1998 ANNUAL REPORT



# MINNESOTA STATE BOARD OF INVESTMENT

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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

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An Equal Opportunity Employer December, 1998

The Minnesota State Board of Investment (SBI) is pleased to present its report for the fiscal year ending June 30, 1998.

#### Investment Environment

Fiscal year 1998 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 fourth consecutive year. The Wilshire 5000 Stock Index moved up 28.9% 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 gain of 10.5%.

The performance of international stock markets was disappointing during the year. Developed markets lagged the US market and were below historical averages. The Morgan Stanley Capital International index of Europe, Australia and the Far East (EAFE) gained 6.1% for the twelve months ended June 30, 1998. The markets of developing countries, often referred to as "emerging markets", declined significantly, experiencing a loss of 39.1% 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 22.2% during fiscal year 1998. The Funds benefited from their high US 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 19.4% for the year. This gain, combined with strong returns in prior years, will provide a lifetime post retirement benefit increase of 9.8% for eligible retirees. (See page 11.)

On June 30, 1998, assets under management totaled \$45.2 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,

Howard Bicker Executive Director

#### 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, Retired 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, Retired Sr. Vice President Piper Capital Management

Daralyn Peifer
Director, Benefits Finance
General Mills, Inc.

Wayne Simoneau Commissioner Mn. Dept. of Finance

Michael L. Troutman V.P., Finance and Investments Board of Pensions, ELCA

Mary Vanek Executive Director Public Employees Retirement Assoc.

Jan Yeomans, Chair Treasurer 3M Co.

<sup>\*</sup> As of December 1998

# Staff, Consultants & Custodians\*

Howard Bicker
Executive Director

Mansco Perry III
Assistant Executive Director

#### Investment Staff

Public Investments

Lois E. Buermann Mgr., Public Investments

Jason Matz Analyst, Fixed Income

Stephen Koessl Analyst, Domestic Equities

Tammy Brusehaver-Derby Analyst, International Equties

Internal Investments

Michael J. Menssen Mgr., Internal Investments

N. Robert Barman Analyst, Internal Fixed Income

A. Arthur Kaese Analyst, Internal Equities

Alternative Assets

John N. Griebenow Mgr., 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

Stephanie Gleeson Analyst, Public Programs

Deborah Griebenow Analyst, Shareholder Services

#### Administrative Staff

Finance and Accounting

L. Michael Schmitt
Administrative Director

Thomas L. Delmont
Accounting Officer, Intermediate

Nancy L. Wold
Accounting Officer, Intermediate

Kathy Sears
Accounting Officer, Intermediate

Wanda Egan Accounting Officer, Intermediate

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 Norwest Bank, N.A. St. Paul, Minnesota

\*As of December 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, 1998, the market value of all assets was \$45.2 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 43 for more information on these guidelines).

During the fiscal year, the Board instituted a policy requiring the SBI active and semi-passive equity managers to discontinue purchases of shares of any company that generates at least 15% of its revenue from the manufacture of consumer tobacco products (refer to page 46 for more information on this policy).

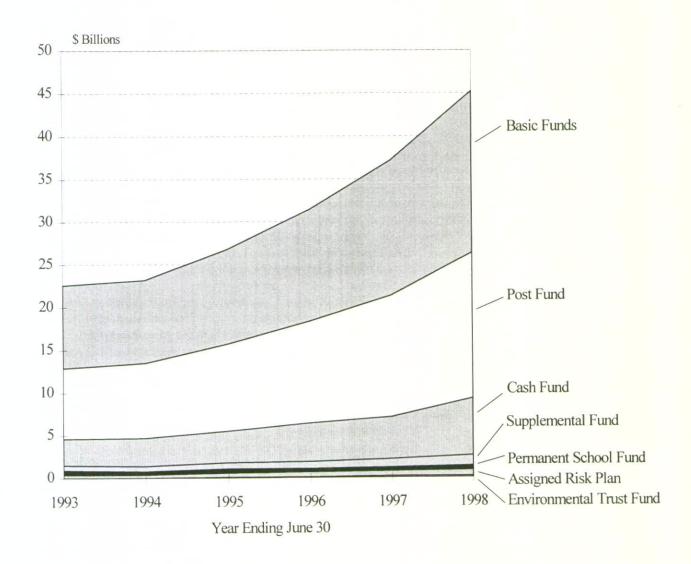
The Board, its staff, and the Investment Advisory Council have conducted detailed analyses of each of the funds under the SBI's control that address investment objectives, asset allocation policy and management structure. These studies guide the on-going management of these funds and are updated periodically.

#### 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 1994 - 1998



# Funds Under Management

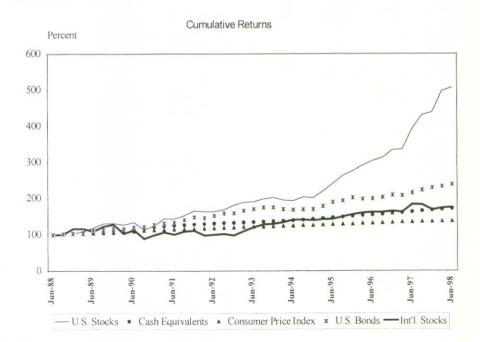
			Market Value June 30, 1998
Basic Retirement Funds			\$18.9 billion
The Basic Retirement Funds contain	the pension assets of the currer	ntly working	<b>*</b> * * * * * * * * * * * * * * * * * *
participants in eight statewide retirer	•		
Teachers Retirement Fund	\$.	7,897 million	
Public Employees Retirement F	und	4,104 million	
State Employees Retirement Fu	nd :	3,930 million	
Public Employees Police and Fi	re Fund	1,938 million	
Police and Fire Consolidation F	und	478 million	
Highway Patrol Retirement Fun	d	271 million	
Correctional Employees Fund		221 million	
Judges Retirement Fund		21 million	
Post Retirement Fund			\$17.0 billion
The Post Retirement Investment Fun	d is composed of the reserves f	or retirement henefits	\$17.0 Dillion
to be paid to retired employees. Life	-time retirement benefit increas		
based on both inflation and investme	ent performance.		
Supplemental Investment Fund		20	\$1.2 billion
The Supplemental Investment Fund			*
plan, supplemental benefit arrangem			
and firefighters, and the unclassified			
among seven separate accounts with		designed to meet a	
wide range of participant needs and			
Income Share Account	stocks and bonds	\$575 million	
Growth Share Account	actively managed stocks	278 million	
Common Stock Index Account	passively managed stocks	212 million	
International Share Account	non U.S. stocks	25 million	
Bond Market Account	actively managed bonds	35 million	
Money Market Account Fixed Interest Account	short-term debt securities guaranteed investment cont	47 million racts 75 million	
i med interest recount	guaranteed investment cont	racts 75 mmon	
Assigned Risk Plan	I D'I D	COMPANIENT CONTO	\$0.7 billion
The Minnesota Workers Compensati			
compensation insurance for compani carriers.	es unable to obtain coverage the	rough private	
carriers.			
Permanent School Trust Fund			\$0.5 billion
The Permanent School Trust Fund is	a trust established for the benef	fit of Minnesota	
public schools.			
Environmental Trust Fund			\$0.2 billion
The Environmental Trust Fund is a tr	ust established for the protection	on and enhancement	7412 21111011
of Minnesota's environment. It is fur			
lottery.	<b>₽</b>		
State Cash Accounts			\$6.7 billion
These accounts are the cash balances	of state government funds, incl	luding the Invested	y v willion
Treasurers Cash Fund, transportation	funds, and other miscellaneous	cash accounts.	
Assets are invested in high quality, li			
Total Assets			\$45.2 billion
			\$40.2 BIIIIOII

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, 1998, the Combined Funds had a market value of \$35.9 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 1989-1998



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.

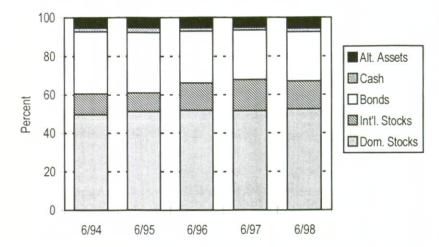
This distinction is necessary due to the very different asset allocation strategies employed by the two funds in the past. The Basic Funds have always been managed to maximize total rates of return over the longterm and therefore its asset allocation has historically included a substantial stock segment. 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 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.

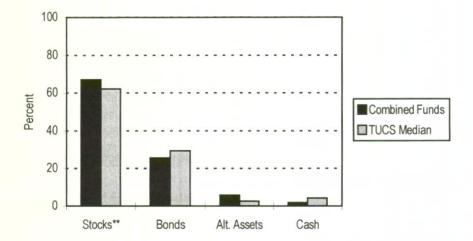
Figure 3. Combined Funds Historical Asset Mix FY 1994-1998



#### 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, 1998 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.

Figure 2. Combined Funds Asset Mix Comparison as of June 30, 1998



		Median
	Combined	Allocation
	Funds	in TUCS*
Stocks**	67.0%	62.1%
Bonds	25.6	29.4
Alternative Assets	5.7	2.5***
Cash	1.7	4.1

- \* Represents the median allocation by asset class, and does not add to 100%.
- \*\* Both international and domestic

#### 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.
- Over 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

<sup>\*\*\*</sup> All other assets in TUCS

billion. All funds in TUCS report their returns gross of fees. For purposes of the TUCS comparison, the SBI returns are ranked on a gross of fees rather than a net of fee basis.

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

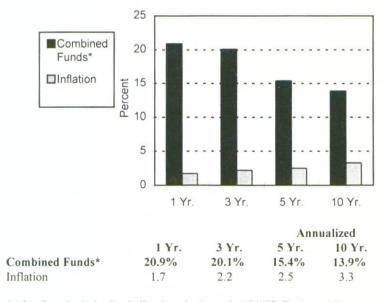
#### Comparison to Inflation

Over the last ten years, the Combined Funds exceeded inflation by 10.6 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

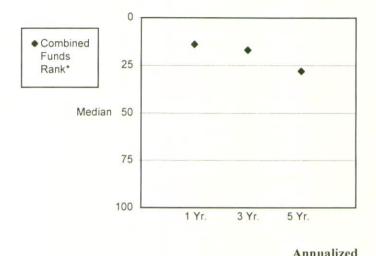
Figure 4. Combined Funds Performance vs. Inflation



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

6

Figure 5. Combined Funds Performance Compared to Other Pension Funds



	1 Yr.	3 Yr.	5 Yr.
Combined Funds Percentile Rank in TUCS*	14 <sup>th</sup>	17 <sup>th</sup>	28 <sup>th</sup>

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

provide an "apples-to-oranges" look at performance:

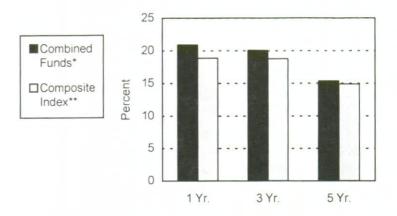
- Differing Allocations. Asset allocation will have a dominant effect on returns. The allocation to stocks among the funds in TUCS typically ranges from 20-90%, a very wide range for meaningful comparison. In addition, it appears that many funds do not include alternative asset holdings in their reports 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 in 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 0.5 percentage point over the last five years and therefore met their stated performance goal. The Funds exceeded the composite index by 1.3 percentage points over the last three years and exceeded it by 1.9 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



		Annu	ialized
	1 Yr.	3 Yr.	5 Yr.
Combined Funds*	20.9%	20.1%	15.4%
Composite Index	19.0	18.8	14.9

<sup>\*</sup> After fees.

#### Composite Index on June 30, 1998

	Market	Composite
Asset Class	Index	Index Wts.*
Domestic Stocks	Wilshire 5000	50.2%
Int'l. Stocks	Int'l. Composite**	15.0
Domestic Bonds	Lehman Aggregate	27.3
Alternative Assets	Wilshire Real Estate	2.2
	Venture Capital Funds	2.9
	Resource Funds	0.5
Unallocated Cash	90 Day T-Bills	1.9
Total		100.0%

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

<sup>\*\*</sup> Composite of MSCI EAFE Free and MSCI Emerging Markets Free.

The Basic Retirement Funds accumulate the retirement assets of public employees during their working years. On June 30, 1998, the Funds covered more than 300,000 active employees and had a market value of \$18.9 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

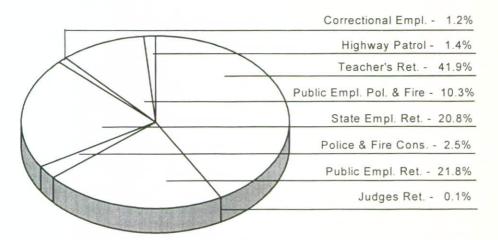
The allocation of assets among stocks, bonds, and alternative investments can have a dramatic impact on investment results. In fact, asset allocation decisions overwhelm the impact of individual security selection within a total portfolio. The asset allocation of the fund is under constant review. No significant changes were made during fiscal year 1998.

#### 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:

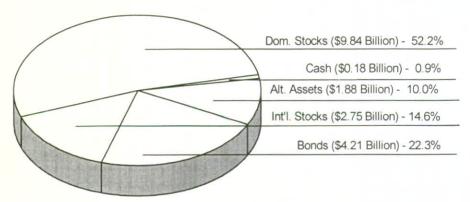
Domestic Stocks	45%
International Stocks	15
Bonds	24
Alternative Assets	15
Unallocated Cash	1

Figure 7. Composition of Basic Funds as of June 30, 1998



#### Basic Retirement Funds

Figure 8. Basic Funds Asset Mix as of June 30, 1998



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

Uninvested portions of the allocation to Alternative Assets are held in Domestic Stocks.

