ROBERTSON COLMAN & STEPHENS         42,281,418         14,416         0         0         0           ROBINSON-HUMPHREY CO         20,288,279         22,559         0         0         0           ROCHDALE SECURITIES CORP         4,902,855         5,481         0         0         0           RODMAN & RENSHAW         2,225,716         1,930         0         0         0           SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         0         0         0           SANDER O NEIL         331,114         0         0         0         0         0         0           SANFORD BERNSTEIN         2,218,370         2,886         0	ROBERT BRANDT & CO			0	0	0
ROBERT W. BAIRD & CO         15,978,975         5,536         0         0         0           ROBERTSON COLMAN & STEPHENS         42,281,418         14,416         0         0         0           ROBINSON-HUMPHREY CO         20,288,279         22,559         0         0         0           ROCHDALE SECURITIES CORP         4,902,855         5,481         0         0         0           RODMAN & RENSHAW         2,225,716         1,930         0         0         0           SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         0         7,965,461,072           SANDLER O NEIL         331,114         0         0         0         0         0           SANFORD BERNSTEIN         2,218,370         2,886         0         0         0         0           SANVA-BGK         0         0         0         0         0				22,303	0	
ROBERTSON COLMAN & STEPHENS         42,281,418         14,416         0         0         0           ROBINSON-HUMPHREY CO         20,288,279         22,559         0         0         0         0           ROCHDALE SECURITIES CORP         4,902,855         5,481         0         0         0         0           RODMAN & RENSHAW         2,225,716         1,930         0         0         0         0           SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         0         7,965,461,072           SANDLER O NEIL         331,114         0         0         0         0         0           SANFORD BERNSTEIN         2,218,370         2,886         0         0         0         0           SANWA-BGK         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0         0         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0					0	
ROBINSON-HUMPHREY CO         20,288,279         22,559         0         0         0           ROCHDALE SECURITIES CORP         4,902,855         5,481         0         0         0           RODMAN & RENSHAW         2,225,716         1,930         0         0         0           SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         0         7,965,461,072           SANDLER O NEIL         331,114         0         0         0         0         0           SANFORD BERNSTEIN         2,218,370         2,886         0         0         0         0           SANWA-BGK         0         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0         0           SCHRODER SECURITIES         28,699,916         33,431         29,066         95         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< td=""><td></td><td></td><td>-</td><td></td><td>-</td><td></td></t<>			-		-	
ROCHDALE SECURITIES CORP         4,902,855         5,481         0         0         0           RODMAN & RENSHAW         2,225,716         1,930         0         0         0         0           SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         0         7,965,461,072           SANDLER O NEIL         331,114         0         0         0         0         0           SANFORD BERNSTEIN         2,218,370         2,886         0         0         0         0           SANWA-BGK         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0				0	Ő	0
RODMAN & RENSHAW         2,225,716         1,930         0         0         0           SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         0         7,965,461,072           SANDLER O NEIL         331,114         0         0         0         0           SANFORD BERNSTEIN         2,218,370         2,886         0         0         0           SANTANDER INVESTMENT SEC'S.         504,210         230         5,208,338         0         0           SANWA-BGK         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0         0         0           SCHRODER SECURITIES         28,699,916         33,431         29,066         95         0           SCOTIA MCLEOD         18,571         43         0         0         0         0           SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0         0						
SALOMON BROTHERS         881,652,274         909,644         5,882,787,095         0         7,965,461,072           SANDLER O NEIL         331,114         0         0         0         0         0           SANFORD BERNSTEIN         2,218,370         2,886         0         0         0         0           SANTANDER INVESTMENT SEC'S.         504,210         230         5,208,338         0         0         0           SANWA-BGK         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0           SBC WARBURG, LONDON         6,553,279         5,590         8,475,085         5,249         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
SANDLER O NEIL         331,114         0         0         0         0           SANFORD BERNSTEIN         2,218,370         2,886         0         0         0           SANTANDER INVESTMENT SEC'S.         504,210         230         5,208,338         0         0           SANWA-BGK         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0           SBC WARBURG, LONDON         6,553,279         5,590         8,475,085         5,249         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0         0         0         0           SCOTIA MCLEOD         18,571         43         0         0         0         0           SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0         0						
SANFORD BERNSTEIN         2,218,370         2,886         0         0         0           SANTANDER INVESTMENT SEC'S.         504,210         230         5,208,338         0         0           SANWA-BGK         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0           SBC WARBURG, LONDON         6,553,279         5,590         8,475,085         5,249         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0         0         0         0           SCOTIA MCLEOD         18,571         43         0         0         0         0           SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0         0						
SANTANDER INVESTMENT SEC'S.         504,210         230         5,208,338         0         0           SANWA-BGK         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0           SBC WARBURG, LONDON         6,553,279         5,590         8,475,085         5,249         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0         0         0         0           SCHRODER SECURITIES         28,699,916         33,431         29,066         95         0         0           SCOTIA MCLEOD         18,571         43         0         0         0         0           SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0         0						
SANWA-BGK         0         0         210,250,392         0         4,199,397           SASSOON SECURITIES         368,659         1,296         0         0         0           SBC WARBURG, LONDON         6,553,279         5,590         8,475,085         5,249         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0         0         0         0           SCHRODER SECURITIES         28,699,916         33,431         29,066         95         0           SCOTIA MCLEOD         18,571         43         0         0         0         0           SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0         0						
SASSOON SECURITIES         368,659         1,296         0         0         0           SBC WARBURG, LONDON         6,553,279         5,590         8,475,085         5,249         0           SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0         0         0           SCHRODER SECURITIES         28,699,916         33,431         29,066         95         0           SCOTIA MCLEOD         18,571         43         0         0         0           SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0						-
SBC WARBURG, LONDON         6,553,279         5,590         8,475,085         5,249         0           SCHAPIRO (M.A.) & CO         2,435,174         0         <						
SCHAPIRO (M.A.) & CO         2,435,174         0         0         0         0           SCHRODER MUNCHMEYER         4,498,872         8,489         0         0         0           SCHRODER SECURITIES         28,699,916         33,431         29,066         95         0           SCOTIA MCLEOD         18,571         43         0         0         0           SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0					-	
SCHRODER MUNCHMEYER         4,498,872         8,489         0         0         0           SCHRODER SECURITIES         28,699,916         33,431         29,066         95         0           SCOTIA MCLEOD         18,571         43         0         0         0           SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0	-					
SCHRODER SECURITIES         28,699,916         33,431         29,066         95         0           SCOTIA MCLEOD         18,571         43         0						
SCOTIA MCLEOD         18,571         43         0				-		-
SCOTT & STRINGFELLOW         2,857,320         1,080         0         0         0         0						
SECURITY PACIFIC BANK         1,800,000         0		2,857,320				
	SECURITY PACIFIC BANK	1,800,000	0	0	0	0

## COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
SEI FINANCIAL SCVS.	95,360,398	110,270	0	0	0
SEI FUNDS EVALUATION	17,727,803	17,345	0	0	0
SELIGMAN SECURITIES	0	0	1,816,423	0	0
SELLIER S.A.	231,929	123	0	0	0
SHEARSON LEHMAN BROS., INC.	1,581,617	1,230	736,303	0	0
SHEARSON LEHMAN AMER EXPRESS	0	0	197,244,496	0	0
SHERWOOD SECURITIES	15,492,792	5,805	0	0	0
SIFF MARKS+OAKLEY	26,739	58	0	0	0
SIGMA SECS, ATHENS SIMMONS & COMPANY	1,382,672	11	0	0	0
SIMMONS & COMPANY SIMMONS FIRST NATL BANK	493,136 0	1,173	73,125 8,988,427	0	0
SKANDINAVISKA ENSKILDA	0	0	8,301,307	0	0
SLOATE,WIESMAN	9,286,257	13,096	0	0	0
SMITH BARNEY & COMPANY	10,762,875	4,555	268,784,232	0	3,409,102,519
SOCIETE GENERAL	13,125,611	3,119	0	0	0
SOUNDVIEW	22,748,582	14,212	0	0	0
SOUTHCOAST CAPITAL CORP	3,604,653	6,291	0	0	0
SOUTHEAST RESEARCH PARTNERS	1,200,357	2,123	0	0	0
SOUTHWEST SECURITIES	0	0	7,836.928	0	0
SPEAR,LEEDS & KELLOGG	3,380,664	5,736	2,340,449	0	0
SSGA EXTERNAL	52,249,594	0	0	0	0
STANDARD & POOR SECURITIES	237,269,464	288,612	0	0	0
STANDARD BANK OF SA JOHANNESBUR	571,741	383	0	0	0
STATE BOARD OF INVESTMENT	0	0	33,560,104	0	0
STATE ST BK & TRUST	2,664,752,971	0	530,782,945	0	24,476,333,094
STEPHEN ROSE & PART	5,333,713	32,348	0	0	0
STEPHENS, INC.	714,533	2,986	0	0	0
STEWART W.P.	16,493	27	0	0	0
STIFEL NICOLAUS & COMPANY STRUCTURED CAPITAL MGMT.	3,591,265 0	10,646 0	3,135,875	0	0
STURDIVANT & CO.	3,806,453	4,812	0,155,875 0	0	0
SUN HUNG KAI	98,002		Ő	0	· O
SUPLICY CORRECTORA	254,195	701	ů 0	0	ů 0
SUTRO AND COMPANY INC.	15,698,614	20,759	4,563,166	0	0
SVENSKA HANDELSBANKEN	2,313,218	1,145	0	0	0
SWEDBANK STOCKHOLM	1,569,111	706	0	0	0
SWISS BANK	22,937,343	22,582	79,039,418	34,277	7,157,572
TA SECURITIES MALAYSIA	1,902,361	6,276	0	0	0
TEMPLETON INC	18,614,607	0	824,000	0	0
TEXACO INC	0	0	0	0	4,991,903
THOMASON INV	2,652,820	6,741	0	0	0
THOMSON INSTITUTIONAL SERVICES	303,086	579	0	0	0
TIEDEMANN	216,583	94	0	0	0
TIR SECURITIES	13,383,837	19,376	0	0	Ŭ
TOKAI BK TONGE CO.	129,690 365,170	0 777	0	0	0
TORONTO DOMINION SEC INC	361,695	1,084	2,291,470	0 0	163,498,373
TRAVELERS GROUP INC	0	1,004	2,221,470	Ő	5,972,823
TRAVELERS INC	0	0	0	0	5,986,675
TROSTER SINGER	2,677	6	0	0	0
TUCKER ANTHONY (L. BAILEY)	33,650	44	0	0	0
TUCKER ANTHONY INC	3,892	17	0	0	0
TUCKER, ANTHONY & R.L. DAY, IN	13,277,786	16,052	345,901	0	0
U S T SECURITIES	1,377,377	2,658	0	0	0
U.S. CLEARING	45,163,934	42,919	0	0	0
UBS PHILLIPS & DREW SEC.	3,503,260	9,540	0	0	0
UBS SECURITIES	19,030,373	34,913	49,272,696	0	0
UBS-DB CORPORATION	157,287,579	158,297	908,169,883	2	0
	0	0	1,198,601 0	0	0 0
UNION BANK OF L.A.	7,817,404	16,832	U	U	U

### COMMISSIONS AND TRADING VOLUME

#### By Broker for Fiscal Year 1997

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
UNION BK-SWISS ZURCH	4,579,949	1,916	0	0	0
UNIVERSITY CAPITAL CORP.	0	0	2,720,638	0	0
UNTERBURG HARRIS & DESANTIS	1,082,145	11	0	0	0
UTENDAHL	0	0	8,802,741	0	0
VALORES BURSATILES DE MEXICO	244,085	6	0	0	0
VALORES FINAMEX	122,204	3	0	0	0
VAN KASPER	1,499,993	3,163	0	0	0
VECTOR SECURITIES INC	11,420,546	7,019	0	0	0
VENHU SECURITIES	0	0	23,875,306	0	0
VICKERS BALLAS LTD	226,380	87	0	0	0
VINING SPA	0	0	3,045,522	0	0
VOLPE WELT	7,366,238	3,810	0	0	0
VONTOBEL	86,519	183	0	0	0
VOTORANTIM BROKERAGE	850,239	2,004	0	0	0
W ANTHONY	2,753	3	0	0	0
W.I. CARR	6,109,674	2,636	0	0	0
W.S. ARNOLD & CO.	0	0	13,232,023	0	0
WACHOVIA BANK	0	0	0	0	2,672,749
WACHOVIA BANK N.A.	0	0	0	0	19,678,536
WAGNER STOTT & CO.	337,639	567	0	0	0
WARBURG S.G.	57,408,150	47,733	1,606,560	221	0
WASSERSTEI	204,430	97	0	0	0
WATKINS & COMPANY	0	0	6,240,688	0	0
WEDBUSH SECURITIES	679,949	460	0	0	0
WEEDEN & COMPANY	60,006,719	97,216	0	0	0
WEISS	34,341,761	73,036	0	0	0
WELLINGTON & CO.	6,162,469	3,580	0	0	0
WERTHEIM & CO	1,145,315	1,537	0	0	0
WESSELS,ARNOLD	24,230,905	7,298	0	0	0
WEST LB SECURITIES	0	0	5,455,082	0	0
WESTERN BANK OF BILLINGS	0	0	9,575,942	0	0
WESTLB DUSSELDORF	0	0	302,944	0	0
WESTMINSTER	23,390,639	68,425	0	0	0
WHEAT FIRST CAP MKTS	28,238	30	0	0	0
WHEAT FIRST SECURITIES	45,424	92	286,256	0	0
WHEATON FIRST SECURITIES INC	8,916,474	10,509	742,065	0	0
WHEELOCK NATWEST SECS LTD	2,124,907	1,365	0	0	0
WICAR	5,841,609	3,217	26,636	81	0
WILLIAM BLAIR & CO.	431,882	608	0	0	0
WILLIAMS	0	0	0	0	17,516,146
WILLIAMS CAP GROWTH	11,776,544	7,972	0	0	0
WILLIAMS CAP GRP LP	0	0	0	0	62,468,442
WILLIAMS SECURITIES INC.	1,450,235	1,461	0	0	0
WILSHIRE ASSOCIATES	9,501,764	14,508	0	0	0
WM. C. RONEY & CO	517,948	871	0	0	0
WOOD & CO.	1,875,930	224	0	0	0
WOOD GUNDY & COMPANY	0	0	11,344,807	0	0
YAMAICHI	10,729,293	217	5,691,893	0	0
YAMAICHI INTL. (AMER) INC	4,814,045	117	0	0	Ő
ZANNEX SECURITIES	1,069,414	2,349	0	ů 0	Ő
ZIONS CAPITAL MARKETS	1,009,414	2,549	52,856,948	ů 0	155,584,206
ZIONS NATIONAL BANK	0	0	100,438	ů 0	155,564,200
BROKER NOT AVAILABLE*	30,249,482,264	1,148,437	15,699,978,115	ő	15,758,750,324
	50,277,702,209	1,170,737	10,077,770,110	v	10,100,100,024
ALL BROKERS COMBINED	\$49,836,412,615	\$17,841,944	\$57,645,353,988	\$1,956,239	\$136,623,518,636

\* Includes transactions where broker data was incomplete, income reinvestment transactions and transfers and adjustments between funds.