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.

Figure 8 presents the actual asset mix of the Basic Funds at the end of fiscal year 1998. 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.

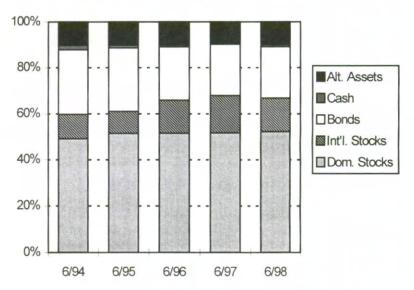
#### **Diversification Vehicles**

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

Figure 9. Basic Funds Historical Asset Mix FY 1994-1998



#### Basic Retirement Funds

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.

#### 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.

#### Investment Performance

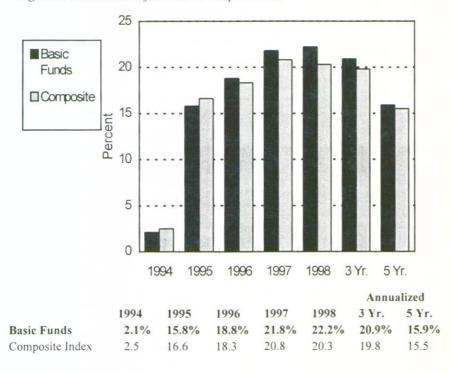
As stated earlier, the Basic Funds are expected to exceed the return of a composite of market indices over a five year period. Performance relative to this standard will measure two effects:

- 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 its 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, 1998, the Basic Funds out-performed the composite index by 0.4 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, while the domestic stock segment matched index performance during the period.

Actual returns relative to the total fund composite index over the last five years are shown in Figure 10.

Figure 10. Basic Funds Performance vs. Composite Index



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, 1998, the Post Fund had a market value of \$17.0 billion and more than 95,000 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 of the Post Retirement Fund 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 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%. Retirees were given a one time permanent adjustment in their pension to compensate them for the increase in the assumed rate.

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 assumption and the inflation adjustment. Investment gains and losses are spread over five years to smooth out the volatility of returns. In addition, all

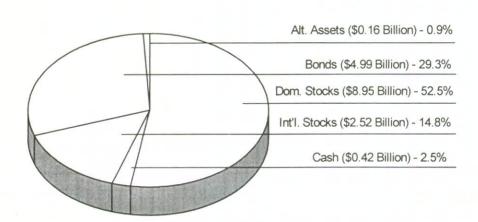
accumulated investment losses must be recovered before an investment-based adjustment is granted.

#### Investment Objective

#### Time Horizon

The time horizon of the Post Fund is 15 to 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

Figure 11. Post Fund Asset Mix as of June 30, 1998



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

Uninvested portions of the Alternative Assets allocation are held in Bonds.

#### Post Retirement Fund

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 current long-term asset allocation for the Post Fund is as follows:

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. The asset allocation is under constant review. No substantial change occurred during fiscal year 1998.

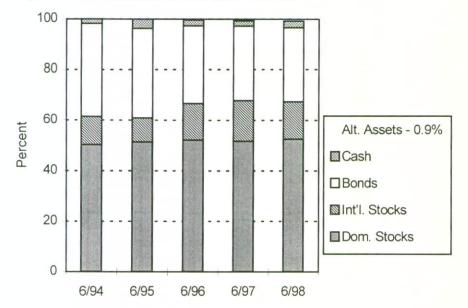
#### **Diversified Vehicles**

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 investments 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.

Figure 12. Post Fund Historical Asset Mix FY 1994-1998



#### Post Retirement Fund

While the Board made several commitments to yield oriented alternative investments during the year, the market value of the alternative segment was only 0.9% of the total fund on June 30, 1998. 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.

#### Investment Management

In order to gain greater operating efficiency, the Basic and Post Funds share the same domestic stock, bond and international stock managers.

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. The Post Fund's performance exceeded its composite market index by 0.7 percentage point for the most recent five year period.

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

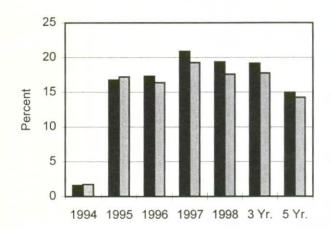
#### Benefit Increase

The Post Fund will provide a benefit increase of 9.8% for fiscal year 1998 payable beginning January 1, 1999. As noted earlier, this increase is comprised of two components:

Inflation component of 1.5% which is equal to 100% of the increase in the Consumer Price Index for wage earners (CPI-W) for the twelve months ending June 30, 1998. (This is the same inflation index used to calculate increases in Social Security payments).

Figure 13. Post Fund Performance vs. Composite Index





						Annua	lized
	1994	1995	1996	1997	1998	3 Yr.	5 Yr.
Post Fund	1.6%	16.7%	17.2%	20.8%	19.4	19.1%	14.9%
Composite Index	1.7	17.2	16.3	19.3	17.6	17.7	14.2

Figure 14. Historical Benefit Increases Granted

	Benefit
Fiscal Year*	Increase
1989**	4.0%
1990**	5.1
1991**	4.3
1992**	4.6
1993	6.0
1994	4.0
1995	6.4
1996	8.0
1997	10.1
1998	9.8

- \* Payable beginning January 1, of the following calendar year.
- \*\* Benefit increase granted under the previous formula.
- This represents a portion of 8.3% This represents a portion of the market value increase that exceeds the amount needed to cover the actuarial assumed rate of return (6.0% beginning FY98) and the inflation adjustment.

Benefit increases for the past ten years are shown in Figure 14. The 9.8% increase granted for fiscal year 1998 represents the sixth 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 1998 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 and Common Stock Index Account in the Supplemental Investment Fund have utilized a portion of the Pool.

As of June 30, 1998, the dollar value of each fund's participation in the Pool was:

Basic Funds \$9.8 billion (active, passive and semi-passive)

Post Fund \$8.9 billion (active, passive and semi-passive)

Growth Share
Account \$278 million
(active and semi-passive)

Common Stock Index Account \$212 million (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 1998, approximately 36% of the Domestic Stock Pool was actively managed by a group of external money managers. The assets allocated to each of ten managers ranged from \$200 million to \$1.3 billion.

In addition, the actively managed segment of the Pool includes eight managers in the SBI's Emerging Manager Program. Emerging Managers have portfolios of \$50 to \$160 million which in aggregate gives the Emerging Manager Program about the same weight as an average single manager in the active manager program.

— Semi-Passive Management. At the end of fiscal year 1998, approximately 31% of the Domestic Stock Pool was managed by a group of three semi-passive external money managers with portfolios of approximately \$2.0 billion each.  Passive Management. At the end of fiscal year 1998, approximately 33% of the Stock Pool was managed passively by a single manager.

The goal 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. Some examples of misfit that the SBI has experienced are the following:

- an over-exposure to mid and small-capitalization stocks and an under-exposure to large capitalization stocks;
- an over-exposure to growth oriented stocks and an underexposure to value oriented stocks; or
- an over-exposure to the consumer non-durable sector and an under-exposure in the utility sector.

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 semi-passive 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.

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.

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

#### FY 1998 Changes

One domestic stock manager (Independence Investment Associates) was terminated from the active manager group during the fiscal year.

#### Investment Performance

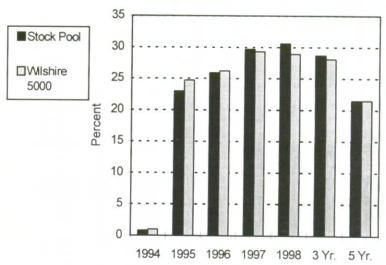
A comprehensive monitoring system has been established to ensure that the many elements of the Domestic Stock Pool conform to the SBI's investment policies. Customized performance benchmarks have been developed for each active and semipassive stock manager. These benchmarks enable the SBI to evaluate 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. The passive and semi-passive managers are expected to hold highly diversified portfolios, while each active domestic stock manager is expected to hold a less diversified portfolio.

The domestic stock managers successfully fulfilled their long-term risk objectives during fiscal year 1998. In general, the managers constructed portfolios consistent with

Figure 15. Domestic Stock Pool Performance FY 1994-1998



						Annua	alized
	1994	1995	1996	1997	1998	3 Yr.	5 Yr.
Stock Pool	0.8%	23.0%	25.9%	29.7%	30.6%	28.7%	21.5%
Wilshire 5000	1.0	24.7	26.2	29.3	28.9	28.1	21.5

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 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 ± 0.10 percentage point annualized, over time.

In aggregate, the Domestic Stock Pool outperformed the Wilshire 5000 by 1.7 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" multi-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 16. Domestic Stock Manager Performance FY 1998

	Actual Return	Benchmark Return
Active Managers		
Alliance Capital Management	50.6%	36.0%
American Express Asset Mgmt.	21.9	30.6
Brinson Partners	22.0	27.7
Forstmann Leff Associates	32.1	15.8
Franklin Portfolio Associates	34.3	27.2
GeoCapital	28.1	12.2
Investment Advisers	10.8	21.8
Lincoln Capital Management	33.2	35.6
Oppenheimer Capital	32.0	29.3
Weiss Peck & Greer	9.9	14.7
Semi-Passive Managers		
Barclays Global Investors	29.8	30.5
Franklin Portfolio Associates	33.1	30.5
J.P. Morgan Investment Mgmt.	31.2	30.5
Passive Manager		
Barclays Global Investors	29.4	28.9
Aggregate Stock Pool*	30.6	
Asset Class Target		
Wilshire 5000	28.9	

Figure 17. Emerging Manager Performance FY 1998

\* Includes Emerging Manager Program, see below.

	Actual	Benchmark
	Return	Return
CIC Asset Management	27.1%	28.5%
Cohen Klingenstein & Marks	34.1	27.9
Compass Capital Management	28.1	28.7
New Amsterdam Partners	38.0	25.2
Valenzuela Capital Partners	24.0	21.0
Wilke/Thompson Capital Mgmt.	18.5	17.4
Winslow Capital Management	39.1	29.7
Zevenbergen Capital	40.7	29.8

Figure 15 provides more detail on the historical performance of the entire Pool. Individual manager performance for fiscal year 1998 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. Five active managers outperformed their benchmarks while five under performed. Two of the three semipassive 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. Six managers outperformed their benchmarks and two 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, 1998, the dollar value of each fund's participation in the Pool was:

Basic Funds \$4.2 billion (active and semi-passive)

Post Fund \$5.0 billion (active and semi-passive)

Bond Market \$35 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 1998, approximately 50% of the Bond Pool was actively managed by a group of six external money managers with portfolios of \$570 million-\$1.3 billion each.

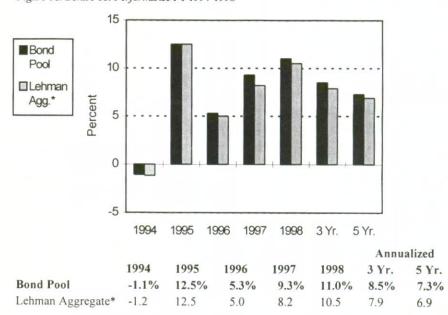
— Semi-Passive Management. At least one-half of the assets allocated to the Bond Pool will be managed by semi-passive managers. At the end of fiscal year 1998, approximately 50% of the bond segment was invested by three managers with portfolios of approximately \$1.5 billion each.

The group of *active* bond managers was selected for its blend of investment styles. Each active manager has the goal of adding incremental value to the Lehman Aggregate Bond Index by focusing 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 duration range (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 (BBB or better) rated bonds. Some managers have been granted authority to invest a limited portion of their portfolios in BB and B rated dollar denominated debt or in nondollar denominated issues. 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

Figure 18. Bond Pool Performance FY 1994-1998



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

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
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 1998 Changes

The active and semi-passive structure and the individual managers in the Bond Pool were unchanged during fiscal year 1998.

#### 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

Figure 19. Bond Manager Performance Actual Return **Active Managers** American Express Asset Mgmt. 11.2% **BEA Associates** 11.1 10.0 Investment Advisers Miller, Anderson & Sherrerd 9.9 10.1 Standish, Aver & Wood Western Asset Management 12.7 Semi-Passive Managers 11.0 BlackRock Financial Goldman Sachs Asset Mgmt. 10.9 10.9 Lincoln Capital Management 11.0 Aggregate Bond Pool Asset Class Target 10.5 Lehman Aggregate

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 1998. In general, the managers constructed portfolios 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 benchmark by 0.5 percentage point for the recent fiscal year. Relative to the benchmark, the Pool benefited from a slightly longer duration portfolio, active yield curve positioning decisions, and an overweighting in the mortgage sector. Exposure to domestic high yield and non-dollar bonds also added value to performance. The overweighting of the corporate sector had a slightly negative impact on performance relative to the benchmark.

Performance over longer periods has been positive as well, exceeding the benchmark by 0.6 percentage point annualized over the three-year period and 0.4 percentage point over the five year period ended June 30, 1998. In general, the decision to hold portfolios with a modestly longer duration than the benchmark

accounted for the outperformance over the longer term.

The relative performance of the active managers was mixed over fiscal year 1998; three of the active managers added value while three lagged the benchmark. All three semi-passive managers added value during fiscal year 1998.

Figure 18 shows historical performance for the entire Pool. Individual manager performance for fiscal year 1998 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, 1998 the dollar value of each fund's participation in the International Stock Pool was:

Basic Funds \$2.8 billion (active and passive)

Post Fund \$2.5 billion (active and passive)

International \$25 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. The target is to have at least one-half of the International Stock Pool managed actively. At the end of fiscal year 1998, approximately 45% of the Pool was actively managed by a group of 7 external money managers with portfolios ranging from \$100 to \$575 million each. Four of these managers focus on developed markets and three are emerging markets specialists.
- Passive Management. The target is to have no more than one-half of the International Stock Pool managed passively. At the end of fiscal year 1998, approximately 55% 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 a 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 Street Global Advisors. Their portfolio is designed to consistently and inexpensively track the EAFE Free index. A portion of 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 1998 Changes

During fiscal year 1998, the size of the currency overlay program was reduced by one-half to reduce the program's volatility relative to an unhedged benchmark.

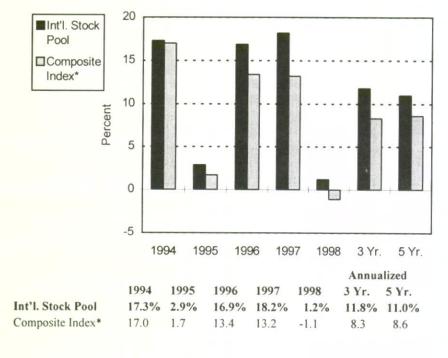
#### Investment Performance

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. While the index manager is expected to hold a well diversified portfolio which tracks its target index, each active manager is expected to hold a less diversified portfolio.

The international stock managers successfully fulfilled their long-term

Figure 20. International Stock Pool Performance FY 1994-1998



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

risk objectives during fiscal year 1998. 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 ±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 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 2.3 percentage points. Performance over the last three and five year periods exceeded the benchmark by 3.5 and 2.4 percentage points annualized, respectively.

Individual manager performance during fiscal year 1998 is shown in Figure 21. The fiscal year proved to be a period of significant market volatility with investors seeking refuge in large quality firms. This hurt performance for managers that maintained a diversified portfolio strategy. One Active EAFE Manager outperformed the EAFE Free index, while three under-performed. The emerging markets plunged more than 39% during the fiscal year, however, two of the three Emerging Market Managers outperformed the Emerging Markets Free index. The passively managed portion of the program trailed EAFE Free by 10 basis points for the year. The currency overlay program added significant value to the International Stock Pool and compensated for the effects of foreign currency depreciation against the US dollar.

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

Figure 21. International Manager Performance FY 1998

	Actual	
	Return	Benchmark
Active EAFE Managers		
Brinson Partners	5.4%	5.9%
Marathon Asset Management	-1.9	5.9
Rowe Price-Fleming International	4.1	5.9
Scudder Kemper Investments	7.8	5.9
Active Emerging Markets Managers		
City of London Investment Management	-29.4	-39.1
Genesis Asset Managers International	-34.7	-39.1
Montgomery Asset Management	-39.6	-39.1
Passive EAFE Manager		
State Street Global Advisors	5.8	5.9
Equity Only Aggregate	-0.5	
Aggregate International Pool*	1.2	
Asset Class Target **	-1.1	

- \* Includes impact of currency overlay gain/loss. During fiscal year 1998, Record Treasury Management added 1.7% to the total program.
- \*\* The composite was weighted 87% EAFE Free and 13% Emerging Markets Free.

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, 1998 the market value of current alternative investments was \$1.9 billion, or 10.0% 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 1998, the SBI approved one new real estate commitment in Colony Investors III. 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 1998, the Board approved commitments to Welsh, Carson, Anderson & Stowe VIII, RCBA Strategic Partners, Banc Fund V, Fox Paine Capital, Summit Ventures V, Coral Fund V, Warburg Pincus Equity Partners, Thoma Cressey Fund VI, and GTCR Golder Rauner Fund VI. 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 oil service 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 1998, the SBI continued to review resource investments for possible inclusion in the Pool and made new commitments to SCF Partners IV and First Reserve VIII.

#### 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 1998, the SBI's real estate pool outperformed the index and exceeded the rate of inflation (SBI real estate 41.1%, Wilshire Real Estate Index 15.7%, CPI 1.6%). Comparisons over the last five years show that the real estate pool outperformed the real estate index and the rate of inflation (SBI real estate 10.8% annualized, Wilshire index 6.3% annualized, CPI 2.4% 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 49.0% return in fiscal year 1998 and 26.0% annualized over the last five years. The *resource* (oil and gas) pool returns are 33.3% for the year and 18.8% 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, 1998, the market value of the Post Fund's alternative investments was \$157.3 million, 0.9% of the Post Fund.

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

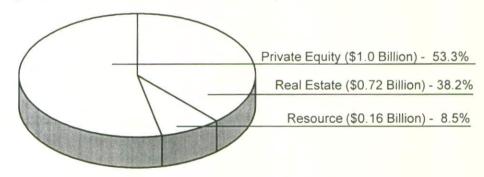
*Yield-oriented investments* (e.g. business loan participations, mortgage loan participations, and income producing private placements) provide additional vehicles to obtain both higher yield and long-term capital appreciation.

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 1998, the Board approved two commitments for the Post Fund: Merit Energy C and Westmark Commercial Mortgage Fund IV. Both commitments are follow-on funds with existing managers. While these investments cross asset class lines (the first is resource, 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.

The SBI's yield-oriented investments provided a 15.0% return for the year and 12.4% annualized return over the last three years.

Figure 22. Basic Funds' Alternative Investments as of June 30, 1998



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, 1998, the market value of the entire Fund was \$1.25 billion.

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 (MnSCU).
- 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 Invest.	ment	Fund
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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	a fixed income portfolio utilizing active and semi- passive management
Money Market	a portfolio of liquid, short-term debt securities
Fixed Interest	a portfolio of guaranteed investment contracts (GIC's and GIC type investments

The investment returns shown in this report are calculated using a time-weighted 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, 1998 is shown by Account in Figure 24 and by Plan in Figure 25.

Figure 24. Composition by Account as of June 30, 1998

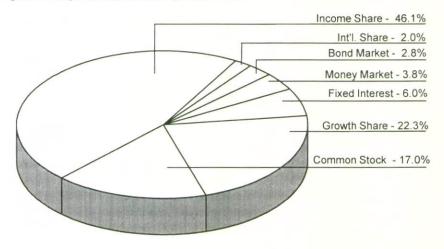
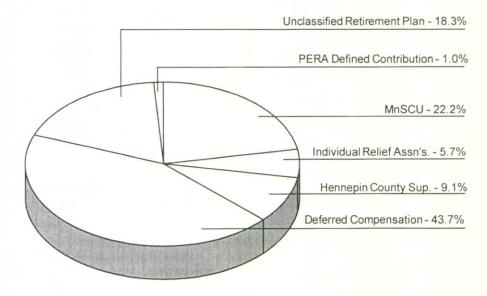


Figure 25. Participation by Plan as of June 30, 1998



#### 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 adverse 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 long-term 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 1998, the value of the Income Share Account was \$575 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.

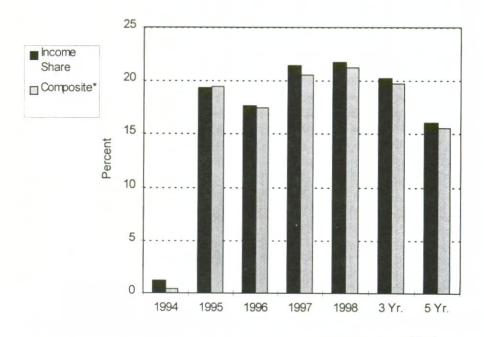
#### Performance

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. The internal bond manager for the Account is expected to exceed the performance of the Lehman Brothers Aggregate Bond Index.

The Income Share Account provided a return of 21.7% for fiscal year 1998, 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.

Figure 26. Income Share Account FY 1994-1998



						Annua	alized
	1994	1995	1996	1997	1998	3 Yr.	5 Yr.
Income Share	1.2%	19.3%	17.6%	21.4%	21.7%	20.2%	16.0%
Composite*	0.4	19.4	17.4	20.5	21.2	19.7	15.5

<sup>\*60%</sup> Wilshire 5000/35% Lehman Brothers Aggregate Bond Index/ 5% 90-Day T-Bill Composite. 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 1998, the value of the Growth Share Account was \$278 million.

#### Management

The assets of the Growth Share Account are invested by the external active and semi-passive managers. This allocation reflects a more aggressive investment than is available through passive management. Since July 1997, these assets have been managed by the same active and semi-passive managers utilized by the Basic and Post Retirement Funds in the Domestic Stock Pool. (Prior to July 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:

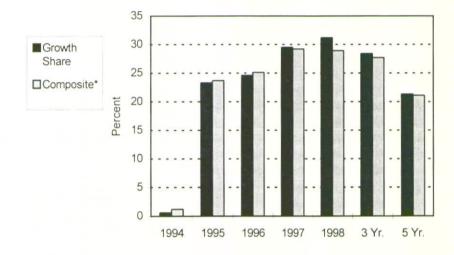
- Total Account. The Growth Share Account is expected to exceed the returns of the Wilshire 5000.
- Individual Manager.
   Performance objectives for the individual managers are described in the Investment

Pool section.

The Growth Share Account provided a return of 31.2% for the fiscal year, outperforming its composite index by 2.3 percentage points. Over the most recent five years, the Account has exceeded its composite index by 0.2 percentage point annually.

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

Figure 27. Growth Share Account FY 1994-1998



						Annua	ılized
	1994	1995	1996	1997	1998	3 Yr.	5 Yr.
<b>Growth Share</b>	0.6%	23.3%	24.6%	29.5%	31.2%	28.4%	21.3%
Composite*	1.2	23.7	25.1	29.2	28.9	27.7	21.1

<sup>\* 95%</sup> Wilshire 5000/5% T-Bill Composite through October 1996. 100% Wilshire 5000 since November 1996.

# 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 1998, it had a market value of \$212 million.

#### Management

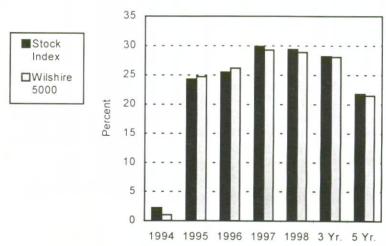
Since July 1, 1995, the Account has been managed by Barclays Global Investors.

#### Performance

The performance objective of the Common Stock Index Account is to track the performance of the Wilshire 5000. The SBI recognizes that the Account's returns may deviate slightly from those of the Wilshire 5000 due to the effects of management fees, timing of new contributions and tracking error.

During fiscal year 1998, the Common Stock Index Account produced a return of 29.4%, which was 0.5 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.

Figure 28. Common Stock Index Account FY 1994-1998



						Annua	alized
	1994	1995	1996	1997	1998	3 Yr.	5 Yr.
Stock Index	2.2%	24.3%	25.5%	29.9%	29.4%	28.2%	21.8%
Wilshire 5000	1.0	24.7	26.2	29.3	28.9	28.1	21.5

### International Share Account

The International Share Account was added to the Supplemental Investment Fund in September 1994. At the end of fiscal year 1998, it had a market value of nearly \$25 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

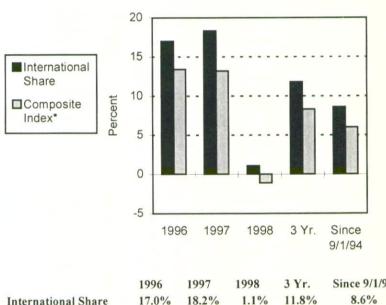
The structure of the International Share Account combines both active and passive management. Approximately one half of the Account is passively managed and is designed to consistently and inexpensively track the return of the Morgan Stanley Capital International index of Europe, Australia and the Far 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 1998, the International Share Account produced a return of 1.1%, which was 2.2 percentage points above its composite index. Since inception of the Account in September 1994. returns exceeded the index by 2.6% annualized.

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

Figure 29. International Share Account Performance



	1996	1997	1998	3 Yr.	Since 9/1/94
International Share	17.0%	18.2%	1.1%	11.8%	8.6%
Composite Index*	13.4	13.2	-1.1	8.3	6.0

<sup>\*</sup>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 investment-grade 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 1998, the market value of the Account was \$35 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

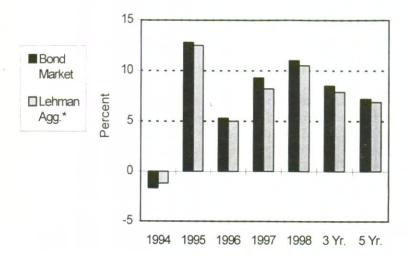
Since July 1997, the structure of the Bond Market Account has included active and semi-passive managers and has mirrored the structure of the Bond Pool utilized by the Basic and Post Funds. (Prior to July 1997, the Bond Market Account used only active managers.)

#### 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 1998, the Account outperformed by 0.5 percentage point. For the most recent five years, the Account has outperformed by 0.3 percentage point annualized.

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

Figure 30. Bond Market Account FY 1994-1998



						Annua	alized
	1994	1995	1996	1997	1998	3 Yr.	5 Yr.
<b>Bond Market</b>	-1.7%	12.8%	5.3%	9.3%	11.0%	8.5%	7.2%
Lehman Aggregate*	-1.2	12.5	5.0	8.2	10.5	7.9	6.9

<sup>\*</sup> 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 1998, the Money Market Account had a market value of \$47 million.