Note: Totals may not add due to rounding.

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1997 Annual Report - Section II

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#### STATE OF MINNESOTA OFFICE OF THE LEGISLATIVE AUDITOR JAMES R. NOBLES, LEGISLATIVE AUDITOR

## **Independent Auditor's Report**

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

We have audited the accompanying financial statements of the Supplemental Investment 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, 1997, as shown on pages 104 to 110. 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 auditing standards and *Government Auditing Standards*, as issued by the Comptroller General of the United States. 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, 1997, and the results of their operations and changes in their net assets for the year then ended, in conformity with generally accepted accounting principles.

The State Board of Investment implemented Governmental Accounting Standards Board (GASB) Statement No. 28, "Accounting and Financial Reporting for Securities Lending Transactions," during the year ended June 30, 1997. This statement requires the collateral for loaned securities and their related liabilities to be reported in certain circumstances as discussed in Note 4 to the financial statements.

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1ST FLOOR SOUTH, CENTENNIAL BUILDING • 658 CEDAR STREET • ST. PAUL, MN 55155

State Board of Investment and Howard J. Bicker, Executive Director Page 2

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 109 to 136 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.

In accordance with *Government Auditing Standards*, we will issue a report in January 1998 on our consideration of the State Board of Investment's internal control structure and its compliance with laws and regulations.

James R. Nobles

James R. Nobles Legislative Auditor

December 8, 1997

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Claudia J. Gudvangen, CPA Deputy Legislative Auditor

## STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF ASSETS AND LIABILITIES YEAR ENDED JUNE 30, 1997 AMOUNTS IN (000)'S

	SUPPLEMENTAL INVESTMENT FUND TOTAL(5)		POST RETIREMENT INVESTMENT FUND (6)		
ASSETS:					
Investments (at market value) (3)					
Common Stock	\$	671,842	\$	9,745,152	
Alternative Equities		0		0	
Fixed Income Securities		233,979		4,183,161	
Short Term Securities		82,025		300,306	
Short Term Securities-Lending Collateral(4b)		83,549	**************************************	1,815,046	
Total Investments (4a)	\$	1,071,395		16,043,665	
Cash		0		0	
Security Sales Receivable		0		0	
Accounts Receivable-Fee Refunds		0		0	
Accounts Receivable-Mortality		0		42,664	
Accounts Receivable-Participants		0		32,039	
Accrued Interest		1,830		0	
Accrued Dividends		0		0	
Accrued Short Term Gain		372		1,183	
Reserve Adjustment		0		36,099	
TOTAL ASSETS	\$	1,073,597	\$	16,155,650	
LIABILITIES:					
Management Fees Payable		179		5,341	
Security Purchases Payable		0		0	
Accounts Payable-Participants		0		0	
Accounts Payable-Mortality		0		7,508	
Reserve Adjustment		0		4,298	
Securities-Lending Collateral		83,549		1,815,046	
TOTAL LIABILITIES	\$	83,728	\$	1,832,193	
NET ASSETS AT JUNE 30, 1997	\$	989,869	\$	14,323,457	

# STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1997 AMOUNTS IN (000)'S

	INV	PLEMENTAL VESTMENT ND TOTAL	POST RETIREMENT INVESTMENT FUND	
FROM INVESTMENT ACTIVITY:	·			
Net Investment Income	\$	54,357	\$	1,172,295
Realized Gains (Losses)		35,056		735,850
Unrealized Gains (Losses)		84,643		526,728
TOTAL INCOME	\$	174,056	\$	2,434,873
Less Distribution To				
Participant Accounts		(174,059)		(1,342,251)
<b>Undistributed Dedicated Income</b>		0		(565,894)
Net Change In Undistributed Income	(\$	3)	\$	526,728
FROM PARTICIPANT TRANSACTIONS: Additions To Participant Accounts Participant Contributions Income Distribution		57,293 174,059		974,012 1,342,251
Income To Be Distributed		0		565,895
Total Additions	\$	231,352	\$	2,882,158
Deductions From Participant Accounts	+		-	_,,
Withdrawals		40,861		1,001,621
Total Deductions	\$	40,861	\$	1,001,621
Net Change In Participation	\$	190,491	\$	1,880,537
TOTAL CHANGE IN ASSETS	\$	190,488	\$	2,407,265
NET ASSETS:				
Beginning Of Period		799,381		11,916,193
End Of Period	\$	989,869	\$	14,323,458

## STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1997 AMOUNTS IN (000)'S

	SUPPLEMENTAL INVESTMENT FUND TOTAL		POST RETIREMENT INVESTMENT FUND	
<b>INVESTMENT INCOME:</b>				
Interest	\$	13,372	\$	312,311
Dividends		36,809		862,462
Short Term Gains		4,557		12,532
Security Lending Gross Earnings(4c)		4,664		94,398
Less: Borrower Rebates		(4,283)		(86,624)
Less: Fees Paid to Agents		(115)		(2,463)
Security Lending Net Earnings		265		5,310
Income Before Expenses	\$	55,003	\$	1,192,615
Management Fees		647		20,320
NET INCOME	\$	54,356	\$	1,172,295
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS Realized:				
<b>Proceeds From Sales</b>	\$	245,839	\$	10,941,721
<b>Cost Of Securities Sold</b>		210,784		10,205,871
Net Realized Gain (Loss) Unrealized:	\$	35,055	\$	735,850
Beginning Of Period		42,308		698,851
End Of Period		126,951		1,225,579
Increase (Decrease) In				
<b>Unrealized Appreciation</b>	\$	84,643	\$	526,728
NET REALIZED AND UNREALIZED				
GAIN (LOSS) ON INVESTMENTS	\$	119,698	\$	1,262,578

#### NOTES TO THE FINANCIAL STATEMENTS JUNE 30, 1997

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Financial Reporting Entity and Basis of <u>Presentation</u>: 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.

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

<u>Risk Categories:</u> At June 30, 1997, 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. In addition, all security lending transactions are collaterized by at least 100% of the value of loaned securities. 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.

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

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

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

<u>Amortization of Fixed Income Securities:</u> Premiums and discounts on fixed income purchases are amortized over the remaining life of the security using the "Effective Interest Method".

Loaning Securities: State Statutes do not prohibit the SBI from participating in security lending. as such, domestic and international corporate securities as well as 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

Asset listings summarizing the securities held by these funds can be found starting on page 137 of this report. A complete listing is available by contacting the State Board's office. Fixed income and equity securities are presented at market value.

#### 3. COST OF INVESTMENTS

At June 30, 1997, the cost of investments for the Investment Trust Funds was:

Supplemental Investment Fund	\$ 944,443,081
Post Retirement Fund	\$ 14,818,086,978

### NOTES TO THE FINANCIAL STATEMENTS JUNE 30, 1997

#### 4. LOANED SECURITIES

4(a) The market value of loaned securities outstanding at June 30, 1997 was:

Supplemental Investment Fund\$ 93,053,620Post Retirement Fund\$ 1,859,029,853

4(b) In accordance with GASB\_28, Accounting and Financial Reporting for Security Lending. Transactions, the amount of cash collateral is concurrently an asset and a liability as at balance sheet date.

Non-cash collateral is considered an asset and a liability only if the lender has the right to sell collateral, absent of a borrower default. There is no such right in our case.

4(c) In accordance with GASB\_28, Accounting and Financial Reporting for Security Lending Transactions, Gross lending income, borrower rebate and agent fees must be reported on the face of the Statement of Operations.

#### 5. SUPPLEMENTAL INVESTMENT FUND

The Supplemental Investment Fund serves as an investment vehicle for the various state and locally administered pension plans. During Fiscal Year 1997 the fund included seven separate accounts with different investment objectives. Financial information on the individual accounts is shown on pages <u>112</u> to <u>125</u> 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 Investment Fund (POST) 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. Assets of the POST Fund are held in custody at State Street Bank in Boston. Participation in the POST Fund is equal to the actuarially determined required reserves for retirement benefits as of June 30, 1997. 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.

Laws of Minnesota 1992, Chapter 530 changed the formula used to calculate post retirement benefit increases. The new formula contains both an inflation adjustment and an investment component and became effective for benefit increases granted January 1, 1994.

Pursuant to *Minnesota Statutes* Section 11A.18, Subdivision 9, the inflation increase is based on the change during the Fiscal Year in the *Consumer Price Index for urban wage earners and clerical workers all items index published by the Bureau of Labor Statistics of the United States Department of Labor.* In addition to the inflation based increase, a portion of the June 30, 1997 net market value in excess of Required Reserves is available for distribution as an investment based benefit increase to pension fund participants in January 1998.

The benefit increase is stated as a percentage of eligible 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, 1997 are eligible to receive the January 1, 1998 benefit increase.

Inflation Based Benefit Increase	2.1000%
Investment Based Benefit Increase	<u>7.9876%</u>
<b>Total Benefit Increase</b>	10.0876%

#### 7. POOLED INVESTMENT ACCOUNTS

The State Board of Investment manages ten 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 <u>126</u> to <u>133</u> of this report.

# STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF PARTICIPATION YEAR ENDED JUNE 30, 1997 AMOUNTS IN (000)'S

,	IN	PPLEMENTAL IVESTMENT UND TOTAL	POST RETIREMENT INVESTMENT FUND		
Teacher's Retirement Fund	\$	0	\$	4,808,918,000	
Public Employees Retirement Fund		0		3,439,503,000	
State Employees Retirement Fund		0		1,583,803,000	
Public Employees Police & Fire Fund		0		466,176,000	
Public Employees Consolidation Fund		0		467,784,000	
Highway Patrolmen's Retirement Fund		0		152,027,000	
Legislators & Survivors Retirement Fund		0		21,208,000	
<b>Correctional Employees Retirement Fund</b>		0		63,680,000	
Judges Retirement Fund		0		58,072,000	
Income Share Account		470,107,948		0	
Growth Share Account		205,775,533		0	
Money Market Account		52,029,122		0	
Common Stock Index Account		142,982,371		0	
International Stock Account		21,431,502		0	
Bond Market Account		26,675,794		0	
Fixed Interest Account		70,891,719		0	
TOTAL PARTICIPATION	\$	989,893,989	\$	11,061,171,000	

## Adjustments

Unrealized Appreciation		
(Depreciation) of Investments	0	1,225,578,548
Undistributed Earnings	(24,352)	2,036,708,252
NET ASSETS	\$ 989,869,637	\$ 14,323,457,800

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## STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL INVESTMENT FUND SCHEDULE OF ASSETS AND LIABILITIES JUNE 30, 1997 AMOUNT IN ('000)'S

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
ASSETS:			
Investments (at market value) (2)			
Common Stock	\$ 301,526	\$ 205,882	\$0
Alternative Equitites	0	0	0
<b>Fixed Income Securities</b>	142,007	0	0
Short Term Securities	24,980	0	51,790
Securities-Lending Collateral(4b)	47,244	16,033	0
Total Investments (3)	\$ 515,757	\$ 221,915	\$ 51,790
Cash	0	0	0
Security Sales Receivable	1	0	0
Account Receivable- Fee Refunds	0	0	0
Account Receivable-Mortality	0	0	0
Account Receivable-Participants	0	0	0
Accrued Interest	1,504	0	0
Accrued Dividend	0	0	0
Accrued Short Term Gain	109	0	239
TOTAL ASSETS	\$ 517,371	\$ 221,915	\$ 52,029
LIABILITIES:			
Management Fees Payable	19	106	1
Security Purchases Payable	0	0	0
Accounts Payable-Participants	0	0	0
<b>Options Premiums Received</b>	0	0	0
Securities-Lending Collateral(4b)	47,244	16,033	0
TOTAL LIABILITIES	\$ 47,263	\$ 16,139	\$ 1
NET ASSETS AT JUNE 30, 1996	\$ 470,108	\$ 205,776	\$ 52,028

STOCK INDEX ACCOUNT	INTERNATIONAL SHARE <u>ACCOUNT</u>	BOND MARKET ACCOUNT	FIXED INTEREST ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
\$ 142,990	\$ 21,445	\$ 0	\$ 0	\$ 671,843
0	0	0	0	0
0	0	26,683	65,289	233,979
0	0	0	5,255	82,025
11,172	4,382	4,717	0	83,548
\$ 154,162	\$ 25,827	\$ 31,400	\$ 70,544	\$ 1,071,395
0	0	0	0	0
0	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	326	1,830
0	0	0	0	0
0	0	0	23	371
\$ 154,162	\$ 25,827	\$ 31,400	\$ 70,893	\$ 1,073,597
		,		
8	13	7	25	179
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
11,172	4,383	4,717	0	83,549
\$ 11,180	\$ 4,396	\$ 4,724	\$ 25	\$ 83,728
\$ 142,982	\$ 21,431	\$ 26,676	\$ 70,868	\$ 989,869

## STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL INVESTMENT FUND COMBINING STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1997

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
FROM INVESTMENT ACTIVITY:			
Net Investment Income	\$ 16,212	\$ 25,412	\$ 2,775
Realized Gains (Losses)	2,095	31,908	0
Unrealized Gains (Losses)	64,829	-10,636	0
TOTAL INCOME	83,136	46,684	2,775
Less Distributions to participants Accounts	(\$ 83,136)	(\$ 46,684)	(\$ 2,775)
Undistributed Dedicated Income	0	0	Û Û
Net Change In Undistributed Income	\$ 0	\$ 0	\$ 0
FROM PARTICIPANT TRANSACTIONS: Additions To Participant Accounts Participant Contributions Income Distributions Income To Be Distributed Total Additions Deductions From Participant Accounts Withdrawals Total Deductions Net change In Participation TOTAL CHANGE IN ASSETS	7,75883,136090,8949,4149,414 $9,4149,414$81,480$81,480$	3,997 46,684 0 50,681 1,666 1,666 \$ 49,015 \$ 49,015	3,1722,77505,9474,194 $4,1944,19451,7531,753$
NET ASSETS: Beginning Of Period End Of Period	\$ 388,628 \$ 470,108	\$ 156,760 \$ 205,775	\$ 50,275 \$ 52,028