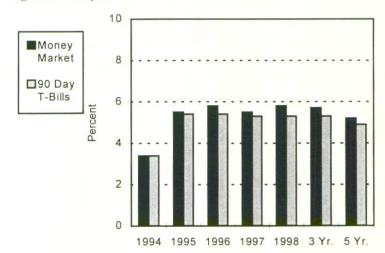
#### Management

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 1998 with a 5.8 % return versus a return on 90-Day Treasury Bills of 5.3%. Total account results for prior years are shown in Figure 31.

Figure 31. Money Market Account FY 1994-1998



1994	1995	1996	1997	1998	3 Yr.	5 Yr.
3.4%	5.5%	5.8%	5.5%	5.8	5.7%	5.2%
3.3	5.4	5.4	5.3	5.3	5.3	4.9
	3.4%	3.4% 5.5%	3.4% 5.5% 5.8%	3.4% 5.5% 5.8% 5.5%	3.4% 5.5% 5.8% 5.5% 5.8	3.4% 5.5% 5.8% 5.5% 5.8 5.7%

#### 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 1998, the Account totaled \$75 million.

#### Management

The assets in the Account are invested primarily in stable value instruments which are guaranteed investment contracts (GIC's) and GIC-type investments offered by

major U.S. companies and banks with varying maturities, typically 3 to 5 years. The assets also may be invested in comparable investments offered by non-U.S. financial institutions. The interest rate credited changes monthly and reflects the blended interest rate available from all investments in the pool each month along with any cash held for liquidity purposes.

The manager for the Account is Galliard Capital Management, a unit of Norwest Bank, N.A. Galliard has managed the Account since November 1994 when the Account was changed to its current portfolio structure.

Annualized

Performance results for the Fixed Interest Account are shown in Figure 32.

Figure 32. Fixed I	meresi Account
1996	6.7%
1997	6.6
1998	6.5
	Annualized
3 Yr.	6.6%
Since 11/1/94	6.7

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, 1998, the market value of the Plan's portfolio was \$694 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.

The actual asset mix will fluctuate in response to changes in the liability stream projected by the Plan's actuary and further analysis by the SBI staff.

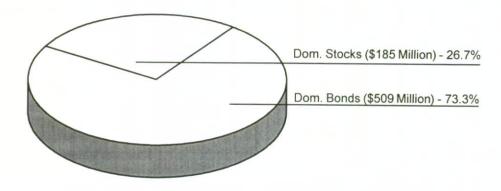
Figure 33 presents the actual asset mix of the Assigned Risk Plan at the end of fiscal year 1998. The current long term asset allocation targets for the Fund are as follows:

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.

Figure 33. Assigned Risk Plan Asset Mix as of June 30, 1998



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

#### **Bond Seament**

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

During fiscal year 1998, the bond

the target for the fixed income

component reflects the duration

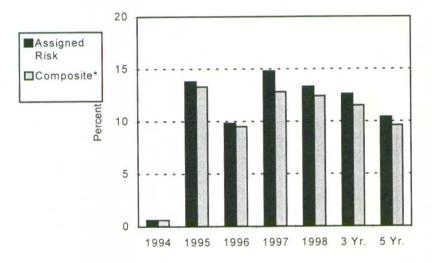
During fiscal year 1998, the **bond** segment outperformed its benchmark by 0.3 percentage point. The **stock** segment underperformed its benchmark by 1.4 percentage points.

Overall, the Assigned Risk Plan provided a return of 13.3% for fiscal year 1998, outperforming its composite index by 0.9 percentage point, 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 0.8 percentage point, annualized. The outperformance was attributable to the portfolio's overweighting in stocks in the last three 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 34.

Figure 34. Assigned Risk Plan Performance FY 1994-1998



		1995 13.8%				Annualized		
Assigned Risk	1994 0.6%		1996 9.8%	1997 14.8%	1998 13.3%	3 Yr. 12.6%	5 Yr. 10.4%	
Composite Index*	0.6	13.3	9.5	12.8	12.4	11.5	9.6	
Stock Segment	-1.2	25.9	25.2	34.4	28.9	29.5	22.0	
Benchmark	0.4	26.1	26.2	34.7	30.3	30.3	22.9	
Bond Segment	0.9	10.8	5.4	7.8	8.4	7.2	6.6	
Benchmark	0.8	10.2	5.6	7.7	8.1	7.1	6.4	

<sup>\*</sup>Weighted 20% stocks, 80% bonds since 11/93. Weighted 15% stocks, 85% bonds prior to 11/93.

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, 1998 the market value of the Fund was \$500 million.

## Investment Objective

The State Board of Investment (SBI) invests the Permanent School Trust Fund to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity that will assist in offsetting state expenditures on school aids.

#### Investment 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

distributed. Finally, all interest and dividend income must be distributed in the year in which it is earned.

## Asset Allocation

Prior to FY 1998, the Permanent School Fund had been invested entirely in fixed income securities for more than a decade. While this asset allocation maximized current income, it limited the long term growth of the Fund and caused 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 had budgetary implications for the state. As a result, such an asset allocation change could not be implemented without the consent of the executive and legislative branches.

During fiscal year 1997, a proposal to introduce equities was favorably received by the Legislature and incorporated into the K-12 education finance bill. As a result, the Fund allocation was shifted to a 50% stock/48% fixed income/2% cash allocation during July 1998. Figure 35 presents the actual asset mix of the Permanent School Trust Fund at the end of fiscal year 1998.

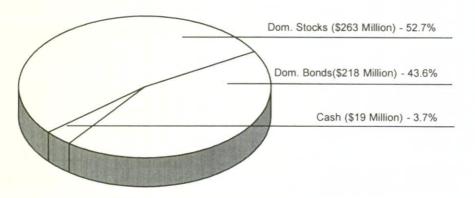
## Investment Management

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 management approach during fiscal year 1994. This approach includes more corporate and mortgage

Figure 35. Permanent School Fund Asset Mix as of June 30, 1998



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

## Permanent School Trust Fund

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.

## 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 of the Permanent School Fund was implemented in late July, 1997 and accomplished its objective of closely tracking the return of the S&P500 benchmark, outperforming the index by 0.1 percentage point. By investing in all 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 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 by 0.2 percentage point due to the sector weightings held in the portfolio versus the Lehman Aggregate Index.

*Overall*, the Permanent School Trust Fund provided a return of 17.8% for fiscal year 1998, outperforming its composite index by 0.9 percentage point.

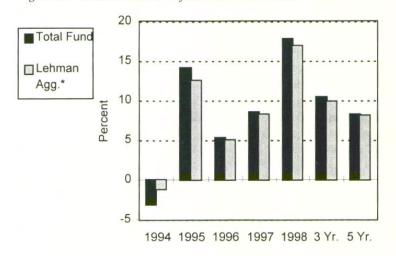
Total account results for the last five years are shown in Figure 36.

## Spendable Income

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

Fiscal Year	Millions
1994	\$33
1995	\$31
1996	\$31
1997	\$30
1998	\$20

Figure 36. Permanent School Performance FY1994-1998



						Annualized			
	1994	1995	1996	1997	1998	3 Yr.	5 Yr.		
<b>Total Fund</b>	-3.1%	14.1%	5.3%	8.5%	17.8%	10.4%	8.3%		
Composite*	-1.2	12.5	5.0	8.2	16.9	9.9	8.1		
Stock Segment	NA	NA	NA	NA	22.8	NA	NA		
S&P	NA	NA	NA	NA	22.7	NA	NA		
Bond Segment	-3.0	15.0	6.0	8.6	10.7	8.4	7.3		
Lehman Agg**	-1.2	12.5	5.0	8.2	10.5	7.9	6.9		

<sup>\* 50%</sup> S&P 500, 48% Lehman Aggregate, 2% -90 Day T-Bill. Prior to July 1, 1998, the Fund's benchmark was 100% Lehman Aggregate.

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

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, 1998, the market value of the Fund was \$236 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.

During fiscal year 1994, the SBI introduced equities into the portfolio and moved to the targeted 50% allocation to domestic common stocks. This allocation has been maintained since then.

Figure 37 presents the actual asset mix of the Environmental Trust Fund at the end of fiscal year 1998. The current long term asset allocation targets for the Fund are:

Domestic Stocks	50%
Domestic Bonds	48
Cash	2

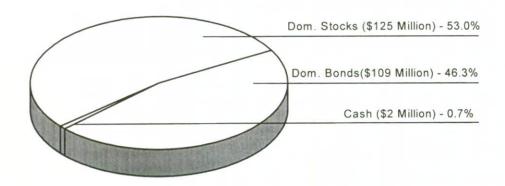
## Investment Management

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.

Figure 37. Environmental Trust Fund Asset Mix as of June 30, 1998



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

## Environmental Trust Fund

## **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&P 500 benchmark, returning 0.1 percentage point more than the S&P 500. By investing all 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 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 by 1.6 percentage points due to the sector weightings held in the portfolio versus the Lehman Aggregate.

Overall, the Environmental Trust Fund provided a return of 21.2% for fiscal year 1998, outperforming its composite index by 1.0 percentage point. The bond segment's outperformance accounted for the total fund's outperformance for the fiscal year. The fund experienced modest outperformance over the last three and five years due to the incremental value added by the bond segment.

Performance results are presented in Figure 38.

## Spendable Income

Spendable income generated by the Fund is shown below:

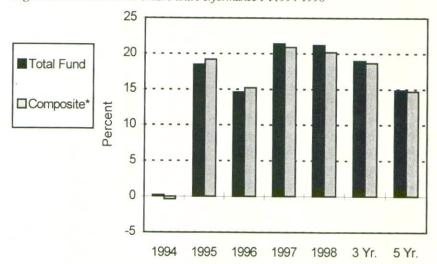
Fiscal Year	Millions
1994	\$3.9
1995	\$5.2
1996	\$6.0
1997	\$6.8
1998	\$8.8

#### Constitutional Amendment

In November 1998, the voters of Minnesota passed a constitutional amendment that continues through 2025 the mandate that 40 percent of the net proceeds from the state lottery be credited to the Fund.

The amendment also eliminates the accounting restrictions on capital gains and losses. The amendment provides for spending 5.5 percent of the Fund's market value annually, beginning fiscal year 2000.

Figure 38. Environmental Trust Fund Performance FY1994-1998



						Annualized			
	1994	1995	1996	1997	1998	3 Yr.	5 Yr.		
Total Fund	0.2%	18.5%	14.6%	21.4%	21.2%	19.0%	14.9%		
Composite*	-0.4	19.2	15.2	20.9	20.2	18.7	14.7		
Stock Segment	1.5	26.0	26.0	34.7	30.4	30.3	23.1		
S&P500	1.5	26.1	26.2	34.7	30.3	30.3	23.1		
Bond Segment	0.4	12.7	4.8	8.6	12.1	8.5	7.6		
Lehman Aggregate	-1.2	12.5	5.0	8.2	10.5	7.9	6.9		

<sup>\*</sup> Weighted 50% S&P500, 48% Lehman Aggregate, 2% 90 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, 1998, the total value of these accounts was \$6.7 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, 1998, the combined value of all agency cash balances was \$6.7 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 and retirement-related accounts that are managed internally. The Trust Fund Pool had an average daily balance of \$75.3 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 \$5.0 billion during the year.

Staff also manages approximately \$1 billion of assets in separately managed dedicated accounts because of special legal

restrictions. The vast majority of these assets are related to state or state agency debt issuance including debt service reserves and proceeds.

#### Performance

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

For fiscal year 1998, the Trust Fund Pool and the Treasurer's Cash Pool outperformed their respective benchmarks. Both pools also outperformed the total return on 90 Day Treasury Bills.

Trust Fund Pool Benchmark	<b>5.8%</b> 5.2
Treasurer's Cash Pool Benchmark	<b>5.9</b> 5.4
90 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.

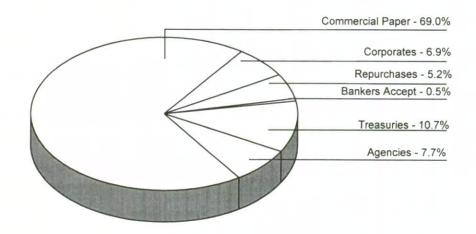
Beginning in January 1997, the Trust Fund Pool is measured against the IBC All Taxable Money Fund Index.

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, 1998 the Treasurer's Cash Pool was dominated by high quality commercial paper holdings. The composition of the pool is shown in Figure 39. At the end of the

Figure 39. Invested Treasurer's Cash Fund Distribution as of June 30, 1998



## Cash Management & Related Programs

fiscal year, the pool had a current yield of 5.7% and an average maturity of 157 days.

## 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 \$13.3 million during fiscal year 1998 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 1998, the SBI purchased over \$344.2 million of CD's from Minnesota financial institutions. Since it began the program in 1980, the SBI has purchased over \$2.7 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 1998, the SBI purchased \$23.5 million in repos from Minnesota financial institutions. The SBI expects to evaluate the pilot program during fiscal year 1999.

## Legislative Update

The State Board of Investment (SBI) did not initiate any legislative proposals for the 1998 Legislative Session. The Legislature did, however, enact several measures that affect SBI operations.

A bill to require statewide voting on a constitutional amendment to abolish the Office of State Treasurer was enacted as *Laws of Minnesota 1998*, Chapter 387. The amendment, adopted by voters in the November 1998 elections, eliminates the Office of State Treasurer in 2003 upon completion of the four-year term of the treasurer elected in 1998. The bill provides for a State Board of Investment of four members, not five, beginning 2003.

The Omnibus Pension Bill was enacted as *Laws of Minnesota* 1998, Chapter 390. The bill repeals the 40 basis point a year asset based charge in the Supplemental Investment Fund (SIF) effective July 1, 1999. Beginning on that date the SBI will no longer deduct the charge from the various accounts of the SIF. Instead, the retirement organizations are given authority to set an administrative charge separate from the SIF for the plans they administer.

A bill to require statewide voting on a constitutional amendment concerning the Environmental Trust Fund was enacted as *Laws of Minnesota 1998*, Chapter 342. Adopted by voters in the November 1998 elections, the amendment allows spending up to 5.5 percent of the market value of the Fund each year.

The annual realized earnings of the Fund will no longer be the basis for expenditures out of the Fund.

## Permanent School Fund Asset Allocation

For more than a decade the Permanent School Fund (PSF) was invested entirely in fixed income securities. While this asset allocation maximized current income, it limited the long-term growth of the Fund and caused the income stream to lose value in inflation-adjusted terms. Both issues were addressed by re-introducing equities to the Fund's asset mix.

Although this change would be beneficial for the fund over the long term, such a move had budgetary implications and could not be implemented without the consent of the executive and legislative branches.

During FY97, 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 K-12 education budget adopted by the Legislature during the 1997 session.

The asset allocation of the PSF was changed from 100% bonds to 50% stocks/48% bonds/2% cash at the start of FY98. During FY98, staff formally updated the written policy paper on the Permanent School Fund to reflect these changes in asset allocation.

## 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 (MSRS).
- 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 plans.

The insurance companies currently used by these programs are shown in Figure 40.

The Legislature mandated that the SBI conduct a study to review the vendor selection process and service delivery mechanism for 403(b) annuities and submit the report by February 1, 1998. The SBI conducted a thorough review of all aspects of the 403(b) market place and presented its findings. The main conclusion drawn from the study is that establishing a statewide plan would be the most efficient and effective delivery mechanism for

the 403(b) program. During the 1998 Legislative Session no action was taken related to this proposal.

In fiscal 1998, the SBI and MSRS began a restructuring of the 457 Plan. The SBI selected six mutual funds as external stock and bond investment options and three insurance companies to jointly provide a fixed interest option.

MSRS selected a central recordkeeper and a central service/communication firm. The restructured Plan is scheduled to take effect July 1, 1999. As of the close of the fiscal year, contracts had not been signed with the selected companies.

Figure 40. Insurance Companies Selected or Approved by the SBI

State Deferred Compensation (457) Plan (through June 30, 1999)

Great-West Life & Annuity Insurance Co. The Minnesota 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

Mergers with PERA: 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.

Two plans consolidated during fiscal year 1998 with assets of \$25.3 million. Since 1987, 43 plans with total assets of \$601 million have merged with PERA. After consolidation, these assets are managed as part of the Basic and Post Retirement Funds.

#### Volunteer Fire Plans Investment:

Police and fire plans that are not consolidated with PERA may invest their assets with the SBI through the Supplemental Investment Fund (SIF). There are more than 700 local volunteer firefighter plans with investment authority.

During fiscal year 1998, an additional 35 plans selected the SIF for all or a portion of their retirement assets. This brought the total number of police and fire plans participating in the Supplemental Investment Fund to 162 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.

#### Local Plan Performance Reports:

In fiscal year 1998, the SBI developed a system to provide the local plans that participate in the Supplemental Investment Plan reports displaying their annual returns and market values from the SIF in compliance with *Minnesota Statutes*, Chapter 356. The local plans are responsible for providing their specific data to the Office of the State Auditor.

## 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. Approximately one-half of the world's markets lie outside the U.S.

U.K., Japan, Germany and France comprise nearly two-thirds of the value of the international markets. Seventeen (17) 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 make up the remainder of the international markets 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.

In 1998, the SBI updated the country groupings. Figure 41 displays the revised groupings.

Figure 41. Current International Investing Guidelines Country Groupings\*

**Group III** 

Croatia

Egypt

Jordan

Kuwait

Lebanon Liberia

Mauritania

Myanmar (Burma)

Morocco

Nigeria

Parkistan

Paraguay Peru

Saudi Arabia

Turkmenistan

Uzbekistan Vietnam

United Arab Emirates

Russia

Oman

Guatemala

Indonesia

Bangladesh

China, Peoples Republic of

Group I	Group II
Australia	Argentina
Austria	Bolivia
Barbados	Botswana
Belgium	Brazil
Canada	Bulgaria
Chile	Colombia
Costa Rica	Cote d'Ivorie
Cyprus	Dominican Republic
Czech Republic	Ecuador
Denmark	Ghana
Estonia	Hong Kong
Finland	India
France	Israel
Germany	Jamaica
Greece	Kazakhstan
Hungary	Kenya
Ireland	Korea, Republic of
Italy	Latvia
Japan	Lithuania
Luxembourg	Malawi
Mauritius	Malaysia
Netherlands	Mexico
New Zealand	Mongolia
Norway	Namibia
Poland	Nepal
Portugal	Panama
Singapore	Papua New Guinea
Slovak Republic	Philippines
Slovenia	Romania
Spain	South Africa
Sweden	Sri Lanka
Switzerland	Swaziland
Trinidad & Tobago	Taiwan
United Kingdom	Thailand
Uruguay	Tunisia
	Turkey
	Ukraine
	respiration of the second of t

Venezuela Zambia Zimbabwe

\* last revised in June 1998

## 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 1998, the SBI held stocks or bonds in 40 of 61 corporations identified by IRRC as having operations in Northern Ireland.

The SBI filed shareholder resolutions with 5 of these corporations during the 1998 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 dealt with a subject relating to the ordinary business operations of the company.

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

	Affirmative
Company	Vote
Baker Hughes	19.7%
Dun & Bradstreet	15.7
Interpublic	9.0

## Tobacco Issues

During fiscal year 1998, investment in tobacco-related stocks again received considerable attention by the State Board of Investment (SBI).

As in the previous fiscal year, the Board received updates on the SBI's holdings of tobacco related stocks at each of its quarterly meetings.

#### Directives to Stock Managers

In fiscal year 1997, in response to concerns expressed by Board members, the SBI Executive Director issued a directive to the SBI's stock managers which required them to provide written justification to SBI staff if a manager chose to make new or additional purchases of stock in companies which obtain more than 50% of their revenues from the sale of tobacco. At its December 1997 meeting, the Board adopted a resolution making this action Board policy.

At its June 1998 meeting, the Board took further action regarding SBI investment in tobacco-related stocks. The Board adopted two resolutions that replace the 1997 directive to managers to justify new purchases of stock in certain tobacco-related companies.

The first resolution requires the SBI active and semi-passive equity managers to discontinue purchases of shares of any company that generates more than 15 percent of its revenue from the manufacture of consumer tobacco products. The second resolution requires the SBI staff to prepare and submit to the Board a plan for divestiture of shares of any company that generates more than 15 percent of its revenue from the manufacture of consumer tobacco

products held in the SBI's actively and semi-passively managed equity portfolios.

Before the end of the fiscal year, SBI staff notified the active and semipassive managers of the new policy and began work on the divestiture plan.

The Board will continue to receive updates on the SBI's holdings of tobacco-related stocks and is expected to continue to monitor the issue very closely.

#### Shareholder Resolutions

During the 1998 proxy season, the SBI cosponsored four (4) tobaccorelated resolutions. One resolution was withdrawn when the company agreed to negotiations with the sponsors.

The resolution at Philip Morris requested management to implement the same programs that the Company has voluntarily proposed and adopted in the U.S. to prevent youth from smoking and buying cigarettes in developing countries. This resolution received support from 9.8% of the votes cast.

The resolution at Loews requested a report on the steps the company will take to warn women of child-bearing age of the harm caused by their tobacco use. The resolution received support from 3.7% of the votes cast.

The resolution at IHOP dealt with a request to make the Company's restaurants smoke-free. This resolution garnered support from 3.2% 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 case-by-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 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 1998 Proposals

During fiscal year 1998, the SBI voted proxies for approximately 4,200 U.S. corporations and more than 1,100 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 17 proposals to redeem "poison pills" (an anti-takeover device) or submit them to shareholder vote. These proposals received average support of 56.7%.
- Eight (8) proposals were submitted concerning confidential voting. These proposals received average support of 45.2%.
- Shareholders submitted 7 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 30.1%.
- Other proposals included the repeal of classified boards which were supported by an average of 44.5% of shares voted; limitations of severance packages to top executives ("golden parachutes") which received support from an average of 25.6% of shares voted; cumulative voting which was supported by an average of 26.1% of shares voted; and requirements for the majority of directors to be independent received support from an average of 23.8% of shares voted.

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

 Ceres Principles resolutions received 15 resolutions with average support of 8.3%.

- Energy related issues received 9 resolutions with an average support level of 7.2%.
- Equal employment issues received 4 resolutions with an average support of 14.4%.
- Resolutions on a variety of tobacco-related issues were on 12 ballots with an average support of 5.1%.
- Human rights issues received 11 resolutions with an average support level of 6.2%.
- Northern Ireland issues received
   5 proposals this year with an average support of 14.8%.

## Domestic Equity Program Managers

# Alliance Capital Management Corporation

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 Group Inc.

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 3000 stocks in their universe into three inputs: valuation, analyst, and signaling. The valuation inputs 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 analysts inputs incorporate future earnings and growth rate forecasts made by over 2500 security analysts. The signaling inputs provide a measure of recent changes in company fundamentals, consensus expectations, and performance. Estimated alphas are used in 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, Inc.

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, Inc. (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 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, Inc. (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 Asset Management, Inc.

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, LLC

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.

Investment Advisers 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.

## J.P. Morgan Investment Management Inc.

J.P. Morgan manages a semipassive 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 Company

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 L.L.C. (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-tobook 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 Partners, Inc. (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, L.L.C.

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, Inc. (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 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 Program 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 Investment Management Company Ltd.

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. City of London was retained by the SBI in May 1996.

## Genesis Asset Managers International Ltd.

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 Ma¥ 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 a 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. In April 1998, the SBI reduced the size of the currency overlay program by about one half to reduce its impact on the International Program return volatility. 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 abovemarket 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 Kemper Investments, Inc.

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 Free). 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.

## Fixed Income Program Managers

## American Express Asset Management Group Inc.

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 indepth 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 longterm 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 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' approach is based on top-down fundamental economic analysis and quantitative assessments of relative value and risk. Analysis of a variety of economic and monetary indicators helps the firm identify the economy's current position in the credit cycle. The interest rate forecast derived from this analysis determines the duration and yield curve strategy in the portfolio. Yield curve and duration strategies drive much of the firm's value added results. Portfolio risk is controlled through disciplined management of key risk variables. Sector allocation decisions are made by linking the top-down economic assessment with bottom-up relative value analysis among bond market segments. Individual security selection focuses largely on relative value analysis of each issue. Investment Advisers was retained by the SBI in July 1984.

## Lincoln Capital Management Company

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, LLP 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, Inc.

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 inter-sector swapping in non-government sectors. Standish was retained by the SBI in July 1993.

## Western Asset Management Company

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 Aetna Realty 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 III, L.P.

Colony Investors II and III are closed-end commingled real estate funds managed by Colony Capital Inc. of Los Angeles, CA. The funds' strategy is to invest in undervalued equity and debt real estate-related assets. The SBI committed to the Fund II in 1994 and Fund III in 1998. Fund II is expected to terminate in 2003 and Fund III in 2008.

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' wholly-owned 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.

# Equity Office Properties Trust Fund: Equity Office Properties Trust (EOP)

Equity Office Properties Trust (EOP), based in Chicago, is the successor entity to three Zell/ Merrill Lynch Real Estate funds in which the SBI had prior investments. In 1997, the Zell/ Merrill Lynch Real Estate funds were combined into a single publicly traded entity and the SBI received shares in EOP. Like the original Zell/ Merrill Lynch Real Estate funds, EOP focuses primarily on office property real estate investments located throughout the U.S. As a publicly-traded company, EOP has an indefinite life.

## 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
Banc Fund V

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. Fund V was formed in 1998 and has a nine year term. Based in Chicago, Illinois, the funds will invest primarily in subregional 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
Midwest.

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.

Funds: IAI Venture Partners
Coral Partners I
Coral Partners II
Coral Partners IV
Coral Partners V

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), IV and V are also Minnesotabased 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, 1994 and 1998, respectively, and have eleven year terms. IAI Ventures is undergoing an orderly liquidation of investments.

DSV Management Ltd. DSV Partners IV Fund: 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.

Fox Paine and Company, L.P.
Fund: Fox Paine Capital Fund
Fox Paine Capital Fund was formed in 1998 and has a ten year term.
Based in Foster City, CA, the fund focuses on private equity investments in middle market operating businesses in a wide variety of industries.

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

Golder, Thoma and Cressey Funds III, IV and V are venture capital limited partnerships and were formed in 1987, 1993 and 1996, 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.

## GTCR Golder Rauner, L. P. Fund: GTCR Golder Rauner Fund VI

GTCR Golder Rauner Fund VI, formed in 1998, is one of two successor firms to the private equity firm of Golder, Thoma, Cressey and Rauner. The SBI has several investments with Golder, Thoma, Cressey and Rauner. The fund has a ten year term. Based in Chicago, the fund focuses primarily on a wide variety of private equity investments in consolidating and fragmented industries.