I	TOCK NDEX COUNT	S	NATIONAL HARE COUNT	M	BOND ARKET COUNT	INT	TXED TEREST COUNT	INVI	LEMENTAL ESTMENT D TOTAL
\$	3,079 143 28,540 31,762	\$	975 1,044 1,182 3,201	\$	2,012 -134 <u>376</u> 2,254	\$	3,892 0 352 4,244	\$	54,357 35,056 84,643 174,056
(\$	31,762) 0 0	(\$	3,201) 0 0	(\$	2,254) 0 0	(\$ 	4,244) 0 0	(\$	174,056) 0 0
	16,467		4,694		1,826		19,378		57,292
	31,763 0 48,230		3,201 0 7,895		2,254 0 4,080		4,244 0 23,622		174,057 0 231,349
	1,125 1,125 47,105		215 215 7,680		1,869 1,869 2,211		22,378 22,378 1,244	\$	40,861 40,861 190,488
\$	47,105	<u>\$</u>	7,680	<u> </u>	2,211	\$	1,244	\$	190,488
\$	95,877 142,982	\$ \$	13,751 21,431	\$	24,465 26,676		69,625 70,869	\$ 	799,381 989,869

## STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL INVESTMENT FUND COMBINING STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1997 AMOUNT IN (\$ '000)'S

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
<b>INVESTMENT INCOME:</b>			
Interest	\$ 7,528	\$ 0	\$0
Dividends	7,073	25,632	0
Short Term Gains	1,527	121	2,778
Security Lending Gross Earnings(4c)	2,986	655	0
Less: Borrower Rebates	(\$ 2,766)	(\$ 595)	0
Less: Fees Paid to Agents	(\$ 66)	(\$ 18)	0
Security Lending Net Earnings	154	42	0
Income Before Expenses	16,282	25,795	2,778
Management Fees	\$ 70	\$ 383	\$ 3
NET INCOME	\$ 16,212	\$ 25,412	\$ 2,775
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS Realized:			
Proceeds From Sales	\$ 44,600	\$ 153,175	\$ 0
<b>Cost Of Securities Sold</b>	42,505	121,267	0
Net Realized Gain (Loss)	2,095	31,908	0
Unrealized:			<b>O</b> (1, 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
Beginning Of Period	\$ 6,690	\$ 31,468	\$ 0
End Of Period	\$ 71,519	\$ 20,832	\$ 0
Increase (decrease) In	Chine dalloui și a șe șe finite de la Chine de la Angrege	and a second	
Unrealized Appreaciation	64,829	(\$ 10,636)	0
NET REALIZED AND UNREALIZED			
GAIN (LOSS) ON INVESTMENTS	\$ 66,924	\$ 21,272	\$ 0

I	FOCK NDEX COUNT	S	NATIONAL HARE COUNT	M	BOND ARKET COUNT	INT	TXED TEREST COUNT	INVI	LEMENTAL ESTMENT D TOTAL
\$ (\$	0 3,042 21 546 485)	\$ (\$	0 1,004 1 177 154)	\$ (\$	2,027 0 2 299 283)	\$	3,807 0 176 0 0	\$ (\$	13,362 36,751 4,626 4,663 4,283)
(\$	$     18)     43     \overline{3,106} $	(\$	8) <u>15</u> 1,020	(\$	5) <u>11</u> <u>2,040</u>		0 0 3,983	(\$	115) 265 55,004
\$ \$	27 3,079	\$ \$	45 975	<u>\$</u>	2,040 28 2,012	\$ \$	91 3,892	\$ \$	647 54,357
\$	1,194 1,051 143	\$	13,917 12,873 1,044	\$	30,732 30,866 134)	\$	2,220 2,220 0	\$	245,838 210,782 35,056
\$ 	2,861 31,401	\$ \$	1,037 2,219	(\$	199) 177	\$	450 802	\$ \$	42,307 126,950
	28,540		1,182		376		352		84,643
\$	28,683	\$	2,226	\$	242	\$	352	\$	119,699

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
PARTICIPATION			
Adrian Fire	66	10	0
Alborn Fire	18	0	0
Almelund Fire	18	28	0
Amboy Fire	0	0	0
Askov Fire	22	0	0
Audubon Fire	77	0	0
Austin Fire	1,359	0	0
Austin Part-time Fire	31	18	0
Bagley Fire	17	0	74
Balsam Fire	73	51	0
Belle Plaine Fire	0	32	0
Bemidji Fire	181	0	141
Benson Fire	25	27	0
Bigfork Fire	6	14	0
Biwabik Township Fire	9	0	0
<b>Bloomington Fire</b>	16,230	0	0
Bricelyn Fire	31	0	0
Brooten Fire	0	0	0
Buffalo Lake Fire	51	63	0
Canby Fire	56	63	13
Carlton Fire	0	18	0
Center City Fire	46	7	0
Chaska Fire	389	0	0
Cherry Fire	29	0	25
Chisago City Fire	238	0	0
Chokio Fire	71	0	0
Clarkfield Fire	76	44	0
Clear Lake Fire	73	78	34
Crane Lake Fire	14	10	5
Dawson Fire	144	102	0
Deerwood Fire	63	0	0
Dover Fire	25	0	23
Edgerton Fire	61	0	0

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STOCK INDEX ACCOUNT	INTERNATIONAL SHARE _ACCOUNT	BOND MARKET ACCOUNT	FIXED INTEREST ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
0	6	0	0	82
2	0	0	0	20
0	0	0	0	46
26	0	22	0	48
0	0	0	0	22
0	0	0	0	77
0	0	0	0	1,359
0	0	0	0	49
0	0	41	0	132
0	0	0	0	124
0	0	0	0	32
62	63	143	0	590
28	0	21	0	101
14	8	22	0	64
0	0	0	0	9
1,165	0	0	0	17,395
0	0	0	0	31
79	0	0	0	79
0	0	0	0	114
0	0	0	0	132
18	16	0	0	52
0	5	0	0	58
0	0	0	0	389
0	0	0	0	54
0	0	94	0	332
0	0	0	0	71
7	0	0	0	127
0	0	0	0	185
0	0	0	0	29
0	0	0	0	246
0	0	0	0	63
9	. 0	23	0	80
24	0	0	0	85

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
Edina Fire	1,062	0	0
Elbow Lake Fire	115	14	0
Elk River Fire	0	8	0
Emmons Fire	24	21	0
Excelsior Fire	784	333	0
Farmington Cataract	47	0	0
Fayal Fire	. 6	4	1
Forest Lake Fire	352	0	0
Frost Fire	4	5	0
Golden Valley Fire	1,190	0	0
Gonvick Fire	17	18	0
Good Thunder Fire	85	30	0
Grand Marais Fire	27	27	40
Grand Meadow Fire	22	22	0
Greenwood Fire	8	41	0
Grey Eagle Fire	39	0	8
Hackensack Fire	22	0	0
Hamel Fire	136	121	16
Hawley Fire	44	0	0
Hayward Fire	25	37	0
Hector Fire	238	0	0
Henning Fire	27	15	0
Hovland Fire	0	0	0
Industrial Fire	20	0	0
Jordan Fire	37	31	0
Kabetogama Fire	0	40	0
Kandiyohi Fire	9	10	0
Kimball Fire	22	22	0
Lafayette Fire	74	15	0
Lake City Fire	279	0	0
Lake Crystal Fire	65	67	0
Lakeville Fire	0	0	0
Leaf Valley Fire	8	9	0
Lewiston Fire	53	32	0
Linwood Fire	299	0	0
Littlefork Fire	25	0	0

STOCK INDEX ACCOUNT	INTERNATIONAL SHARE ACCOUNT	BOND MARKET ACCOUNT	FIXED INTEREST ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
. 0	0	0	0	1,062
0	0	0	0	129
8	0	0	0	16
21	6	0	0	72
0	138	47	0	1,302
50	0	0	0	97
3	0	1	0	15
146	0	0	0	498
5	0	0	0	14
1,267	0	92	0	2,549
0	0	0	0	35
31	7	0	0	153
0	0	69	0	163
22	0	0	0	66
0	0	7	0	56
0	0	0	0	47
0	0	0	0	22
0	14	0	0	287
18	0	0	0	62
54	0	0	0	116
0	0	0	0	238
29	19	17	0	107
7	0	0	0	7
20	0	0	0	40
0	0	14	0	82
0	0	0	0	40
11	0	8	0	38
0	0	0	0	. 44
18	0	6	0	113
0	0	0	0	279
68	0	0	0	200
139	0	0	0	139
0	0	0	0	17
0	0	0	0	85
0	0	0	0	299
18	0	0	0	43

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
Lowry Fire	0	0	0
Madelia Fire	0	13	0
Mahtomedi Fire	197	0	0
Mapleton Fire	35	13	0
Mapleview Fire	26	38	0
Marine St Croix Fire	47	71	0
Mayer Fire	39	0	0
Maynard Fire	44	0	0
McDavitt Fire	17	10	0
McIntosh Fire	11	13	0
Medicine Lake Fire	264	0	0
Menahga Fire	34	0	0
Milan Fire	8	8	0
Minneota Fire	13	0	0
Minnetonka Fire	2068	0	0
Morris Fire	26	36	0
Morristown Fire	118	0	0
New Brighton Fire	0	633	0
New Ulm Fire	44	0	0
New York Mills	55	0	0
Nodine Fire	0	0	0
North Branch Fire	13	15	0
North Mankato Fire	42	46	0
Northfield Fire	624	0	0
Norwood Young America Fire	21	14	0
Osakis Fire	0	44	0
Ottertail Fire	79	0	0
Owatonna Fire	0	58	0
Pine Island Fire	68	36	0
Randall Fire	18	104	0
Randolph Fire	66	0	0
<b>Redwood Falls Fire</b>	37	0	0
Renville Fire	18	21	0
Rice Lake Fire	60	92	0
Roseville Fire	247	328	0
Rush City Fire	21	24	0

STOCK INDEX ACCOUNT	INTERNATIONAL SHARE ACCOUNT	BOND MARKET ACCOUNT	FIXED INTEREST ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
26	0	0	0	26
13	0	0	0	26
0	0	0	0	197
0	0	0	0	48
0	3	20	0	87
0	0	21	0	139
65	0	0	0	104
0	0	0	0	44
0	6	13	0	46
13	0	0	0	37
49	0	0	0	313
0	0	31	0	65
7	0	0	0	23
0	0	9	0	22
0	0	0	0	2,068
37	20	0	0	119
220	0	0	0	338
0	258	1,048	0	1,939
183	0	0	0	227
0	0	0	0	55
16	8	13	0	37
15	7	0	0	50
93	0	0	0	181
0	0	0	0	624
0	0	0	0	35
44	11	6	0	105
0	0	0	0	79
0	0	0	0	58
0	0	0	0	104
17	24	0	0	163
77	0	0	0	143
0	0	18	0	55
0	0	14	0	53
92	0	59	0	303
210	0	105	0	890
60	0	0	0	105

	INCOME SHARE <sup>®</sup> ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
Ruthton Fire	0	0	0
Sandstone Fire	88	0	0
Scandia Valley Fire	138	0	0
Schroeder Fire	0	24	0
Shakopee Fire	0	225	0
Sherburn Fire	85	0	0
Silver Bay Fire	22	25	0
Stewart Fire	27	0	0
St. James Fire	0	23	0
St. Michael Fire	0	11	0
Stillwater Fire	108	111	0
Sturgeon Lake Fire	0	11	0
Tofte Fire	3	0	0
Truman Fire	22	22	0
Vergas Fire	62	0	0
Vermillion Lake Fire	44	0	0
Waconia Fire	22	23	0
Willow River Fire	0	7	0
Winnebago Fire	17	0	0
Woodbury Fire	856	576	42
Wykoff Fire	56	0	0
Zumbro Falls Fire	70	0	0
Deferred Comp	132,184	83,919	30,529
Unclassified	95,817	36,812	11,038
PERA-DCP	3,725	1,913	579
Hennepin County	51,727	24,793	4,934
MnSCU	156,011	54,176	4,526
TOTAL PARTICIPATION	470,108	205,775	52,028
Adjustments			
Unrealized Appreciation			
(Depreciation) of Investments	0	0	0
Undistributed Earnings	0	0	-1
NET ASSETS	470,108	205,775	52,028

STOCK INDEX ACCOUNT	INTERNATIONAL SHARE ACCOUNT	BOND MARKET ACCOUNT	FIXED INTEREST ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
23	0	0	0	23
0	0	0	0	88
0	0	0	0	138
0	0	0	0	24
227	71	0	0	523
0	0	0	0	85
0	9	0	0	56
0	0	0	0	27
0	0	0	0	23
11	11	0	0	33
0	0	0	0	219
0	0	5	0	16
4	0	0	0	7
23	0	0	0	67
0	0	0	0	62
0	0	0	0	44
0	0	0	0	45
9	0	0	0	16
0	0	0	0	17
394	165	147	0	2,180
0	0	0	0	56
0	0	0	0	70
95,856	12,089	15,170	56,117	425,864
23,233	5,700	4,970	9,138	186,708
1,442	114	479	878	9,130
9,409	1,233	1,300	0	93,396
7,745	1,420	2,621	4,757	231,256
142982	21,431	26,676	70,890	989,890
				0
				0
				0
0	0	0	0	0
0	0	0	-24	-25
142,982	21,431	26,676	70,869	989,869

# STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF ASSETS AND LIABILITIES JUNE 30, 1997 AMOUNTS IN (000)'S

	REAL ESTATE ACCOUNT		RESOURCE ACCOUNT	
ASSETS:	<u></u>	2004-03310-0710-0818-082-080-0979-94-061831858009820083		
Investments (at market value) (2)				
Common Stock	\$	0	\$	0
Alternative Equities		535,652		144,708
Fixed Income Securities		0		0
Short Term Securities		21,390		7,223
Securities-Lending Collateral(4b)		0		0
Total Investments (3)	\$	557,042	\$	151,931
Cash		0		0
Security Sales Receivable		0		0
Accounts Receivable-Fee Refunds		0		0
Accounts Receivable-Mortality		0		0
Accounts Receivable-Participants		0		0
Accrued Interest		0		0
Accrued Dividends		0		0
Accrued Short Term Gain		12		4
TOTAL ASSETS	\$	557,054	\$	151,935
LIABILITIES:				
Management Fees Payable		0		0
Security Purchases Payable		0		0
Accounts Payable-Participants		0		0
<b>Options Premiums Received</b>		0		0
Securities-Lending Collateral(4b)				
TOTAL LIABILITIES	\$	0	\$	0
NET ASSETS AT JUNE 30, 1997	\$	557,054	\$	151,935

VENTURE CAPITAL ACCOUNT(4)			BOND		DOMESTIC EQUITY ACCOUNT		RNATIONAL QUITY CCOUNT
\$	0	\$	120,663	\$	15,978,920	\$	4,713,186
¥	773,236	Ŷ	0	Ψ	0	Ψ	0
	0		7,160,975		2,957		1,920
	2,057		800,735		218,235		124,822
	0		1,395,641		1,302,081		1,003,018
\$	775,293	\$	9,478,014	\$	17,502,193	\$	5,842,946
	0		40,516		834		34,127
	4,761		185,451		86,964		6,854
	0		0		815		0
	0		0		0		0
	0		0		0		0
	0		89,881		57		33
	0		0		16,861		11,531
n	14		4,447		867		30,781
\$	780,068	\$	9,798,309	\$	17,608,591	\$	5,926,272
	0		1,936		5,844		2,603
	556		641,271		92,109		15,608
	0		0		0		0
	0		0		0		0
			1,395,641		1,302,081		1,003,018
\$	556	\$	2,038,848	\$	1,400,034	\$	1,021,229
\$	779,512	\$	7,759,461	\$	16,208,557	\$	4,905,043

# STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1997 AMOUNTS IN (000)'S

FROM INVESTMENT ACTIVITY:       8       28,008       \$       6,872         Realized Gains (Losses)       (106)       222         Unrealized Gains (Losses)       9,714       29,192         TOTAL INCOME       \$       37,616       \$       36,286         Less Distribution To       9       9,714       29,192       36,286         Less Distribution To       \$       37,616       \$       36,286         Less Distributed Dedicated Income       2,918       (452)       (452)         Net Change In Undistributed Income       \$       9,714       \$       29,192         FROM PARTICIPANT TRANSACTIONS:       Additional To Participant Accounts       121,801       22,105         Income Distribution       30,820       6,642       452         Total Additions       \$       149,703       \$       29,199         Deductions From Participant Accounts       \$       112,644       \$       14,548         Withdrawals       112,644       \$       14,548       \$       14,548         Net Change In Participation       \$       37,059       \$       14,651       \$       43,843         Net Change In Participation       \$       37,059       \$       14,651       \$ </th <th></th> <th>REAL CSTATE CCOUNT</th> <th></th> <th>SOURCE</th>		REAL CSTATE CCOUNT		SOURCE
Realized Gains (Losses)       (106)       222         Unrealized Gains (Losses)       9,714       29,192         TOTAL INCOME       \$ 37,616       \$ 36,286         Less Distribution To       \$ 37,616       \$ 36,286         Participant Accounts       (30,820)       (6,642)         Undistributed Dedicated Income       2,918       (452)         Net Change In Undistributed Income       \$ 9,714       \$ 29,192         FROM PARTICIPANT TRANSACTIONS:       Additional To Participant Accounts       121,801       22,105         Income Distribution       30,820       6,642       452         Total Additions       \$ 149,703       \$ 29,199         Deductions From Participant Accounts       \$ 149,703       \$ 29,199         Deductions       \$ 112,644       \$ 14,548         Net Change In Participation       \$ 37,059       \$ 14,651         TOTAL CHANGE IN ASSETS       \$ 46,773       \$ 43,843	FROM INVESTMENT ACTIVITY:			
Unrealized Gains (Losses) $9,714$ $29,192$ TOTAL INCOME\$ $37,616$ \$ $36,286$ Less Distribution To $9,714$ \$ $36,286$ Less Distribution To $9,714$ \$ $36,286$ Undistributed Dedicated Income $2,918$ $(452)$ Net Change In Undistributed Income\$ $9,714$ \$Participant Contributions $121,801$ $22,105$ Income Distribution $30,820$ $6,642$ Income To Be Distributed $(2,918)$ $452$ Total Additions\$ $149,703$ \$Deductions From Participant Accounts\$ $112,644$ $14,548$ Net Change In Participant Accounts\$ $112,644$ $14,548$ Net Change In Participant Accounts\$ $112,644$ $$14,548$ Net Change In Participation\$ $37,059$ \$ $14,651$ TOTAL CHANGE IN ASSETS\$ $46,773$ \$ $43,843$ NET ASSETS:Beginning Of Period $510,281$ $108,092$	Net Investment Income	\$ 28,008	\$	6,872
TOTAL INCOME\$37,616\$36,286Less Distribution To Participant Accounts(30,820)(6,642)Undistributed Dedicated Income2,918(452)Net Change In Undistributed Income\$9,714\$Zey,192FROM PARTICIPANT TRANSACTIONS: Additional To Participant Accounts121,80122,105Participant Contributions121,80122,105Income Distribution30,8206,642Income To Be Distributed(2,918)452Total Additions\$149,703\$Deductions From Participant Accounts\$112,644\$Withdrawals112,644\$14,548Net Change In Participation\$37,059\$14,651TOTAL CHANGE IN ASSETS\$46,773\$43,843NET ASSETS: Beginning Of Period510,281108,092	Realized Gains (Losses)	(106)		222
Less Distribution To Participant Accounts(30,820)(6,642)Undistributed Dedicated Income2,918(452)Net Change In Undistributed Income\$ 9,714\$ 29,192FROM PARTICIPANT TRANSACTIONS: Additional To Participant Accounts121,80122,105Income Distribution30,8206,642Income Distribution\$ 149,703\$ 29,199Deductions From Participant Accounts\$ 149,703\$ 29,199Deductions From Participant Accounts\$ 112,64414,548Net Change In Participation\$ 37,059\$ 14,651TOTAL CHANGE IN ASSETS\$ 46,773\$ 43,843NET ASSETS: Beginning Of Period510,281108,092	Unrealized Gains (Losses)	 9,714	*12*2********************	29,192
Participant Accounts(30,820)(6,642)Undistributed Dedicated Income2,918(452)Net Change In Undistributed Income\$ 9,714\$ 29,192FROM PARTICIPANT TRANSACTIONS: Additional To Participant Accounts121,80122,105Income Distribution30,8206,642Income To Be Distributed(2,918)452Total Additions\$ 149,703\$ 29,199Deductions From Participant Accounts\$ 112,64414,548Withdrawals112,644\$ 14,548Net Change In Participation\$ 37,059\$ 14,651TOTAL CHANGE IN ASSETS\$ 46,773\$ 43,843NET ASSETS: Beginning Of Period510,281108,092	TOTAL INCOME	\$ 37,616	\$	36,286
Undistributed Dedicated Income2,918(452)Net Change In Undistributed Income\$ 9,714\$ 29,192FROM PARTICIPANT TRANSACTIONS: Additional To Participant Accounts121,80122,105Participant Contributions121,80122,105Income Distribution30,8206,642Income To Be Distributed(2,918)452Total Additions\$ 149,703\$ 29,199Deductions From Participant Accounts\$ 112,644\$ 14,548Withdrawals\$ 112,644\$ 14,548Total Deductions\$ 37,059\$ 14,651TOTAL CHANGE IN ASSETS\$ 46,773\$ 43,843NET ASSETS: Beginning Of Period\$ 510,281108,092	Less Distribution To			
Net Change In Undistributed Income\$9,714\$29,192FROM PARTICIPANT TRANSACTIONS: Additional To Participant Accounts Participant ContributionsParticipant Contributions121,80122,105Income Distribution30,8206,642Income To Be Distributed(2,918)452Total Additions\$149,703\$Deductions From Participant Accounts\$112,64414,548Withdrawals112,644\$14,548Total Deductions\$37,059\$14,651TOTAL CHANGE IN ASSETS\$46,773\$43,843NET ASSETS: Beginning Of Period510,281108,092	Participant Accounts	(30,820)		(6,642)
FROM PARTICIPANT TRANSACTIONS: Additional To Participant Accounts Participant ContributionParticipant Contributions121,80122,105Income Distribution30,8206,642Income To Be Distributed(2,918)452Total Additions\$149,703\$Deductions From Participant Accounts112,64414,548Withdrawals112,644\$14,548Net Change In Participation\$37,059\$14,651TOTAL CHANGE IN ASSETS\$46,773\$43,843NET ASSETS: Beginning Of Period510,281108,092	<b>Undistributed Dedicated Income</b>	2,918		(452)
Additional To Participant AccountsParticipant Contributions121,80122,105Income Distribution30,8206,642Income To Be Distributed(2,918)452Total Additions\$149,703\$Deductions From Participant Accounts112,64414,548Withdrawals112,644\$14,548Total Deductions\$37,059\$Net Change In Participation\$37,059\$14,651TOTAL CHANGE IN ASSETS\$46,773\$43,843NET ASSETS:Beginning Of Period510,281108,092	Net Change In Undistributed Income	\$ 9,714	\$	29,192
Participant Contributions       121,801       22,105         Income Distribution       30,820       6,642         Income To Be Distributed       (2,918)       452         Total Additions       \$ 149,703       \$ 29,199         Deductions From Participant Accounts       112,644       14,548         Withdrawals       112,644       \$ 14,548         Total Deductions       \$ 112,644       \$ 14,548         Net Change In Participation       \$ 37,059       \$ 14,651         TOTAL CHANGE IN ASSETS       \$ 46,773       \$ 43,843         NET ASSETS:       510,281       108,092	FROM PARTICIPANT TRANSACTIONS:			
Income Distribution       30,820       6,642         Income To Be Distributed       (2,918)       452         Total Additions       \$ 149,703       \$ 29,199         Deductions From Participant Accounts       112,644       14,548         Withdrawals       112,644       \$ 1458         Total Deductions       \$ 112,644       \$ 14,548         Net Change In Participation       \$ 37,059       \$ 14,651         TOTAL CHANGE IN ASSETS       \$ 46,773       \$ 43,843         NET ASSETS:       510,281       108,092	<b>Additional To Participant Accounts</b>			
Income To Be Distributed       (2,918)       452         Total Additions       \$ 149,703       \$ 29,199         Deductions From Participant Accounts       112,644       14,548         Withdrawals       112,644       \$ 142,548         Total Deductions       \$ 112,644       \$ 14,548         Net Change In Participation       \$ 37,059       \$ 14,651         TOTAL CHANGE IN ASSETS       \$ 46,773       \$ 43,843         NET ASSETS:       510,281       108,092	<b>Participant Contributions</b>	121,801		22,105
Total Additions       \$       149,703       \$       29,199         Deductions From Participant Accounts       112,644       14,548         Withdrawals       112,644       \$       14,548         Total Deductions       \$       112,644       \$       14,548         Net Change In Participation       \$       37,059       \$       14,651         TOTAL CHANGE IN ASSETS       \$       46,773       \$       43,843         NET ASSETS:       Beginning Of Period       510,281       108,092	<b>Income Distribution</b>	30,820		6,642
Deductions From Participant Accounts         Withdrawals       112,644       14,548         Total Deductions       \$ 112,644       \$ 14,548         Net Change In Participation       \$ 37,059       \$ 14,651         TOTAL CHANGE IN ASSETS       \$ 46,773       \$ 43,843         NET ASSETS:       Beginning Of Period       510,281       108,092	<b>Income To Be Distributed</b>	 (2,918)		452
Withdrawals       112,644       14,548         Total Deductions       \$ 112,644       \$ 14,548         Net Change In Participation       \$ 37,059       \$ 14,651         TOTAL CHANGE IN ASSETS       \$ 46,773       \$ 43,843         NET ASSETS:       Beginning Of Period       510,281       108,092	Total Additions	\$ 149,703	\$	29,199
Total Deductions       \$ 112,644       \$ 14,548         Net Change In Participation       \$ 37,059       \$ 14,651         TOTAL CHANGE IN ASSETS       \$ 46,773       \$ 43,843         NET ASSETS:       Beginning Of Period       510,281       108,092	<b>Deductions From Participant Accounts</b>			
Net Change In Participation         \$ 37,059         \$ 14,651           TOTAL CHANGE IN ASSETS         \$ 46,773         \$ 43,843           NET ASSETS:         Beginning Of Period         510,281         108,092	Withdrawals	 112,644		14,548
TOTAL CHANGE IN ASSETS       \$ 46,773       \$ 43,843         NET ASSETS:       510,281       108,092	<b>Total Deductions</b>	\$ 112,644	\$	14,548
NET ASSETS: Beginning Of Period 510,281 108,092	Net Change In Participation	\$ 37,059	\$	14,651
Beginning Of Period         510,281         108,092	TOTAL CHANGE IN ASSETS	\$ 46,773	\$	43,843
	NET ASSETS:			
<b>End Of Period</b> \$ 557,054 \$ 151,935	Beginning Of Period	 510,281		108,092
	End Of Period	\$ 557,054	\$	151,935

C	VENTURE CAPITAL ACCOUNT(4)		DOMESTIC BOND ACCOUNT		DOMESTIC EQUITY ACCOUNT		CRNATIONAL EQUITY CCOUNT
\$	17,542	\$	499,682	\$	244,399	\$	185,463
	155,129		74,165		1,341,862		73,599
	13,523		65,695		2,204,079		478,949
\$	186,194	\$	639,542	\$	3,790,340	\$	738,011
	(166,924)		(574,046)		(1,587,745)		(232,744)
	(5,747)		199		1,484		(26,318)
\$	13,523	\$	65,695	\$	2,204,079	\$	478,949
	191,495		482,608		249,261		871,955
	166,924		574,046		1,587,745		232,744
	5,747		(199)		(1,484)		26,318
\$	364,166	\$	1,056,455	\$	1,835,522	\$	1,131,017
	311,875		82,699		1,274,773		332,158
\$	311,875	\$	82,699	\$	1,274,773	\$	332,158
\$	52,291	\$	973,756	\$	560,749	\$	798,859
\$	65,814	\$	1,039,451	\$	2,764,828	\$	1,277,808
	713,698		6,720,010		13,443,729		3,627,235
\$	779,512	\$	7,759,461	\$	16,208,557	\$	4,905,043

# STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCCOUNTS SCHEDULE OF OPERATIONS YEAR ENDED JUNE 30, 1997 AMOUNTS IN (000)'S