#### 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.

#### Crescendo Ventures

Fund: Crescendo Venture Fund II Crescendo 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, high-technology firms. The fund will emphasize investments in California, where the general partner, Inman & Bowman Management, is based. However, the fund will consider investments in the Pacific Northwest as well. The partnership has a ten-year term which is currently in liquidation.

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

Funds: KKR 1984 Fund KKR 1986 Fund KKR 1987 Fund KKR 1993 Fund KKR 1996 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.

## 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 is undergoing 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 terminate in 1998. 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. First Century III Fund: 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 V

Summit Ventures I, II and V are limited partnerships formed in 1986, 1988 and 1998 with ten-year terms. Fund I and II are being liquidated. 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.

Thoma Cressey Equity Partners
Fund: Thoma Cressey Fund VI
Thoma Cressey Fund VI, formed in
1998, is one of two successor firms
to the private equity firm of Golder,
Thoma, Cressey and Rauner. The
SBI has several investments with
Golder, Thoma, Cressey and
Rauner. The fund has a ten year
term. Based in Chicago, the fund
focuses primarily on a wide variety
of private equity investments in
consolidating and fragmented
industries.

#### 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 Equity

Warburg, Pincus Equity
Partners
Warburg Pincus is based in New

York, New York. These funds will invest private equity in a wide variety of businesses located domestically and abroad. The SBI committed to the first fund in 1994 and the second fund in 1998. Both funds have a 12 year term.

Welsh, Carson, Anderson and Stowe Fund: Welsh, Carson, Anderson and Stowe Fund VIII

Welsh, Carson, Anderson and Stowe Fund VIII was formed in 1998 and has a twelve year term. Based in New York, N.Y., the fund focuses on private equity investments in the healthcare and information services industries.

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

First Reserve SEA First Reserve V First Reserve VII First Reserve VIII

American Gas and Oil (AMGO) funds were formed in 1981, 1983, 1988, 1990, 1996 and 1998, respectively, and are structured as limited partnerships. The funds are expected to terminate in 2001, 2001, 1998, 2000, 2006 and 2008, respectively. The general partner and manager of the funds is First

Reserve Corp. The general partner's long-term investment strategy is to create diversified portfolios of oil and gas investments. The portfolios are diversified across four dimensions: location, geological structure, investment type, and operating company.

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
OFS Investments, L.P. IV

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 II was formed in 1992, Fund III was formed in 1994 and Fund IV was formed in 1998. All 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 Commercial Mortgage Fund II, III and IV are funds formed in 1995, 1996 and 1997, respectively, 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 yieldoriented 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.

## Resource Funds

# Merit Energy Company Fund: Merit Energy Partners B and C

Merit Energy Partners B and C were formed in 1996 and 1998, respectively, and each fund has a eight year initial term. Based in Dallas, TX., the funds will focus on resource investments in producing oil and gas properties.

## Assigned Risk Plan Managers

#### GE Investment Management

GE Investment manages a semipassive stock portfolio for the Assigned Risk Plan. They believe that style leadership cannot be predicted in the equity market and can overwhelm stock selection in the short-term. Their strategy is to neutralize the style bet and focus on fundamental, bottom-up stock selection to add value. This is accomplished by combining the expertise of four portfolio managers, each with different styles ranging from value to growth, supported by a staff of nine industry analysts. Each analyst is responsible for one or more industries and together provide analytical coverage across the full spectrum of industries. The four portfolios are combined to create a well-diversified portfolio while maintaining a style-neutral position between value and growth. GE Investments was retained by the SBI in January 1995.

## Vogageur Asset Management

Voyageur manages the fixed income portfolio for the Assigned Risk Plan. The main objective for the portfolio is to provide cash for the payment of workers compensation claims on the

required dates. Because of the uncertainty of premium and liability cash flows, the fund is invested conservatively. Voyageur uses a top-down approach to bond selection. They focus on sector analysis and security selection. Yield curve and duration analysis are secondary considerations. Voyageur was responsible for the stock and bond portfolios when the SBI assumed responsibility for the plan in 1991. The firm has managed only the bond portfolio since 1994.

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## Stock Manager Risk Factor Exposure Glossary

The following definitions describe the risk factors that the State Board of Investment (SBI) uses in monitoring its stock managers. The terms are referred to in the Risk Factor Exposure table that follows this glossary.

SBI analysis of a stock manager's portfolio, in part, utilizes the BARRA E2 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 1500 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.

#### 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.

#### Success (Suc.)

Describes the extent to which a company has been "successful" in the recent past, in terms of stock prices and to a lesser degree, earnings growth information. Composed of six descriptors: relative strength over the last twelve months, historical alpha based on five-year regression to the S&P500, most recent one-year earnings growth, forecasted next year's earnings growth, the average dividend cut over the last five years, and earnings growth for the last five years.

#### Size

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

#### 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.

#### 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.

## 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).

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

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

#### 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.

## Financial Leverage (Finl.)

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.

## 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.

## Dividend Yield (Div. Yld.)

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

## 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.

## Equity Allocation (Eq. Alloc.)

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

## EXTERNAL ACTIVE STOCK MANAGERS

## Risk Factor Exposures July 1993 - June 1998

		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.
Alliance Capital Management  Minimum 1.13 0.14 0.00 0.22 0.02 0.31 -0.22 -0.49 -0.09 -0.16 -0.26 0.14 -0.81 0.16 78%															
Minimum	1.13	0.14	0.00	0.22	0.02	0.31	-0.22	-0.49	-0.09	-0.16	-0.26	0.14	-0.81	0.16	78%
Average	1.18	0.35	0.34	0.36	0.26	0.52	-0.03	-0.37	0.07	0.03	0.04	0.21	-0.53	3.41	99%
Maximum	1.24	0.54	0.67	0.48	0.42	0.77	0.11	-0.26	0.28	0.19	0.25	0.36	-0.35	9.88	100%
Bmrk. Avg.	1.10	0.19	0.14	0.08	0.12	0.33	-0.06	-0.23	-0.03	0.02	0.02	0.29	-0.38	N.A.	97%
American Expr			1000												000/
Minimum		-0.03				-0.01						-0.11			83%
Average		0.17				0.24			0.15			0.11	-0.28		94%
Maximum	1.14	0.50	0.56	0.51	0.47	0.59	0.35	0.14	0.36	0.26	0.27	0.33	-0.09	71.41	100%
							0.00	0.00	0.00	0.00	0.10	0.16	0.10	27.4	070/
Bmrk. Avg.	1.06	0.12	0.12	0.06	0.20	0.15	-0.03	-0.09	0.03	0.03	0.10	0.16	-0.18	N.A.	9/%
Brinson Partner		0.17	0.22	0.65	0.06	0.06	0.25	0.00	0.07	0.04	0.20	-0.02	0.22	0.76	94%
Minimum		-0.17				-0.06 0.07	0.05	0.09	0.07		-0.39		-0.32		97%
Average	1.01	0.05	0.01			0.07	0.03		0.60			0.11	0.10		99%
Maximum	1.09	0.51	0.01	-0.57	0.52	0.29	0.29	0.29	0.00	0.42	0.01	0.10	0.10	7.90	7770
Bmrk. Avg.	1.00	0.11	-0.11	-0.55	0.15	0.06	0.00	0.16	0.16	-0.07	-0.27	0.03	-0.03	NA	99%
Billik, Avg.	1.00	0.11	-0.11	-0.55	0.15	0.00	0.00	0.10	0.10	-0.07	0.27	0.05	0.05	14.2 %	7770
Forstmann Leff	Assoc	iates													
Minimum		0.11	-0.28	-1.35	0.07	0.12	-0.43	-0.11	0.13	-0.08	-0.68	-0.37	-0.72	1.74	85%
Average		0.42		-0.85		0.55	-0.16	0.14	0.43	0.11	-0.31	-0.07	-0.54	8.34	95%
Maximum	1.13			-0.29		0.90	0.16	0.50	0.77	0.26	0.04	0.15	-0.33	17.69	100%
Bmrk. Avg.	1.12	0.52	0.04	-0.76	0.56	0.41	-0.04	-0.01	0.26	-0.04	-0.23	0.12	-0.36	N.A.	97%
Franklin Portfo	lio Ass	ociates													
Minimum	0.98	-0.01	-0.06	-0.55	0.13	-0.09	0.16	0.01				-0.34			97%
Average	1.03	0.18	0.15	-0.36	0.24	0.05	0.34	0.18				-0.07			
Maximum	1.06	0.28	0.34	-0.23	0.50	0.16	0.51	0.35	0.39	0.05	-0.01	0.15	0.15	22.05	100%
								2.55		2 8 9		2 (2/2)	2 120 0		
Bmrk. Avg.	1.01	0.09	-0.04	-0.39	0.16	0.06	0.02	0.07	0.09	-0.05	-0.25	0.02	-0.06	N.A.	98%

## EXTERNAL ACTIVE STOCK MANAGERS

## Risk Factor Exposures July 1993 - June 1998

	Var.				Trad.				Earn.		For.	Labor	Div.	Mo.	Eq.
	Beta	Mkts.	Suc.	Size	Act.	Growth	E/P	B/P	Var.	Finl.		Int.	Yld.		Alloc.
GeoCapital															
Minimum	0.96	0.32	-0.31	-2.36	0.06	0.75	-0.52	-0.33	0.19	-0.32	-0.67	0.25	-1.00	0.41	88%
Average	1.07	0.73	0.20	-2.19	0.24	0.84	-0.37	-0.14	0.31	-0.03	-0.56	0.39	-0.74	2.31	97%
Maximum	1.20	1.01	0.68	-1.95	0.46	0.97	-0.20	0.04	0.44	0.35	-0.49	0.52	-0.60	4.90	100%
Bmrk. Avg.	1.18	1.21	0.38	-2.33	0.67	1.19	-0.56	-0.19	0.65	-0.04	-0.56	0.41	-0.92	N.A.	99%
	-														
Investment Adv					0.00	0.05	0.00	0.04	0.10	0.41	0.67	0.21	0.00	0.00	770/
Minimum	0.89	0.01		-2.14		0.27						0.21	-0.88		77%
Average	0.99	0.23		-1.65		0.50		-0.06						10.09	
Maximum	1.10	0.66	0.76	-0.95	0.35	0.72	0.12	0.18	0.33	0.13	-0.12	0.67	-0.23	34.97	99%
Bmrk. Avg.	0.97	0.08	-0.06	-1.04	-0.10	0.20	0.01	0.09	0.09	-0.07	-0.43	0.22	-0.19	N.A.	97%
Lincoln Capita	l Mana	gement	t												
Minimum		-0.16		0.32	-0.19	0.04	-0.36	-0.47	-0.45	-0.06	0.05	0.25	-0.51	0.00	84%
Average	1.09	0.01	0.14	0.51	-0.04	0.19	-0.15	-0.40	-0.31	0.07	0.43	0.34	-0.33	4.52	96%
Maximum	1.12	0.19	0.40	0.69	0.07	0.34	0.11	-0.27	-0.17	0.22	0.71	0.40	-0.19	18.55	100%
Bmrk. Avg.	1.10	0.15	0.10	0.18	0.10	0.33	-0.18	-0.33	-0.20	-0.03	0.17	0.35	-0.37	N.A.	97%
Oppenheimer (	Canital														
Minimum		-0.12	-0.12	-0.08	-0.04	-0.12	0.23	-0.08	-0.23	-0.10	-0.04	0.14	-0.22	0.00	86%
Average		-0.01				-0.03	0.33		-0.08			0.26		1.80	94%
Maximum	1.07			0.15		0.08	0.42		0.09			0.36	-0.05	7.85	98%
Bmrk. Avg.	0.99	-0.10	-0.08	-0.01	-0.04	-0.10	0.11	0.03	-0.09	-0.04	-0.15	0.04	0.06	N.A.	97%
Weiss Peck & 0	Greer														
Minimum	1.07	0.87	-0.72	-2.67	0.58	0.90	-0.87	-0.32	0.62	-0.31	-0.55	0.05	-1.17	4.18	83%
Average	1.19	1.32	0.20	-2.48	0.84	1.26	-0.62	-0.11	0.81	-0.18	-0.34	0.38	-0.92	9.10	97%
Maximum	1.30			-1.88		1.38		0.27		0.43			-0.64	35.87	100%
Bmrk. Avg.	1.22	1.34	0.39	-2.27	0.83	1.29	-0.52	-0.14	0.76	-0.05	-0.46	0.35	-0.96	N.A.	98%

## **EXTERNAL ACTIVE STOCK MANAGERS**

## Risk Factor Exposures July 1993 - June 1998

	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.
Aggregate Active Stock Managers*															
Minimum	1.04	0.21	0.03	-0.55	0.14	0.29	-0.15	-0.18	0.08	-0.09	-0.20	0.10	-0.58	3.14	89%
Average	1.09	0.33	0.19	-0.41	0.27	0.38	-0.04	-0.10	0.16	0.00	-0.09	0.18	-0.39	6.03	95%
Maximum	1.15	0.49	0.38	-0.28	0.42	0.50	0.05	-0.02	0.25	0.09	0.01	0.25	-0.25	39.72	98%
Bmrk. Avg.	1.05	0.31	0.06	-0.83	0.22	0.36	-0.07	-0.02	0.18	-0.01	-0.21	0.19	-0.38	N.A.	98%

Bmrk. Avg. = Benchmark average.

<sup>\*</sup>Aggregate includes all managers that were part of the External Active Stock Manager Program at any time during the period July 1993-June 1998.