	]	REAL		
	E	STATE	RES	SOURCE
	AC	COUNT	AC	COUNT
<b>INVESTMENT INCOME:</b>				
Interest	\$	0	\$	0
Dividends		27,884		6,842
Short Term Gains		124		30
Security Lending Gross Earnings(4c)		0		0
Less: Borrower Rebates		0		0
Less: Fees Paid to Agents		0		0
Security Lending Net Earnings	and and a second second second	0		0
Income Before Expenses	\$	28,008		6,872
Management Fees		0		0
NET INCOME	\$	28,008	\$	6,872
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS				
Realized:				
<b>Proceeds From Sales</b>	\$	88,284	\$	11,043
<b>Cost Of Securities Sold</b>		88,390		10,821
Net Realized Gain (Loss)	(\$	106)	\$	222
Unrealized:				
Beginning Of Period		3,007		4,747
End Of Period		12,721		33,939
Increase (Decrease)				
In Unrealized Appreciation	\$	9,714	\$	29,192
NET REALIZED AND UNREALIZED				
GAIN (LOSS) ON INVESTMENTS	\$	9,608	\$	29,414

	VENTURE CAPITAL ACCOUNT(4)		DOMESTICDOMESTICBONDEQUITYACCOUNTACCOUNT		BOND		EQUITY		RNATIONAL EQUITY CCOUNT
\$	0	\$	467,411	\$	454	\$	305		
	17,069		1,870		255,320		156,678		
	473		34,549		7,617		35,266		
	0		87,254		61,208		42,251		
	0		(82,715)		(55,248)		(36,643)		
	0		(1,364)		(1,787)		(1,960)		
	0		3,175		4,173		3,648		
	17,542		507,005		267,564		195,897		
	0		7,323		23,165		10,434		
\$	17,542	\$	499,682	\$	244,399	\$	185,463		
\$	308,313	\$	22,244,733	\$	8,362,095	\$	880,072		
	153,184	1771-00-07-7-10-00-00-00-00-00-00-00-00-00-00-00-00-	22,170,568		7,020,233		806,473		
\$ \$		\$\$		\$ \$	, .	\$ \$			
	153,184	1771-00-07-7-10-00-00-00-00-00-00-00-00-00-00-00-00-	22,170,568		7,020,233		806,473		
	153,184 155,129 172,593	1771-00-07-7-10-00-00-00-00-00-00-00-00-00-00-00-00-	22,170,568 74,165 (10,562)		7,020,233 1,341,862 2,766,546		806,473 73,599 560,491		
	<u>153,184</u> 155,129	1771-00-07-7-10-00-00-00-00-00-00-00-00-00-00-00-00-	22,170,568 74,165		7,020,233		806,473 73,599		
	153,184 155,129 172,593	1771-00-07-7-10-00-00-00-00-00-00-00-00-00-00-00-00-	22,170,568 74,165 (10,562)		7,020,233 1,341,862 2,766,546		806,473 73,599 560,491		

# STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF PARTICIPATION JUNE 30, 1997 AMOUNTS IN (000)'S

	REAL ESTATE ACCOUNT		RESOURCE ACCOUNT	
BASIC RETIREMENT FUNDS				
Teachers Retirement Fund	\$	239,862	\$	65,421
Public Employees Retirement Fund		117,670		32,095
State Employees Retirement Fund		112,897		30,792
Public Employees Police & Fire Fund		55,954		15,262
Highway Patrolmen's Retirement Fund		8,030		2,190
Judges Retirement Fund		666		182
Police & Fire Consolidation Fund		15,834		4,318
<b>Correctional Employees Retire. Fund</b>	C11102-011-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-011-0-00-0	6,141		1,675
TOTAL BASIC RETIREMENT FUNDS	\$	557,054	\$	151,935
Post Retirement Fund		0		0
Supplemental Income Share Account		0		0
Supplemental Growth Share Account		0		0
Supplemental Index Share Account		0		0
Supplemental Bond Market Account		0		0
Supplemental International Equity Account		0		0
TOTAL PARTICIPATION	\$	557,054	\$	151,935

C	VENTURE CAPITAL ACCOUNT(4)		DOMESTIC BOND ACCOUNT		DOMESTIC EQUITY ACCOUNT		RNATIONAL EQUITY CCOUNT
\$	335,645	\$	1,492,204	\$	3,469,091	\$	1,081,339
	164,668		763,658		1,764,356		552,500
	157,983		732,656		1,692,730		530,072
	78,301		363,126		838,968		262,719
	11,237		52,111		120,398		37,702
	932		4,322		9,986		3,127
	22,153		102,737		237,411		74,338
	8,593		39,853		92,075		28,833
\$	779,512	\$	3,550,667	\$	8,225,015	\$	2,570,630
	0		4,182,118		7,333,252		2,312,980
	0		0		301,514		0
	0		0		205,792		0
	0		0		142,984		0
	0		26,676		0		0
	0		0		0		21,433
\$	779,512	\$	7,759,461	\$	16,208,557	\$	4,905,043

### NOTES TO THE SUPPLEMENTAL FINANCIAL STATEMENTS JUNE 30, 1997

#### 1. PORTFOLIO LISTING:

Asset listings summarizing securities held by these funds can be found starting on page 137 of this report. Fixed income and equity securities are presented at market value.

#### 2. COST OF INVESTMENTS:

At June 30, 1997 the cost of investments for the Minnesota Pooled Investment Accounts and the individual accounts of the Minnesota Supplemental Investment Fund was:

#### MINNESOTA POOLED INVESTMENT ACCOUNTS

DOMESTIC ACCOUNTS	
Equity Account	\$ 12,531,567,729
Bond Account	\$ 9,422,881,636
Real Estate Account	\$ 544,321,000
Resource Account	\$ 117,992,000
Venture Capital Account	\$ 589,177,000
INTERNATIONAL ACCOUNTS	
Equity Account	\$ 4,803,505,791

### SUPPLEMENTAL INVESTMENT FUND

Income Share Account	\$ 444,238,310
Growth Share Account	\$ 201,082,636
International Share Account	\$ 23,607,130
Money Market Account	\$ 51,790,101
Stock Index Account	\$ 122,760,618
Bond Market Account	\$ 31,223,113
Fixed Interest Account	\$ 69,741,173

#### 3. LOANED SECURITIES:

The market value of loaned securities outstanding at June 30, 1997 for the Minnesota Pooled Investment Accounts included in the total investments figure was:

Equity Account (Domestic)	\$ 879,965,825
Equity Index Account (Domestic)	\$ 382,321,798
Bond Account (Domestic)	\$ 1,518,641,104
International Equity Account	\$ 1,006,330,077

# EXTERNAL STOCK AND BOND MANAGERS FEES

# **Total Payments for Fiscal Year 1997**

Active Domestic Stock Managers (1)	
Alliance Capital	\$ 2,579,248
American Express Advisory Service	840,836
Brinson Partners	1,203,128
Forstmann Leff Associates	1,334,434
Franklin Portfolio Associates	1,753,484
GeoCapital Corp.	1,074,511
Independence Investment Associates	1,244,591
Investment Advisors Inc.	756,842
Lincoln Capital	1,363,233
Oppenheimer Capital	1,390,081
Waddell & Reed *	-531,614
Weiss Peck & Greer	1,443,993
CIC Asset Management	253,132
Cohen, Davis & Marks	315,955
Compass Capital Management	239,717
Kennedy Capital Management *	333,089
New Amsterdam Partners	193,826
Valenzuela Capital	272,320
Wilke Thompson Capital	229,497
Winslow Capital	322,036
Zevenbergen Capital	399,165
Passive Domestic Stock Managers (2)	
BZW Barclays	725,818
Semi-Passive Domestic Equity Managers (2)	
Franklin Portfolio	1,446,280
J P Morgan	1,688,318
BZW Barclays	1,699,957
Active Domestic Bond Managers (2)	
American Express Advisory Service	368,216
BEA Associates	759,934
Investment Advisors	749,738
Miller Anderson	1,157,843
Standish Ayer Woods	936,375
Western Asset Mgmt.	1,216,696

# EXTERNAL STOCK AND BOND MANAGERS FEES

# **Total Payments for Fiscal Year 1997**

Semi-Passive Domestic Bond Managers (3)	
Blackrock Financial	\$ 781,707
Goldman Sachs	932,087
Lincoln Capital Management	469,202
International Stock Managers (2)	
Baring International *	325,161
Brinson Partners International	623,588
Genesis	1,585,105
Marathon	1,131,564
Montgomery	1,511,913
Record Treasury Ltd.	1,153,793
Rowe Price - Fleming	1,689,693
Scudder Stevens	917,159
State Street Global Advisors	459,596
Templeton *	233,706
City of London	802,482
Assigned Risk Plan	
G E Investment Management	411,328
Voyageur Asset Management	409,403
* Manager Terminated in Fiscal '97	
(1) Active stock managers are compensated on a performance-based fee formula. Four fee options are available and fees earned 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, international stock managers, active bond managers and two semi-passive bond managers are compensated based on a specified percentage of assets under management.	
(3) One semi-passive bond manager is compensated on a performance-based fee formula. Fees earned range from 5 to 10 basis points of assets under management, depending on the manager's performance relative to an established benchmark.	

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## ALLIANCE CAPITAL MGMT.

# **BRINSON PARTNERS**

Equities	<b>Market Value</b>	%	Equities	<b>Market Value</b>	%
BASIC INDUSTRIES	\$0.00	0.00 %	BASIC INDUSTRIES	\$19,294,237.50	3.52 %
CAPITAL GOODS	35,154,687.50	3.96	CAPITAL GOODS	30,366,900.00	5.55
CONSUMER BASICS	243,466,050.00	27.45	CONSUMER BASICS	113,884,709.36	20.80
CONSUMER DURABLES	0.00	0.00	CONSUMER DURABLES	17,145,470.62	3.13
CONSUMER NON-DUR.	67,372,512.50	7.60	CONSUMER NON-DUR.	30,814,912.50	5.63
CONSUMER SERVICES	76,664,981.25	8.64	CONSUMER SERVICES	1,478,868.75	0.27
ENERGY	0.00	0.00	ENERGY	23,573,084.25	4.31
FINANCE	165,340,859.37	18.64	FINANCE	102,099,299.80	18.65
GENERAL BUSINESS	58,806,617.87	6.63	GENERAL BUSINESS	45,563,918.37	8.32
MISCELLANEOUS	25,231,180.00	2.85	MISCELLANEOUS	2,771,937.50	0.51
SHELTER	0.00	0.00	SHELTER	10,846,652.99	1.98
TECHNOLOGY	196,057,743.75	22.11	TECHNOLOGY	77,473,441.18	14.15
TRANSPORTATION	0.00	0.00	TRANSPORTATION	33,964,525.00	6.20
UTILITIES	13,079,775.00	1.47	UTILITIES	18,160,758.87	3.32
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	
Total Equities	\$881,174,407.24	99.36	Total Equities	\$527,438,716.69	96.35
Cash Equivalents	5,676,160.66	0.64	Cash Equivalents	19,966,309.06	3.65
Grand Total	\$886,850,567.90	100.00 %	Grand Total	\$547,405,025.75	100.00 %

## AMERICAN EXPRESS, INC.

## CIC ASSET MGMT. INC.

Equities	Market Value	%	Equities	<b>Market Value</b>	%
BASIC INDUSTRIES	\$41,715,787.50	6.13 %	BASIC INDUSTRIES	\$8,283,484.37	14.11 %
CAPITAL GOODS	32,968,900.00	4.85	CAPITAL GOODS	7,032,500.00	11.98
CONSUMER BASICS	168,311,131.25	24.74	CONSUMER BASICS	5,988,662.50	10.20
CONSUMER DURABLES	33,789,037.50	4.97	CONSUMER DURABLES	1,198,562.50	2.04
CONSUMER NON-DUR.	33,569,681.25	4.93	CONSUMER NON-DUR.	1,499,625.00	2.55
CONSUMER SERVICES	19,757,187.50	2.90	CONSUMER SERVICES	1,173,671.87	2.00
ENERGY	0	0.00	ENERGY	6,039,006.25	10.29
FINANCE	84,442,750.00	12.41	FINANCE	10,493,865.62	17.88
GENERAL BUSINESS	20,447,700.00	3.01	GENERAL BUSINESS	1,132,950.00	1.93
MISCELLANEOUS	0.00	0.00	MISCELLANEOUS	1,161,100.00	1.98
SHELTER	0.00	0.00	SHELTER	0.00	0.00
TECHNOLOGY	122,559,825.00	18.01	TECHNOLOGY	6,672,865.62	11.37
TRANSPORTATION	0.00	0.00	TRANSPORTATION	1,238,400.00	2.11
UTILITIES	45,994,562.50	6.76	UTILITIES	6,347,628.12	10.81
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$603,556,562.50	88.71	Total Equities	\$58,262,321.85	99.26
Cash Equivalents	76,803,985.96	11.29	Cash Equivalents	433,443.10	0.74
Grand Total	\$680,360,548.46	100.00 %	Grand Total	\$58,695,764.95	100.00 %

# COHEN KLINGENSTEIN & MARKS

## FORSTMANN-LEFF ASSOC.

Equities	<b>Market Value</b>	%	Equities	Market Value	%
BASIC INDUSTRIES	\$3,360,262.50	2.83 %	BASIC INDUSTRIES	\$33,182,756.24	5.86 %
CAPITAL GOODS	4,110,168.75	3.47	CAPITAL GOODS	18,310,378.12	3.23
CONSUMER BASICS	21,848,025.00	18.43	CONSUMER BASICS	87,323,770.12	15.42
CONSUMER DURABLES	3,790,100.00	3.20	CONSUMER DURABLES	3,673,381.25	0.65
CONSUMER NON-DUR.	15,837,487.50	13.36	CONSUMER NON-DUR.	101,805,038.12	17.97
CONSUMER SERVICES	7,023,825.00	5.92	CONSUMER SERVICES	36,783,128.61	6.49
ENERGY	0	0.00	ENERGY	44,543,218.36	7.86
FINANCE	26,282,987.50	22.17	FINANCE	58,837,729.36	10.39
GENERAL BUSINESS	0.00	0.00	GENERAL BUSINESS	26,197,870.31	4.62
MISCELLANEOUS	0.00	0.00	MISCELLANEOUS	0.00	0.00
SHELTER	0.00	0.00	SHELTER	4,115,075.00	0.73
TECHNOLOGY	29,048,981.25	24.50	TECHNOLOGY	129,679,370.00	22.89
TRANSPORTATION	0.00	0.00	TRANSPORTATION	479,537.50	0.08
UTILITIES	6,796,687.50	5.73	UTILITIES	21,366,003.12	3.77
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$118,098,525.00	99.62	Total Equities	\$566,297,256.11	99.97
Cash Equivalents	455,193.01	0.38	Cash Equivalents	146,945.12	0.03
Grand Total	\$118,553,718.01	100.00 %	Grand Total	\$566,444,201.23	100.00 %

#### COMPASS CAPITAL MGMT.

# FRANKLIN PORTFOLIO ASSOC.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$6,992,312.50	11.92 %	BASIC INDUSTRIES	\$48,473,481.25	6.73 %
CAPITAL GOODS	4,524,600.00	7.71	CAPITAL GOODS	65,441,712.50	9.08
CONSUMER BASICS	16,500,375.00	28.13	CONSUMER BASICS	49,799,662.50	6.91
CONSUMER DURABLES	7,093,093.75	12.09	CONSUMER DURABLES	13,941,075.00	1.93
CONSUMER NON-DUR.	7,723,887.50	13.17	CONSUMER NON-DUR.	70,093,412.50	9.73
CONSUMER SERVICES	0	0.00	CONSUMER SERVICES	31,212,712.50	4.33
ENERGY	0	0.00	ENERGY	64,203,687.50	8.91
FINANCE	2,218,437.50	3.78	FINANCE	199,683,163.50	27.71
GENERAL BUSINESS	2,034,900.00	3.47	GENERAL BUSINESS	18,967,562.50	2.63
MISCELLANEOUS	2,432,750.00	4.15	MISCELLANIOUS	0.00	0.00
SHELTER	0.00	0.00	SHELTER	0.00	0.00
TECHNOLOGY	8,859,521.87	15.11	TECHNOLOGY	98,423,025.00	13.66
TRANSPORTATION	0.00	0.00	TRANSPORTATION	0.00	0.00
UTILITIES	0.00	0.00	UTILITIES	51,955,031.25	7.21
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$58,379,878.12	99.54	Total Equities	\$712,194,526.00	98.82
Cash Equivalents	267,941.49	0.46	Cash Equivalents	8,490,355.88	1.18
Grand Total	\$58,647,819.61	100.00 %	Grand Total	\$720,684,881.88	100.00 %

## **GEO CAPITAL**

## INDEPENDENCE INVESTMENT ASSOC.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$5,360,575.00	1.32 %	BASIC INDUSTRIES	\$24,544,906.25	5.13 %
CAPITAL GOODS	3,731,350.00	0.92	CAPITAL GOODS	28,901,700.00	6.04
CONSUMER BASICS	47,335,280.99	11.64	CONSUMER BASICS	101,783,277.87	21.29
CONSUMER DURABLES	2,778,200.00	0.68	CONSUMER DURABLES	22,021,287.50	4.61
CONSUMER NON-DUR.	39,992,475.00	9.83	CONSUMER NON-DUR.	35,326,381.25	7.39
CONSUMER SERVICES	36,102,116.87	8.88	CONSUMER SERVICES	5,444,887.50	1.14
ENERGY	7,951,500.00	1.96	ENERGY	41,732,756.25	8.73
FINANCE	31,315,615.62	7.70	FINANCE	69,862,250.00	14.61
GENERAL BUSINESS	121,649,897.61	29.91	GENERAL BUSINESS	13,585,291.25	2.84
MISCELLANEOUS	11,228,887.50	2.76	MISCELLANEOUS	19,431,881.25	4.06
SHELTER	0.00	0.00	SHELTER	0.00	0.00
TECHNOLOGY	88,695,024.99	21.81	TECHNOLOGY	78,141,421.87	16.34
TRANSPORTATION	8,486,167.68	2.09	TRANSPORTATION	1,293,150.00	0.27
UTILITIES	0.00	0.00	UTILITIES	32,709,856.38	6.84
ALL NON U.S.	0.00	0.00	ALL NON U.S.	7,248.69	0.00
Total Equities	\$404,627,091.26	99.49	Total Equities	\$474,786,296.06	99.29
Cash Equivalents	2,065,566.21	0.51	Cash Equivalents	3,386,727.95	0.71
Grand Total	\$406,692,657.47	100.00 %	Grand Total	\$478,173,024.01	100.00 %

## **INVESTMENT ADVISERS INC.**

## LINCOLN CAPITAL MGMT.

Equities	Market Value	%	Equities	Market Value	%
<b>BASIC INDUSTRIES</b>	\$17,076,225.00	8.82 %	BASIC INDUSTRIES	\$42,388,293.75	7.58 %
CAPITAL GOODS	21,595,362.50	11.14	CAPITAL GOODS	0.00	0.00
CONSUMER BASICS	26,957,550.00	13.90	CONSUMER BASICS	263,414,782.25	47.09
CONSUMER DURABLES	10,023,125.00	5.18	CONSUMER DURABLES	0.00	0.00
CONSUMER NON-DUR.	10,697,250.00	5.53	CONSUMER NON-DUR.	57,854,587.50	10.34
CONSUMER SERVICES	2,321,100.00	1.20	CONSUMER SERVICES	9,654,075.00	1.73
ENERGY	5,824,812.50	3.01	ENERGY	0	0.00
FINANCE	20,525,255.25	10.59	FINANCE	48,911,737.50	8.74
GENERAL BUSINESS	9,802,550.00	5.06	GENERAL BUSINESS	19,913,900.00	3.56
MISCELLANEOUS	7,973,387.50	4.12	MISCELLANEOUS	0.00	0.00
SHELTER	0.00	0.00	SHELTER	0.00	0.00
TECHNOLOGY	28,229,000.00	14.57	TECHNOLOGY	101,521,568.75	18.15
TRANSPORTATION	14,153,193.75	7.31	TRANSPORTATION	0.00	0.00
UTILITIES	5,082,300.00	2.62	UTILITIES	0.00	0.00
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$180,261,111.50	93.05	Total Equities	\$543,658,944.75	97.18
Cash Equivalents	13,465,870.01	6.95	Cash Equivalents	15,784,419.18	2.82
Grand Total	\$193,726,981.51	100.00 %	Grand Total	\$559,443,363.93	100.00 %

#### NEW AMSTERDAM PARTNERS

## VALENZUELA CAPITAL MGMT.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$1,164,087.50	2.04 %	BASIC INDUSTRIES	\$4,702,737.50	7.68 %
CAPITAL GOODS	4,964,750.00	8.71	CAPITAL GOODS	2,543,200.00	4.15
CONSUMER BASICS	14,515,360.75	25.46	CONSUMER BASICS	6,648,293.75	10.86
CONSUMER DURABLES	1,851,625.00	3.25	CONSUMER DURABLES	5,285,187.50	8.62
CONSUMER NON-DUR.	7,487,709.37	13.13	CONSUMER NON-DUR.	12,439,616.99	20.29
CONSUMER SERVICES	2,232,150.00	3.92	CONSUMER SERVICES	0.00	0.00
ENERGY	1,737,187.50	3.05	ENERGY	4,616,318.75	7.54
FINANCE	10,701,277.74	18.77	FINANCE	10,274,106.12	16.77
GENERAL BUSINESS	3,122,125.00	5.48	GENERAL BUSINESS	5,483,012.50	8.95
MISCELLANEOUS	0.00	0.00	MISCELLANEOUS	0.00	0.00
SHELTER	0.00	0.00	SHELTER	0.00	0.00
TECHNOLOGY	4,598,575.00	8.07	TECHNOLOGY	4,659,443.75	7.60
TRANSPORTATION	1,152,937.50	2.02	TRANSPORTATION	0.00	0.00
UTILITIES	1,856,812.50	3.26	UTILITIES	1,860,650.00	3.04
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$55,384,597.86	97.15	Total Equities	\$58,512,566.86	95.50
Cash Equivalents	1,624,144.52	2.85	Cash Equivalents	2,757,165.83	4.50
Grand Total	\$57,008,742.38	100.00 %	Grand Total	\$61,269,732.69	100.00 %

#### **OPPENHEIMER & CO.**

## WEISS PECK & GREER

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$75,800,037.50	13.26 %	BASIC INDUSTRIES	\$5,494,550.00	1.64 %
CAPITAL GOODS	53,306,250.00	9.33	CAPITAL GOODS	5,760,575.00	1.72
CONSUMER BASICS	49,095,000.00	8.59	CONSUMER BASICS	50,511,262.50	15.13
CONSUMER DURABLES	0.00	0.00	CONSUMER DURABLES	10,473,750.00	3.14
CONSUMER NON-DUR.	40,315,625.00	7.06	CONSUMER NON-DUR.	22,019,425.00	6.59
CONSUMER SERVICES	29,450,000.00	5.16	CONSUMER SERVICES	25,669,025.01	7.69
ENERGY	9,037,500.00	1.58	ENERGY	22,238,487.50	6.65
FINANCE	198,911,562.50	34.79	FINANCE	15,928,737.50	4.76
GENERAL BUSINESS	12,906,250.00	2.26	GENERAL BUSINESS	34,344,651.03	10.26
MISCELLANEOUS	14,210,625.00	2.49	MISCELLANEOUS	28,949,300.00	8.69
SHELTER	0.00	0.00	SHELTER	0.00	0.00
TECHNOLOGY	58,574,062.50	10.25	TECHNOLOGY	87,624,318.75	26.27
TRANSPORTATION	0.00	0.00	TRANSPORTATION	0.00	0.00
UTILITIES	16,840,000.00	2.95	UTILITIES	6,211,037.50	1.86
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$558,446,912.50	97.72	Total Equities	\$315,225,119.79	94.40
Cash Equivalents	13,012,579.54	2.28	Cash Equivalents	16,116,750.29	4.83
Grand Total	\$571,459,492.04	100.00 %	Fixed Income	2,579,137.50	0.77
			Grand Total	\$333,921,007.58	100.00 %

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#### WILKE/THOMPSON CAPITAL MGMT.

### ZEVENBERGEN CAPITAL INC.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$0.00	0.00 %	BASIC INDUSTRIES	\$0.00	0.00 %
CAPITAL GOODS	0.00	0.00	CAPITAL GOODS	2,521,100.00	4.50
CONSUMER BASICS	5,512,431.25	12.95	CONSUMER BASICS	13,961,693.75	24.93
CONSUMER DURABLES	639,625.00	1.50	CONSUMER DURABLES	0.00	0.00
CONSUMER NON-DUR.	6,234,399.75	14.64	CONSUMER NON-DUR.	6,401,275.00	11.43
CONSUMER SERVICES	2,827,353.12	6.65	CONSUMER SERVICES	1,621,050.00	2.89
ENERGY	0.00	0.00	ENERGY	1,383,112.50	2.47
FINANCE	0.00	0.00	FINANCE	7,747,762.50	13.83
GENERAL BUSINESS	12,284,937.50	28.91	GENERAL BUSINESS	8,106,887.87	14.48
MISCELLANEOUS	413,400.00	0.97	MISCELLANEOUS	0.00	0.00
SHELTER	1,685,600.00	3.96	SHELTER	0.00	0.00
TECHNOLOGY	11,301,081.25	26.57	TECHNOLOGY	9,597,439.06	17.14
TRANSPORTATION	0.00	0.00	TRANSPORTATION	0.00	0.00
UTILITIES	0.00	0.00	UTILITIES	3,823,167.50	6.83
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$40,898,827.87	96.15	Total Equities	\$55,163,488.18	98.50
Cash Equivalents	1,638,216.02	3.85	Cash Equivalents	838,040.90	1.50
Grand Total	\$42,537,043.89	100.00 %	Grand Total	\$56,001,529.08	100.00 %

#### WINSLOW CAPITAL MGMT.

## FRANKLIN PORTFOLIO ASSOC.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	· \$0.00	0.00 %	BASIC INDUSTRIES	\$93,426,312.50	6.10 %
CAPITAL GOODS	3,211,593.75	6.06	CAPITAL GOODS	92,667,377.50	6.05
CONSUMER BASICS	12,416,950.00	23.41	CONSUMER BASICS	305,858,855.00	19.93
CONSUMER DURABLES	0.00	0.00	CONSUMER DURABLES	46,322,425.00	3.02
CONSUMER NON-DUR.	10,059,031.25	18.97	CONSUMER NON-DUR.	59,609,025.00	3.89
CONSUMER SERVICES	866,250.00	1.63	CONSUMER SERVICES	38,149,462.25	2.49
ENERGY	1,450,000.00	2.73	ENERGY	165,366,075.00	10.77
FINANCE	4,601,165.62	8.68	FINANCE	283,526,943.05	18.49
GENERAL BUSINESS	3,970,700.00	7.49	GENERAL BUSINESS	95,670,170.25	6.24
MISCELLANEOUS	0.00	0.00	MISCELLANEOUS	40,227,666.62	2.63
SHELTER	0.00	0.00	SHELTER	13,008,940.66	0.85
TECHNOLOGY	14,302,765.62	26.98	TECHNOLOGY	81,284,848.00	5.28
TRANSPORTATION	0.00	0.00	TRANSPORTATION	11,713,900.00	0.76
UTILITIES	1,100,312.50	2.08	UTILITIES	196,205,782.50	12.72
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$51,978,768.74	98.03	Total Equities	\$1,523,037,783.33	99.22
Cash Equivalents	1,044,641.06	1.97	Cash Equivalents	11,897,066.35	0.78
Grand Total	\$53,023,409.80	100.00 %	Grand Total	\$1,534,934,849.68	100.00 %

## BARCLAY'S GLOBAL INVESTORS (Semi-Passive)

# J.P. MORGAN INVESTMENT MGMT. (Semi-Passive)

Equities	Market Value	%	Equities	<b>Market Value</b>	%
BASIC INDUSTRIES	\$99,977,449.12	6.28 %	BASIC INDUSTRIES	\$82,663,777.37	5.24 %
CAPITAL GOODS	120,017,040.62	7.56	CAPITAL GOODS	94,776,710.89	6.04
CONSUMER BASICS	288,967,732.63	18.23	CONSUMER BASICS	306,416,163.54	19.55
CONSUMER DURABLES	61,346,182.50	3.90	CONSUMER DURABLES	46,625,800.00	2.96
CONSUMER NON-DUR.	66,931,669.80	4.23	CONSUMER NON-DUR.	49,405,277.00	3.16
CONSUMER SERVICES	30,118,200.75	1.91	CONSUMER SERVICES	17,524,420.62	1.11
ENERGY	146,032,068.75	9.22	ENERGY	147,307,131.25	9.41
FINANCE	289,134,356.33	18.25	FINANCE	309,687,803.10	19.76
GENERAL BUSINESS	64,949,244.24	4.12	GENERAL BUSINESS	76,295,409.37	4.90
MISCELLANEOUS	40,360,178.00	2.55	MISCELLANEOUS	39,106,978.43	2.50
SHELTER	12,169,867.37	0.77	SHELTER	12,852,531.25	0.81
TECHNOLOGY	118,386,681.87	7.48	TECHNOLOGY	142,743,668.12	9.11
TRANSPORTATION	6,271,389.62	0.38	TRANSPORTATION	21,340,475.00	1.36
UTILITIES	227,163,689.49	14.35	UTILITIES	216,400,254.60	13.80
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
BONDS	419,571.58	0.02			
	1				
Total Equities	\$1,572,245,322.67	99.25	Total Equities	\$1,563,146,400.54	99.71
Cash Equivalents	11,810,905.27	0.75	Cash Equivalents	4,588,481.79	0.29
Grand Total	\$1,584,056,227.94	100.00 %	Grand Total	\$1,567,734,882.33	100.00 %