#### EXTERNAL EMERGING STOCK MANAGERS

#### Risk Factor Exposures April 1994 - June 1998

		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.
CIC Asset Mana	ageme	nt													
Minimum	0.87	-0.38	-0.55	-0.71	-0.16	-0.41	0.21	0.07	-0.16	-0.23	-0.32		0.18	1.94	91%
Average	0.96	-0.23	-0.29	-0.12	-0.02	-0.31	0.35	0.23	-0.02	-0.03	-0.14		0.31	8.06	96%
Maximum	1.02	-0.11	-0.10	0.26	0.24	-0.19	0.52	0.41	0.18	0.12	0.01	0.20	0.41	18.39	100%
Bmrk. Avg.	0.96	-0.21	-0.12	0.15	-0.11	-0.23	0.25	0.12	-0.07	-0.01	-0.13	-0.09	0.19	N.A.	99%
Cohen, Klingen	stein &	& Mark	s												
Minimum	1.09	0.19	-0.08	-0.50	0.20	0.14	-0.15	-0.39	-0.05	-0.07	-0.14	0.14	-0.45	0.00	90%
Average	1.13	0.36	0.15	-0.36	0.49	0.30	0.11	-0.27	0.10	0.09	0.06	0.29	-0.30	3.69	98%
Maximum	1.18	0.50	0.51	-0.16	0.87	0.47	0.30	-0.15	0.34	0.21	0.22	0.48	-0.22	43.13	100%
Bmrk. Avg.	1.09	0.26	-0.05	-0.53	0.39	0.18	-0.01	0.06	0.23	0.12	-0.05	0.30	-0.20	N.A.	98%
Compass Capita	al Mar	ageme	nt												
Minimum	0.94	-0.24	-0.40	-0.48	-0.28	0.00	-0.27	-0.34	-0.51	-0.40	-0.23	0.34	-0.32	0.00	93%
Average	1.01	-0.07	-0.21	-0.40	-0.22	0.11	-0.14	-0.27	-0.37	-0.31	-0.05	0.47		2.23	98%
Maximum	1.08	0.20	-0.01	-0.31	-0.12	0.16	0.04	-0.18	-0.25	-0.17	0.15	0.62	-0.02	6.00	100%
Bmrk. Avg.	1.06	0.11	-0.01	-0.43	0.00	0.20	-0.13	-0.21	-0.27	-0.11	0.01	0.43	-0.32	N.A.	98%
New Amsterdam	n Part	ners													
Minimum	0.99	0.16	-0.31	-1.29	-0.05	0.18	-0.06	-0.13	-0.23	-0.30	-0.60	-0.01	-0.44	0.00	96%
Average	1.04	0.28	0.00	-0.96	0.11	0.26	0.12	0.01	-0.16	-0.13	-0.37	0.09	-0.37	2.90	98%
Maximum	1.09	0.52	0.32	-0.72	0.32	0.34	0.32	0.30	-0.12	0.05	-0.19	0.19	-0.29	9.60	100%
Bmrk. Avg.	1.06	0.28	-0.02	-0.61	0.31	0.19	0.13	0.12	0.17	-0.03	-0.14	0.08	-0.16	N.A.	99%
Valenzuela Cap	ital Pa	artners													
Minimum	0.98	0.04	-0.16	-1.33	-0.04	0.01	-0.25	-0.12	-0.06	-0.20				0.00	86%
Average	1.02	0.15	0.13	-1.05	0.18	0.20	-0.06	0.01			-0.35			5.66	92%
Maximum	1.06	0.28	0.58	-0.78	0.36	0.44	0.21	0.11	0.37	0.18	0.08	0.62	-0.24	18.45	98%
Bmrk. Avg.	1.01	0.23	-0.08	-1.21	0.18	0.27	0.05	0.15	0.18	-0.07	-0.45	0.17	-0.27	N.A.	98%

#### **EXTERNAL EMERGING STOCK MANAGERS**

#### Risk Factor Exposures April 1994 - June 1998

		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.
11/11 /TI		tal Ma													
Wilke/Thomps					0.15	0.07	0.71	0.46	0.01	-0.70	0.70	0.34	-1.14	0.00	92%
Minimum		0.56				0.97									
Average	1.09	0.20.0350.230		-2.62		1.12				-0.61			-0.96		96%
Maximum	1.18	1.19	1.10	-2.48	0.69	1.23	-0.30	0.05	0.59	-0.52	-0.36	0.56	-0.77	9.28	100%
Bmrk. Avg.	1.11	1.01	0.24	-2.60	0.42	0.94	-0.27	-0.01	0.33	-0.29	-0.65	0.44	-0.82	N.A.	97%
Winslow Capit	al Man	agemer	nt												
Minimum	1.11	0.35	0.02	-0.68	0.19	0.77	-0.56	-0.67	-0.02	-0.51	-0.39	0.23	-1.02	0.00	88%
Average	1.19	0.64	0.37	-0.46	0.41	0.88	-0.42	-0.47	0.09	-0.28	-0.17	0.33	-0.78	5.55	97%
Maximum	1.26	0.87	0.86	-0.28	0.68	1.07	-0.21	-0.30	0.18	-0.02	0.17	0.45	-0.62	10.93	100%
Bmrk. Avg.	1.17	0.54	0.24	-0.37	0.45	0.72	-0.23	-0.22	0.23	-0.12	0.04	0.37	-0.67	N.A.	98%
Zevenbergen C	apital														
Minimum	1.04	0.20	-0.14	-0.77	0.00	0.33	-0.62	-0.49	-0.03	-0.15	-0.29	0.09	-0.89	0.70	68%
Average	1.13	0.49	0.29	-0.45	0.29	0.68	-0.48	-0.31	0.11	-0.01	-0.14	0.30	-0.60	8.27	97%
Maximum	1.24	0.83	0.69	0.01	0.59	0.95	-0.33	-0.12	0.27	0.21	0.09	0.51	-0.26	25.50	100%
Bmrk. Avg.	1.15	0.48	0.25	-0.32	0.36	0.62	-0.32	-0.38	0.04	-0.10	0.06	0.33	-0.58	N.A.	98%
Aggregate Eme	erging S	Stock M	1anag	ers*											
Minimum	0	0.15			0.12	0.31	-0.16	-0.18	-0.03	-0.18	-0.29	0.18	-0.50	2.24	85%
Average	1.06	0.32	0.09	-0.92	0.18	0.39	-0.09	-0.12	0.06	-0.14	-0.23	0.29	-0.39	5.04	96%
Maximum	1.10	0.45	0.24	-0.69	0.25	0.44	0.03	-0.06	0.14	-0.09	-0.19	0.39	-0.29	14.44	98%
Bmrk. Avg.	1.06	0.38	0.09	-0.98	0.20	0.38	-0.07	-0.03	0.04	-0.14	-0.21	0.22	-0.36	N.A.	100%

Bmrk. Avg. = Benchmark average.

<sup>\*</sup>Aggregate includes all managers that were part of the External Emerging Stock Manager Program at any time during the period April 1994-June 1998.

#### EXTERNAL SEMI-PASSIVE STOCK MANAGERS

#### Risk Factor Exposures January 1995 - June 1998

		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.
Barclays Globa	Inves	tors													
Minimum	0.90	-0.22	-0.08	-0.21	-0.23	-0.31	0.08	0.16	-0.09	-0.04	-0.24	-0.28	0.18	0.11	99%
Average	0.92	-0.15	-0.01	-0.15	-0.19	-0.26	0.23	0.24	-0.01	0.01	-0.19	-0.20	0.23	4.69	99%
Maximum	0.94	-0.11	0.05	-0.09	-0.13	-0.17	0.30	0.32	0.06	0.07	-0.12	-0.12	0.30	11.65	100%
Franklin Portfo	lio Ass	sociates	3												
Minimum	0.90	-0.24	-0.14	-0.21	-0.27	-0.29	0.14	0.10	-0.07	-0.03	-0.22	-0.25	0.21	0.00	99%
Average		-0.18				-0.24	0.24	0.22	-0.02	0.04	-0.18	-0.19	0.26	6.03	99%
Maximum		-0.12				-0.19	0.32	0.35	0.05	0.09	-0.13	-0.12	0.35	12.22	100%
ID M		- 4 N/I													
J.P. Morgan Inv			_		0.20	0.20	0.05	0.05	0.06	0.01	0.25	0.20	0.17	0.11	000/
Minimum		-0.27				-0.30						-0.20			99%
Average		-0.21				-0.22						-0.16		4.93	100%
Maximum	0.94	-0.16	-0.06	0.02	-0.16	-0.16	0.19	0.23	0.02	0.12	-0.01	-0.10	0.33	9.39	100%
Aggregate Semi	-Passi	ve Equi	ity												
Minimum		-0.24		-0.17	-0.25	-0.30	0.11	0.10	-0.07	-0.01	-0.23	-0.24	0.19	0.00	99%
Average	0.92	-0.18	-0.07	-0.11	-0.21	-0.24	0.20	0.21	-0.02	0.03	-0.17	-0.18	0.24	4.97	99%
Maximum	0.94	-0.14	0.01	-0.01	-0.15	-0.18	0.27	0.29	0.03	0.08	-0.11	-0.12	0.32	7.88	100%
Bmrk. Avg.*	0.91	-0.22	-0.12	-0.07	-0.28	-0.23	0.11	0.15	-0.04	0.07	-0.14	-0.15	0.24	N.A.	100%

Bmrk. Avg. = Benchmark average.

<sup>\*</sup>All semi-passive managers use the same benchmark.

## EXTERNAL ACTIVE STOCK MANAGERS

#### Sector Weights July 1993 - June 1998

	Cons.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
	Non Dur.	Dur.	Mat.	Goods	Ellergy	reen.	i i ans.	om.	
Alliance Capital	Managemer	ıt							
Minimum	40.40	0.00	0.00	2.42	0.00	8.99	0.00	1.49	13.76
Average	47.00	2.10	0.85	4.00	0.10	15.43	4.21	3.29	23.03
Maximum	52.82	5.97	3.39	7.37	0.99	20.91	6.96	4.93	31.04
Bmrk. Avg.	48.01	4.35	5.38	7.05	1.37	12.77	1.84	3.75	15.49
American Expre	ess Asset Ma	nagement							
Minimum	14.57	0.31	3.49	2.43	0.00	4.44	0.00	1.34	12.91
Average	31.68	5.14	10.44	7.48	5.75	13.12	4.33	4.19	17.88
Maximum	58.61	13.93	15.40	13.10	12.68	23.14	11.42	8.15	25.36
Bmrk. Avg.	40.64	3.53	7.01	6.38	5.19	12.64	2.51	7.46	14.66
Brinson Partner	s								
Minimum	25.48	1.30	5.92	5.31	1.81	4.00	1.98	5.04	12.85
Average	36.50	3.31	8.80	7.34	3.50	7.94	5.35	7.59	19.66
Maximum	42.01	5.21	12.57	11.57	6.38	10.88	9.71	10.68	24.61
Bmrk. Avg.	34.68	3.29	8.05	7.51	5.61	9.98	2.11	11.68	17.09
Forstmann Leff	Associates								
Minimum	30.21	0.00	1.60	0.22	3.79	1.90	0.19	1.37	2.99
Average	45.90	4.38	7.13	4.86	8.84	8.32	3.54	4.82	12.21
Maximum	62.05	15.95	14.50	9.87	12.31	18.40	7.30	11.47	22.34
Bmrk. Avg.	40.92	6.40	7.71	6.55	6.98	9.55	2.77	7.49	11.64
Franklin Portfol	lio Associates	s							
Minimum	20.50	1.94	2.04	1.59	2.53	2.59	0.00	4.92	14.33
Average	30.53	4.96	7.08	5.64	7.64	10.27	2.81	11.00	20.06
Maximum	37.94	9.05	13.04	11.35	14.15	14.71	5.17	15.14	28.58
Bmrk. Avg.	33.93	4.46	10.22	6.52	6.02	8.85	2.28	10.84	16.88

#### EXTERNAL ACTIVE STOCK MANAGERS

#### Sector Weights July 1993 - June 1998

	Cons.	Cons.	Basic	Cap.					
	Non Dur.	Dur.	Mat.	Goods	Energy	Tech.	Trans.	Util.	Finl.
Geo Capital									
Minimum	56.78	1.52	1.53	0.00	0.00	2.07	0.69	0.00	8.04
Average	67.99	2.67	2.49	0.54	0.02	5.17	1.84	1.42	17.87
Maximum	79.84	5.37	4.43	5.10	0.13	8.89	4.07	4.11	31.52
Bmrk. Avg.	60.67	1.64	2.04	5.09	1.41	11.95	1.12	2.85	13.22
Investment Adv	isers								
Minimum	28.27	0.75	3.52	4.02	1.24	3.30	0.00	0.69	7.87
Average	34.28	5.26	10.19	18.26	2.41	8.95	3.25	3.91	13.48
Maximum	47.03	10.03	15.01	25.59	5.02	15.31	7.45	13.63	23.13
Bmrk. Avg.	38.04	4.63	8.60	11.84	2.27	6.65	2.72	8.08	17.18
Lincoln Capital	Managemen	t							
Minimum	51.85	0.00	0.90	2.44	0.00	0.58	0.00	0.00	7.72
Average	61.26	1.09	4.80	5.23	0.08	11.58	0.40	2.44	13.12
Maximum	68.69	3.31	8.59	8.69	0.62	18.10	1.08	5.73	25.15
Bmrk. Avg.	59.49	1.50	3.70	5.52	0.67	12.38	0.22	3.64	12.89
Oppenheimer C	apital								
Minimum	17.74	1.45	6.25	7.35	0.10	1.64	0.00	2.29	30.40
Average	27.04	3.40	10.22	10.95	1.46	5.19	1.94	3.44	36.36
Maximum	39.54	5.90	14.46	13.43	4.26	7.88	6.00	5.11	45.21
Bmrk. Avg.	35.73	3.86	9.38	6.71	6.09	6.55	2.37	10.67	18.64
Weiss Peck & G	reer								
Minimum	35.15	2.53	1.95	2.03	1.91	6.91	2.80	0.87	4.94
Average	50.56	4.28	3.97	4.69	5.71	14.27	5.05	3.20	8.26
Maximum	58.82	6.42	6.78	12.60	11.15	19.54	7.67	8.06	18.44
Bmrk. Avg.	48.57	4.57	5.77	8.07	5.13	15.95	2.57	2.42	6.95

#### EXTERNAL ACTIVE STOCK MANAGERS

#### Sector Weights July 1993 - June 1998

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
Aggregate Act	ive Stock Man	agers*							
Minimum	38.05	1.77	4.82	3.43	2.32	7.41	2.29	3.16	13.78
Average	43.22	3.58	5.93	6.21	3.64	11.11	2.87	5.31	18.13
Maximum	47.05	6.32	8.04	8.03	5.06	14.46	3.82	6.97	24.19
Bmrk. Avg.	43.35	3.98	7.02	7.19	3.77	8.49	2.81	5.80	17.94

Bmrk. Avg. = Benchmark Average.