# BARCLAY'S GLOBAL INVESTORS (Passive)

Equities	Market Value	%
BASIC INDUSTRIES	\$298,876,427.29	5.88 %
CAPITAL GOODS	300,660,129.28	5.94
CONSUMER BASICS	1,007,927,962.47	19.91
CONSUMER DURABLES	122,574,651.72	2.42
CONSUMER NON-DUR.	289,472,191.80	5.72
CONSUMER SERVICES	131,931,471.91	2.61
ENERGY	338,943,990.48	6.70
FINANCE	884,020,381.56	17.46
GENERAL BUSINESS	276,570,126.36	5.46
MISCELLANEOUS	139,376,870.23	2.75
SHELTER	40,896,064.76	0.81
TECHNOLOGY	737,552,203.88	14.57
TRANSPORTATION	57,086,511.23	1.14
UTILITIES	430,997,348.14	8.52
ALL NON U.S.	0.00	0.00
BONDS	62,625.30	0.00
Total Equities	\$5,056,948,956.41	99.89
Cash Equivalents	5,544,812.95	0.11
Grand Total	\$5,062,493,769.36	100.00 %

#### AGGREGATE DOMESTIC STOCK POOL\*

Equities	Market Value	%
BASIC INDUSTRIES	\$912,777,700.64	5.63 %
CAPITAL GOODS	932,566,986.41	5.76
CONSUMER BASICS	3,208,444,982.48	19.81
CONSUMER DURABLES	410,572,579.84	2.53
CONSUMER NON-DUR.	1,042,962,496.58	6.44
CONSUMER SERVICES	508,005,938.51	3.14
ENERGY	1,031,979,936.84	6.37
FINANCE	2,834,548,047.04	17.50
GENERAL BUSINESS	931,806,672.03	5.75
MISCELLANEOUS	372,876,142.03	2.30
SHELTER	95,574,732.03	0.59
TECHNOLOGY	2,235,986,877.08	13.80
TRANSPORTATION	157,180,187.28	0.97
UTILITIES	1,303,951,657.47	8.05
ALL NON U.S.	7,248.69	0.00
BONDS	482,196.88	0.00
Total Equities	\$15,979,724,381.83	98.64
Cash Equivalents	217,815,722.15	1.34
Fixed Income	2,579,137.50	0.02
Grand Total	\$16,200,119,241.48	100.00 %

\* Aggregate of all managers in the Domestic Equity Account in the financial Statements. Includes Active, Semi-Passive, and Passive managers.

## Summarized Asset Listings - Alternative Assets

As of June 30, 1997

Asset listing for the Alternative Asset Pools can be found on pages 86 to 88 of this report.

## **BARING INTERNATIONAL**

Exposure by Country	Market Value	%
AUSTRALIA	\$11,013,924.64	3.66 %
FRANCE	24,678,738.67	8.21
GERMANY	32,466,926.36	10.79
HONG KONG	11,943,886.92	3.97
ITALY	9,756,288.02	3.24
JAPAN	67,594,572.96	22.47
NETHERLANDS	6,395,668.99	2.13
NORWAY	3,258,020.03	1.08
SINGAPORE	5,706,232.83	1.90
SPAIN	8,353,308.43	2.78
SWEDEN	7,115,157.31	2.37
SWITZERLAND	19,523,592.81	6.49
THAILAND	68.23	0.00
UNITED KINGDOM	58,242,606.10	19.36
UNITED STATES	32,341,147.33	10.75
FORWARD CURRENCY CASH	2,210,558.52	0.73
FORWARD CURRENCY CONTI	175,246.67	0.06
Grand Total	\$300,775,944.82	100.00 %

## **BRINSON PARTNERS INTERNATIONAL**

Exposure by Country	Market Value	%
AUSTRALIA	\$20,248,612.60	4.85 %
BELGIUM	13,368,149.62	3.21
FINLAND	2,392,269.84	0.57
FRANCE	30,388,257.99	7.29
GERMANY	39,044,743.22	9.36
HONG KONG	5,446,894.21	1.31
ITALY	14,691,940.89	3.52
JAPAN	101,262,997.99	24.28
MALAYSIA	7,826,512.96	1.88
NETHERLANDS	25,421,532.04	6.10
NEW ZEALAND	14,093,749.48	3.38
SINGAPORE	5,163,898.30	1.24
SPAIN	8,828,948.66	2.12
SWITZERLAND	10,180,714.40	2.44
UNITED KINGDOM	87,429,363.15	20.96
UNITED STATES	28,906,565.93	6.93
FORWARD CURRENCY CASH	1,628,680.93	0.39
FORWARD CURRENCY CONTI	752,545.46	0.18
Grand Total	\$417,076,377.67	100.00 %

## MARATHON ASSET MANAGEMENT

Exposure by Country	Market Value	%
AUSTRALIA	\$18,911,242.07	4.89 %
DENMARK	2,531,355.59	0.65
FINLAND	9,597,671.92	2.48
FRANCE	25,149,455.85	6.50
GERMANY	14,916,006.24	3.86
HONG KONG	9,514,894.85	2.46
INDONESIA	1,685,008.93	0.44
ITALY	10,062,032.23	2.60
JAPAN	118,807,972.72	30.72
MALAYSIA	4,522,298.69	1.17
MEXICO	1,352,584.29	0.35
NETHERLANDS	9,080,798.10	2.35
NEW ZEALAND	509,652.56	0.13
NORWAY	4,194,625.83	1.08
SINGAPORE	1,051,473.93	0.27
SOUTH AFRICA	5,648,454.00	1.46
SPAIN	9,827,239.87	2.54
SWEDEN	17,595,748.02	4.55
SWITZERLAND	11,277,475.39	2.92
UNITED KINGDOM	71,868,890.28	18.58
UNITED STATES	36,522,345.00	9.44
FOREIGN CURRENCY CASH	2,081,727.21	0.54
FORWARD CURRENCY CONT	(2,603.51)	0.00
Grand Total	\$386,706,350.06	100.00 %

## **ROWE PRICE-FLEMING INTERNATIONAL**

Exposure by Country	Market Value	%
ARGENTINA	\$837,963.17	0.21 %
AUSTRALIA	7,803,291.55	1.93
AUSTRIA	180,933.21	0.04
BELGIUM	4,455,270.96	1.10
BRAZIL	7,828,294.98	1.94
CANADA	1,108,236.03	0.27
CZECH REPUBLIC	130,115.30	0.03
DENMARK	996,035.72	0.25
FINLAND	947,522.65	0.23
FRANCE	32,771,302.09	8.10
GERMANY	17,691,344.36	4.37
HONG KONG	13,642,167.41	3.37
ITALY	9,053,546.88	2.24
JAPAN	89,123,426.88	22.04
MALAYSIA	7,049,937.33	1.74
MEXICO	3,067,633.35	0.76
NETHERLANDS	38,230,778.41	9.45
NEW ZEALAND	2,008,994.29	0.50
NORWAY	6,254,598.26	1.55
PHILIPPINES	930,895.01	0.23
PORTUGAL	2,330,377.73	0.58
SINGAPORE	7,564,379.48	1.87
SPAIN	9,016,650.50	2.23
SWEDEN	11,067,814.67	2.74
SWITZERLAND	22,388,193.58	5.54
THAILAND	597,822.70	0.15
UNITED KINGDOM	61,840,612.04	15.29
UNITED STATES	43,413,895.59	10.74
FOREIGN CURRENCY CASH	2,079,475.37	0.51
FORWARD CURRENCY CONTI	770.40	0.00
Grand Total	\$404,412,279.90	100.00 %

## RECORD TREASURY MANAGEMENT

Exposure by Country	Market Value	
FORWARD CURRENCY CONTRACT	ГS	
FRANCE	\$7,882,581.18	26.30 %
GERMANY	9,326,606.73	31.12
JAPAN	7,394,080.20	24.67
SWITZERLAND	7,606,694.64	25.38
UNITED KINGDOM	(2,238,896.00)	(7.47)
FOREIGN CURRENCY CASH	(336.50)	(0.00)
Grand Total	\$29,970,730.25	100.00 %

## SCUDDER, STEVENS & CLARK

Exposure by Country	Market Value	%
AUSTRALIA	\$5,261,300.44	1.81 %
AUSTRIA	967,317.87	0.33
BRAZIL	4,015,982.28	1.38
CANADA	6,401,315.74	2.20
FRANCE	28,640,480.98	9.84
GERMANY	45,627,752.88	15.67
HONG KONG	14,979,233.42	5.14
ITALY	3,670,766.78	1.26
JAPAN	58,132,903.94	19.97
MALAYSIA	5,714,578.90	1.96
NETHERLANDS	20,523,074.05	7.05
PHILIPPINES	3,399,535.13	1.17
SWEDEN	12,789,619.75	4.39
SWITZERLAND	30,332,468.71	10.42
UNITED KINGDOM	31,047,249.54	10.66
UNITED STATES	18,576,483.83	6.38
FOREIGN CURRENCY CASH	1,082,922.77	0.37
FORWARD CURRENCY CONT	2,911.80	0.00
Grand Total	\$291,165,898.81	100.00 %

## STATE STREET GLOBAL ADVISORS (Passive)

Exposure by Country	Market Value	%
AUSTRALIA	\$68,336,465.22	2.78 %
AUSTRIA	9,024,122.02	0.37
BELGIUM	29,702,728.37	1.21
DENMARK	22,167,789.27	0.90
FINLAND	17,189,215.57	0.70
FRANCE	156,012,597.83	6.35
GERMANY	202,657,176.39	8.25
HONG KONG	91,189,527.57	3.71
IRELAND	7,827,841.10	0.32
ITALY	73,713,110.80	3.00
JAPAN	814,048,832.67	33.15
MALAYSIA	48,730,201.21	1.98
NETHERLANDS	123,091,910.78	5.01
NEW ZEALAND	9,211,726.82	0.38
NORWAY	12,877,203.17	0.52
SINGAPORE	30,994,542.50	1.26
SPAIN	58,453,921.71	2.38
SWEDEN	60,439,683.14	2.46
SWITZERLAND	157,964,216.80	6.43
UNITED KINGDOM	438,886,989.51	17.87
UNITED STATES	2,929.80	0.00
FOREIGN CURRENCY CASH	22,986,021.05	0.94
FORWARD CURRENCY CONT	0.00	0.00
Grand Total	\$2,455,508,753.30	100.00 %

# CITY OF LONDON INVESTMENT MGMT. (Emerging Markets)

Exposure by Country	Market Value	%
EMERG. MKT COUNTRY FD.	\$122,191,890.00	100.00 %
FOREIGN CURRENCY CASH	\$0.00	0.00
FORWARD CURRENCY CONTI	0.00	0.00
Grand Total	\$122,191,890.00	100.00 %

#### GENESIS ASSET MANAGERS (Emerging Markets)

Exposure by Country	Market Value	%
ARGENTINA	\$7,857,259.69	3.18 %
AUSTRALIA	7,801,339.50	3.15
BRAZIL	29,914,227.54	12.09
CANADA	1,644,547.28	0.66
CZECH REPUBLIC	1,225,077.53	0.50
GREECE	6,115,765.70	2.47
HONG KONG	4,014,505.22	1.62
INDIA	2,650,000.00	1.07
INDONESIA	4,172,166.61	1.69
KOREA REPUBLIC OF	8,035,723.73	3.25
LUXEMBOURG	2,557,500.00	1.03
MALAYSIA	6,199,158.16	2.51
MEXICO	3,274,555.39	1.32
MOROCCO	1,286,676.15	0.52
PAKISTAN	2,258,315.02	0.91
PERU	1,962,845.24	0.79
PHILIPPINES	1,786,653.89	0.72
POLAND	340,588.00	0.14
SOUTH AFRICA	8,615,559.79	3.48
THAILAND	6,032,150.94	2.44
TURKEY	3,818,884.00	1.54
UNITED KINGDOM	15,742,934.31	6.36
UNITED STATES	116,796,494.93	47.22
ZIMBABWE	2,966,682.04	1.20
FOREIGN CURRENCY CASH	293,133.63	0.12
FORWARD CURRENCY CONTI	(67.82)	0.00
Grand Total	\$247,362,676.47	100.00 %

## MONTGOMERY ASSET MANAGEMENT (Emerging Markets)

Exposure by Country	Market Value	%
ARGENTINA	\$3,915,422.78	1.57 %
BRAZIL	30,374,223.33	12.15
CZECH REPUBLIC	2,703,947.99	1.08
EGYPT	1,907,810.61	0.76
GREECE	0.00	0.00
HONG KONG	12,979,515.00	5.19
INDIA	254,538.85	0.10
INDONESIA	6,644,567.96	2.66
IRELAND	1,001,880.00	0.40
ISRAEL	1,290,414.37	0.52
KOREA REPUBLIC OF	6,852,995.70	2.74
MALAYSIA	19,580,614.76	7.84
MEXICO	9,603,161.45	3.84
MOROCCO	71,802.81	0.03
PAKISTAN	837,690.63	0.34
PERU	1,016,551.01	0.41
PHILIPPINES	5,931,319.19	2.37
PORTUGAL	7,036,807.48	2.82
SINGAPORE	1,672,599.28	0.67
SOUTH AFRICA	12,064,016.91	4.83
TAIWAN PROVINCE OF CHIN	17,152,729.76	6.86
THAILAND	4,046,291.44	1.62
TURKEY	5,349,074.28	2.14
UNITED STATES	95,731,568.45	38.31
FOREIGN CURRENCY CASH	1,878,719.33	0.75
FORWARD CURRENCY CONT	(7,017.12)	0.00
Grand Total	\$249,891,246.25	100.00 %

#### AGGREGATE INTERNATIONAL STOCK POOL\*

Exposure by Country	Market Value	%
ARGENTINA	\$12,610,645.64	0.26 %
AUSTRALIA	139,376,176.02	2.84
AUSTRIA	10,172,373.10	0.21
BELGIUM	47,526,148.95	0.97
BRAZIL	72,132,728.13	1.47
CANADA	9,154,099.05	0.19
CZECH REPUBLIC	4,059,140.82	0.08
DENMARK	25,695,180.58	0.52
EGYPT	1,907,810.61	0.04
EMERG. MKT. COUNTRY FD	122,191,890.00	2.49
FINLAND	30,126,679.98	0.61
FRANCE	297,640,833.41	6.07
GERMANY	352,403,949.45	7.18
GREECE	6,115,765.70	0.12
HONG KONG	163,710,624.60	3.34
INDIA	2,904,538.85	0.06
INDONESIA	12,501,743.50	0.25
IRELAND	8,829,721.10	0.18
ISRAEL	1,290,414.37	0.03
ITALY	120,947,685.60	2.47
JAPAN	1,248,970,707.16	25.46
KOREA REPUBLIC OF	14,888,719.43	0.30
LUXEMBOURG	2,557,500.00	0.05
MALAYSIA	99,623,302.01	2.03
MEXICO	17,297,934.48	0.35
MOROCCO	1,358,478.96	0.03
NETHERLANDS	222,743,762.37	4.54
NEW ZEALAND	25,824,123.15	0.53
NORWAY	26,584,447.29	0.54
PAKISTAN	3,096,005.65	0.06
PERU	2,979,396.25	0.06
PHILIPPINES	12,048,403.22	0.25
POLAND	340,588.00	0.01
PORTUGAL	9,367,185.21	0.19
SINGAPORE	52,153,126.32	1.06
SOUTH AFRICA	26,328,030.70	0.54
SPAIN	94,480,069.17	1.93
SWEDEN	109,008,022.89	2.22
SWITZERLAND	251,666,661.69	5.13
TAIWAN PROVINCE OF CHIN	17,152,729.76	0.35
THAILAND	10,676,333.31	0.22
TURKEY	9,167,958.28	0.19
UNITED KINGDOM	765,058,644.93	15.60
UNITED STATES	372,291,430.86	7.59
ZIMBABWE	2,966,682.04	0.06
FOREIGN CURRENCY CASH	34,240,902.31	0.70
FORWARD CURRENCY CONTI	30,892,852.63	0.63
Grand Total	\$4,905,062,147.53	100.00 %

\* Aggregate of all managers in the International Equity Account in the Financial Statements. Includes Active, Passive, Emerging Markets and Currency Overlay managers.

#### **AMERICAN EXPRESS**

Fixed Income	Market Value	%	Fixed Income	Market Value	%
U.S. CORPORATES	\$113,687,373.50	32.68 %	U.S. CORPORATES	\$135,084,921.89	23.02 %
U.S. FINANCE	0.00	0.00	U.S. FINANCE	0.00	0.00 ·
U.S. GOV'T./SPONSORED	23,678,100.00	6.81	U.S. GOV'T./SPONSORED	7,183,484.80	1.22
U.S. MTG. REL	49,917,642.48	14.35	U.S. MTG. REL	188,656,158.69	32.15
U.S. TREASURY	149,605,758.00	43.01	U.S. TREASURY	184,729,678.19	31.48
U.S. MUNICIPALS	0.00	0.00	U.S. MUNICIPALS	0.00	0.00
MISCELLANEOUS	0.00	0.00	MISCELLANEOUS	0.00	0.00
ALL NON U.S.	0.00	0.00	ALL NON U.S.	7,340,262.70	1.25
Total Fixed Income	\$336,888,873.98	96.85	Total Fixed Income	\$522,994,506.27	89.12
Cash Equivalents			Cash Equivalents		
U.S.	10,943,262.97	3.15	U.S.	63,866,882.91	10.88
All Non U.S.	0.00	0.00	All Non U.S.	0.00	0.00
Grand Total	\$347,832,136.95	100.00 %	Grand Total	586,861,389.18	100.00 %

#### **BEA ASSOCIATES**

## MILLER ANDERSON & SHERRERD

**INVESTMENT ADVISERS, INC.** 

Fixed Income	Market Value	%	Fixed Income	Market Value	%
U.S. CORPORATES	\$113,730,076.72	23.80 %	U.S. CORPORATES	\$137,711,190.37	17.97 %
U.S. FINANCE	0.00	0.00	U.S. FINANCE	0.00	0.00
U.S. GOV'T./SPONSORED	8,367,064.00	1.75	U.S. GOV'T./SPONSORED	0.00	0.00
U.S. MTG. REL	190,288,566.06	39.82	U.S. MTG. REL	314,600,673.14	41.06
U.S. TREASURY	66374146.66	13.89	U.S. TREASURY	105,459,458.26	13.76
U.S. MUNICIPALS	12,394,876.90	2.59	U.S. MUNICIPALS	3,297,390.80	0.43
MISCELLANEOUS	2,025,358.65	0.42	MISCELLANEOUS	47,121,898.17	6.15
ALL NON U.S.	34080687.25	7.13	ALL NON U.S.	19,026,494.25	2.48
					0.00
Total Fixed Income	\$427,260,776.24	89.40	<b>Total Fixed Income</b>	\$627,217,104.99	81.86
Cash Equivalents			Cash Equivalents		
U.S.	50,729,861.07	10.61	U.S.	138,992,255.76	18.14
All Non U.S.	(64,408.68)	(0.01)	All Non U.S.	65.07	0.00
Grand Total	\$477,926,228.63	100.00 %	Grand Total	\$766,209,425.82	100.00 %

## STANDISH, AYER & WOOD

### WESTERN ASSET MGMT.

Fixed Income	Market Value	%	Fixed Income	Market Value	%
U.S. CORPORATES	\$251,549,286.50	39.25 %	U.S. CORPORATES	\$205,603,861.79	17.18 %
U.S. FINANCE	20,157,106.59	3.15	U.S. FINANCE	0.00	0.00
U.S. GOV'T./SPONSORED	41,587,450.28	6.49	U.S. GOV'T./SPONSORED	13,081,900.50	1.09
U.S. MTG. REL	153,267,902.19	23.92	U.S. MTG. REL	511,065,577.23	42.69
U.S. TREASURY	107,512,331.40	16.78	U.S. TREASURY	258,951,536.87	21.63
U.S. MUNICIPALS	0.00	0.00	U.S. MUNICIPALS	3,102,727.96	0.26
MISCELLANEOUS	6,318,495.00	0.99	MISCELLANEOUS	89,211,319.28	7.45
ALL NON U.S.	57,044,775.21	8.90	ALL NON U.S.	41,854,611.76	3.50
Total Fixed Income	\$637,437,347.17	99.46	Total Fixed Income	\$1,122,871,535.39	93.80
Cash Equivalents			Cash Equivalents		
U.S.	3,447,645.47	0.54	U.S.	74,181,961.15	6.20
All Non U.S.	0.00	0.00	All Non U.S.	0.00	0.00
Grand Total	\$640,884,992.64	100.00 %	Grand Total	\$1,197,053,496.54	100.00 %

## BLACKROCK FINANCIAL MGMT.

## (Semi-Passive)

## LINCOLN CAPITAL MGMT. (Semi-Passive)

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Fixed Income	Market Value	%	<b>Fixed Income</b>	Market Value	%
U.S. CORPORATES	\$350,740,526.79	26.84 %	U.S. CORPORATES	\$278,808,779.98	21.59
U.S. FINANCE	0.00	0.00	U.S. FINANCE	0.00	0.00
U.S. GOV'T./SPONSORED	0.00	0.00	U.S. GOV'T./SPONSORED	16,427,889.50	1.27
U.S. MTG. REL	497,437,747.05	38.07	U.S. MTG. REL	441,452,547.45	34.19
U.S. TREASURY	289,327,222.56	22.14	U.S. TREASURY	471,182,949.13	36.49
U.S. MUNICIPALS	11,634,706.60	0.89	U.S. MUNICIPALS	0.00	0.00
MISCELLANEOUS	2,658,393.99	0.20	MISCELLANEOUS	0.00	0.00
ALL NON U.S.	33,790,640.80	2.59	ALL NON U.S.	7,766,761.60	0.60
Total Fixed Income	\$1,185,589,237.79	90.73	Total Fixed Income	\$1,215,638,927.66	94.14
Cash Equivalents			Cash Equivalents		
U.S.	121,078,400.96	9.27	U.S.	75,716,942.47	5.86
All Non U.S.	0.00	0.00	All Non U.S.	0.00	0.00
Grand Total	\$1,306,667,638.75	100.00 %	Grand Total	\$1,291,355,870.13	100.00

## GOLDMAN SACHS ASSET MGMT.

\*

#### (Semi-Passive)

#### **AGGREGATE BOND POOL\***

Fixed Income	Market Value	%	Fixed Income	Market Value	%
U.S. CORPORATES	\$422,450,770.10	28.72 %	U.S. CORPORATES	\$2,009,366,787.64	24.85 %
U.S. FINANCE	0.00	0.00	U.S. FINANCE	20,157,106.59	0.25
U.S. GOV'T./SPONSORED	1,989,067.21	0.14	U.S. GOV'T./SPONSORED	112,314,956.29	1.39
U.S. MTG. REL	492,782,338.25	33.50	U.S. MTG. REL	2,839,469,152.54	35.12
U.S. TREASURY	326,924,616.30	22.23	U.S. TREASURY	1,960,067,697.37	24.24
U.S. MUNICIPALS	0.00	0.00	U.S. MUNICIPALS	30,429,702.26	0.38
MISCELLANEOUS	1,202,883.93	0.08	MISCELLANEOUS	148,538,349.02	1.84
ALL NON U.S.	22,134,721.05	1.50	ALL NON U.S.	223,038,954.62	2.76
Total Fixed Income	\$1,267,484,396.84	86.17	Total Fixed Income	\$7,343,382,706.33	90.82
Cash Equivalents			Cash Equivalents		
U.S.	203,480,146.07	13.83	U.S.	742,437,358.83	9.18
All Non U.S.	0.00	0.00	All Non U.S.	(64,343.61)	0.00
Grand Total	\$1,470,964,542.91	100.00 %	Grand Total	\$8,085,755,721.55	100.00 %

\* Aggregate of all managers in the Bond Account in the Financial Statements. Includes both Active and Semi-Passive managers.

#### **INCOME SHARE ACCOUNT**

	Market Value	%	
STOCKS	\$301,526,074.46	64.15	%
BONDS	148,670,218.44	31.63	
<b>CASH EQUIVALENTS</b>	19,838,845.83	4.22	
Grand Total	\$470,035,138.73	100.00	%

Market Value

\$205,880,846.96 100.00 %

\$205,880,846.96 100.00 %

0.00 0.00

%

#### **GROWTH SHARE ACCOUNT**

STOCKS

**Grand Total** 

CASH EQUIVALENTS

#### BOND MARKET ACCOUNT

	Market Value	%	
BONDS	\$26,682,032.82	100.00	%
CASH EQUIVALENTS	0.00	0.00	
Grand Total	\$26,682,032.82	100.00	%

#### MONEY MARKET ACCOUNT

	Market Value	%	
<b>CASH EQUIVALENTS</b>	51,790,101.23	100.00	
Grand Total	\$51,790,101.23	100.00	%

#### COMMON STOCK INDEX ACCOUNT

	Market Value	%	
STOCKS	\$142,990,439.67	100.00	%
<b>CASH EQUIVALENTS</b>	0.00	0.00	
Grand Total	\$142,990,439.67	100.00	%

#### INTERNATIONAL SHARE ACCOUNT

	Market Value	%	
STOCKS	\$21,444,657.64	100.00	%
<b>CASH EQUIVALENTS</b>	0.00	0.00	
Grand Total	\$21,444,657.64	100.00	%

#### FIXED INTEREST ACCOUNT

	Market Value	%
GIC POOL	\$65,288,685.28	92.55
CASH EQUIVALENTS	5,254,933.44	7.45
Grand Total	\$70,543,618.72	100.00

#### SUPPLEMENTAL INVESTMENT FUND

	Market Value	%	
INCOME SHARE	\$470,035,138.73	47.51	%
GROWTH SHARE	205,880,846.96	20.81	
COMMON STOCK INDEX	142,990,439.67	14.45	
INTERNATIONAL SHARE	21,444,657.64	2.17	
BOND MARKET	26,682,032.82	2.70	
MONEY MARKET	51,790,101.23	5.23	
FIXED INTEREST	70,543,618.72	7.13	
Grand Total	\$989,366,835.77	100.00	%

#### Assigned Risk Plan\*

	<b>Market Value</b>	%
Equities		
<b>Basic Industries</b>	\$27,167,769	4.6%
Capital Goods	9,159,976	1.5
Consumer Basics	2,290,841	0.4
Consumer Durables	3,022,007	0.5
Consumer Non. Dur.	17,012,766	2.9
<b>Consumer Services</b>	1,752,625	0.3
Energy	12,315,738	2.1
Finance	23,678,171	4.0
General Business	7,616,884	1.3
Miscellaneous	3,239,159	0.5
Shelter	0	0.0
Technology	20,456,022	3.5
Transportation	8,661,624	1.5
Utilities	2,978,762	0.5
All Non U.S.	0	0.0
Total Equities	139,352,344	23.6
Fixed Income		
U.S. Gov't./Sponsored	80,424,435	13.6
U.S. Corporates	198,104,199	33.5
U.S. Mtg. Rel.	144,853,850	24.5
U.S. Municipals	2,050,240	0.4
All Non U.S.	5,134,050	0.9
<b>Total Fixed Income</b>	430,566,774	72.9
Cash Equivalents	20,885,263	3.5
Grand Total	\$590,804,379	100.0%

#### **Permanent School Fund\***

	Market Value	%
Fixed Income	\$425,587,077	97.4%
Cash Equivalents	11,439,243	2.6
Grand Total	\$437,026,320	100.0%

#### **Environmental Trust Fund\***

	<b>Market Value</b>	%
Equities	\$93,161,013	51.9%
Fixed Income	84,392,192	47.1
Cash Equivalents	1,788,144	1.0
Grand Total	\$179,341,350	100.0%

\* All amounts are rounded to the nearest dollar, therefore totals may not add due to rounding.

#### Notes applicable to all Summarized Asset Listings:

- The data source for Domestic Stock Managers, International Stock Managers, and Bond Managers was State Street Bank & Trust, the SBI's custodian for retirement-related assets.
- The data source for the Assigned Risk Plan, Permanent School Fund and the Environmental Trust Fund was Financial Control Systems, the SBI's external accounting vendor.
- Market value figures in the Summarized Asset Listings may not reconcile to the amounts shown for various Accounts in the Financial Statements due to minor pricing differences between Financial Controls and State Street Bank as well as trade adjustments that were reflected in the Financial Statements.

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