<sup>\*</sup>Aggregate includes all managers that were part of the External Active Stock Manager Program at any time during the period July 1993-June 1998.

#### **EXTERNAL EMERGING STOCK MANAGERS**

#### Sector Weights April 1994 - June 1998

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
CIC Asset Mana	gement								
Minimum	10.06	2.21	4.50	3.18	5.17	2.71	0.00	2.96	9.26
Average	21.04	6.86	13.32	9.42	8.62	6.50	2.67	10.31	21.27
Maximum	34.95	13.39	22.29	14.81	12.51	11.90	5.14	19.37	31.15
Bmrk. Avg.	26.72	6.62	9.45	7.95	8.14	6.56	1.87	12.28	20.41
Cohen, Klingens	tein & Mark	is							
Minimum	34.26	0.00	0.26	0.00	0.00	2.69	0.00	0.00	15.77
Average	43.50	6.84	5.63	2.63	0.60	13.72	1.07	2.14	23.86
Maximum	56.83	13.05	13.24	8.31	4.03	22.87	3.14	6.98	30.95
Bmrk. Avg.	43.62	6.63	9.07	7.86	1.19	13.50	1.61	1.57	14.96
Compass Capita	l Manageme	nt							
Minimum	53.56	1.01	2.71	12.30	0.00	3.23	0.00	0.00	0.18
Average	61.56	2.74	7.29	18.77	0.00	4.05	0.00	0.00	5.59
Maximum	71.43	8.72	11.12	23.78	0.00	5.28	0.00	0.00	9.79
Bmrk. Avg.	59.00	4.34	7.87	8.63	0.23	10.62	1.51	0.22	7.59
New Amsterdam	Partners								
Minimum	32.86	5.62	1.23	0.00	1.85	4.21	0.00	6.62	13.93
Average	41.12	9.93	6.54	1.78	4.40	8.73	2.13	8.76	16.60
Maximum	52.05	15.05	10.71	4.34	6.74	13.85	2.92	11.22	20.46
Bmrk. Avg.	37.99	4.12	8.18	6.86	5.06	12.68	2.24	7.68	15.19
Valenzuela Capi	tal Partners								
Minimum	33.77	0.00	2.69	0.77	2.56	2.84	0.00	0.00	12.64
Average	41.19	4.35	9.14	12.29	7.40	4.65	1.28	1.11	18.58
Maximum	54.65	10.48	15.95	18.36	10.82	9.66	8.65	5.27	28.85
Bmrk. Avg.	38.30	5.11	10.89	7.59	4.88	7.27	3.26	5.21	17.50

#### **EXTERNAL EMERGING STOCK MANAGERS**

#### Sector Weights April 1994 - June 1998

	Cons. Non Dur.	Cons. Dur.	Basic Mat.	Cap. Goods	Energy	Tech.	Trans.	Util.	Finl.
Wilke/Thompso	n Capital Ma	angement							
Minimum	64.68	0.00	0.00	0.86	0.00	3.29	0.00	0.00	0.00
Average	83.99	1.90	1.69	3.69	0.00	7.99	0.00	0.08	0.65
Maximum	90.51	9.22	7.07	8.23	0.00	12.21	0.00	2.59	4.42
Bmrk. Avg.	59.52	8.59	5.45	10.57	1.55	11.55	0.29	0.19	2.29
Winslow Capita	l Manageme	nt							
Minimum	52.24	0.00	0.00	0.00	0.00	8.86	0.00	0.65	1.73
Average	63.53	1.44	1.20	2.66	1.33	12.66	1.72	7.03	8.44
Maximum	70.37	3.98	5.70	7.32	7.88	22.38	3.98	11.99	17.18
Bmrk. Avg.	50.61	3.14	4.63	6.84	2.19	18.70	1.64	3.38	8.88
Zevenbergen Ca	pital								
Minimum	42.91	0.00	0.00	1.46	0.00	6.68	0.00	2.70	1.16
Average	57.79	2.03	1.17	4.85	2.19	11.32	0.74	8.23	11.70
Maximum	67.67	7.02	3.90	12.63	6.03	15.49	4.44	13.39	21.71
Bmrk. Avg.	55.71	1.81	4.27	5.39	2.56	17.90	0.61	4.59	7.15
Aggregate Emer	ging Stock N	lanagers*							
Minimum	44.85	2.70	4.25	5.11	2.08	6.79	0.43	3.25	9.96
Average	49.90	4.69	6.49	7.48	3.07	8.84	1.11	4.63	13.79
Maximum	54.88	8.38	9.21	9.73	4.06	10.96	2.62	6.54	16.75
Bmrk. Avg.	45.83	4.67	6.77	7.00	2.63	12.18	1.87	5.37	13.68

Bmrk. Avg. = Benchmark Average.

<sup>\*</sup>Aggregate includes all managers that were part of the External Emerging Stock Manager Program at any time during the period April 1994-June 1998.

#### EXTERNAL SEMI-PASSIVE STOCK MANAGERS

#### Sector Weights January 1995 - June 1998

stors 4.63								
4.63								
	3.17	5.74	6.44	6.88	3.34	0.44	13.54	18.20
7.61	4.02	8.49	7.49	8.33	4.81	1.08	16.31	21.86
0.79	4.92	11.60	9.20	10.16	5.84	1.75	19.45	23.96
sociates								
26.52	2.66	6.48	5.40	7.32	3.03	0.24	12.15	18.34
9.27	3.55	9.06	7.13	8.56	4.79	0.75	15.92	20.98
3.37	4.85	11.82	8.46	9.97	6.77	1.42	18.86	22.80
ent Mana	agement							
25.97	2.57	6.86	6.41	7.34	3.74	1.17	12.37	19.06
28.42	3.59	8.16	7.23	8.43	5.64	1.59	15.83	21.12
31.68	4.93	9.49	8.02	9.63	7.39	2.04	18.42	23.07
ive Equit	ty							
25.94	3.23	6.68	6.28	7.33	4.09	0.79	12.81	18.74
28.43	3.72	8.56	7.28	8.44	5.08	1.14	16.02	21.32
31.62	4.57	10.82	8.28	9.61	6.46	1.48	18.82	23.16
28.80	3.17	8.42	7.31	8.35	5.45	1.67	15.40	21.43
i i	7.61 0.79 sociates 6.52 9.27 3.37 ent Mana 5.97 8.42 1.68 ive Equit	7.61 4.02 0.79 4.92 sociates 6.52 2.66 9.27 3.55 3.37 4.85 ent Management 5.97 2.57 8.42 3.59 1.68 4.93 ive Equity 5.94 3.23 8.43 3.72 1.62 4.57	7.61 4.02 8.49 0.79 4.92 11.60  sociates 6.52 2.66 6.48 9.27 3.55 9.06 3.37 4.85 11.82  ent Management 5.97 2.57 6.86 8.42 3.59 8.16 1.68 4.93 9.49  ive Equity 5.94 3.23 6.68 8.43 3.72 8.56 1.62 4.57 10.82	7.61 4.02 8.49 7.49 0.79 4.92 11.60 9.20  sociates 6.52 2.66 6.48 5.40 9.27 3.55 9.06 7.13 3.37 4.85 11.82 8.46  ent Management 5.97 2.57 6.86 6.41 8.42 3.59 8.16 7.23 1.68 4.93 9.49 8.02  sive Equity 5.94 3.23 6.68 6.28 8.43 3.72 8.56 7.28 11.62 4.57 10.82 8.28	7.61 4.02 8.49 7.49 8.33 0.79 4.92 11.60 9.20 10.16 sociates 6.52 2.66 6.48 5.40 7.32 9.27 3.55 9.06 7.13 8.56 3.37 4.85 11.82 8.46 9.97 ent Management 5.97 2.57 6.86 6.41 7.34 8.42 3.59 8.16 7.23 8.43 1.68 4.93 9.49 8.02 9.63 ive Equity 5.94 3.23 6.68 6.28 7.33 8.43 3.72 8.56 7.28 8.44 1.62 4.57 10.82 8.28 9.61	7.61	7.61 4.02 8.49 7.49 8.33 4.81 1.08 0.79 4.92 11.60 9.20 10.16 5.84 1.75  Sociates 6.52 2.66 6.48 5.40 7.32 3.03 0.24 9.27 3.55 9.06 7.13 8.56 4.79 0.75 3.37 4.85 11.82 8.46 9.97 6.77 1.42  Sent Management 6.5.97 2.57 6.86 6.41 7.34 3.74 1.17 8.42 3.59 8.16 7.23 8.43 5.64 1.59 1.68 4.93 9.49 8.02 9.63 7.39 2.04  Sive Equity 6.5.94 3.23 6.68 6.28 7.33 4.09 0.79 8.43 3.72 8.56 7.28 8.44 5.08 1.14 1.62 4.57 10.82 8.28 9.61 6.46 1.48	7.61

Bmrk. Avg. = Benchmark average.

<sup>\*</sup>All semi-passive managers use the same benchmark.

#### EXTERNAL DOMESTIC STOCK MANAGERS

#### Annualized Performance Summary Periods Ending June 30, 1998

	1	Year	3 1	Years	5 1	Years
	Actual	Benchmark	Actual	Benchmark	Actual	Benchmark
Active Managers						
Alliance Capital Management	50.6%	36.0%	38.0%	31.7%	28.0%	24.1%
American Express Asset Mgmt.	21.9	30.6	23.9	30.2	19.0	23.5
Brinson Partners	22.0	27.7	28.4	26.4	21.9	20.6
Forstmann Leff Associates	32.1	15.8	31.4	22.2	22.2	17.8
Franklin Portfolio Associates	34.3	27.2	29.8	25.5	22.1	20.1
GeoCapital	28.1	12.2	21.0	17.4	17.8	17.3
Investment Advisers	10.8	21.8	17.2	24.1	15.6	19.9
Lincoln Capital Management	33.2	35.6	32.5	33.1	25.3	25.2
Oppenheimer Capital	32.0	29.3	32.3	28.6	25.0	21.5
Weiss Peck & Greer	9.9	14.7	16.5	15.4	12.7	15.3
Emerging Managers (1)						
CIC Asset Management	27.1	28.5	27.9	28.6		
Cohen, Klingenstein & Marks	34.1	27.9	32.2	27.0		
Compass Capital Management	28.1	28.7	25.5	29.4		
New Amsterdam Partners	38.0	25.2	31.1	24.1		
Valenzuela Capital Partners	24.0	21.0	29.8	23.8		
Wilke/Thompson Capital Mgmt.	18.5	17.4	8.5	18.5		
Winslow Capital Management	39.1	29.7	25.4	26.6		
Zevenbergen Capital	40.7	29.8	29.8	26.9		
Semi-Passive Managers (2)						
Barclays Global Investors	29.8	30.5	30.4	29.7		
Franklin Portfolio Associates	33.1	30.5	30.6	29.7		
J.P. Morgan Investment Mgmt.	31.2	30.5	29.9	29.7		
Passive Manager						
Barclays Global Investors	29.4	28.9	28.2	28.0		
Aggregate (3)	30.6%		28.7%		21.5%	
Capital Markets Data						
Wilshire 5000		28.9%		28.1%		21.6%
90-Day Treasury Bills		5.3		5.3		4.9
Inflation		1.7		2.2		2.5

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

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

<sup>(3)</sup> Aggregate of all Domestic Stock Managers retained during the time period shown.

#### 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.

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

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

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

The average rating given the 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.

#### Coupon

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

#### 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.

#### 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.

#### 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.

# EXTERNAL ACTIVE BOND MANAGERS Portfolio Characteristics FY1997-1998

	#Of Issues	Avg. Qual.	Coupon	Yield To Mat.	Duration	Term To Mat.
American Express Asset Mana	ngement					
June-98	95	AAA/AA	6.79%	0.06	5.79 Yrs.	13.4 Yrs
June-97	65	AAA/AA	7.56	6.98	4.67	11.4
BEA Associates						
June-98	123	AA	6.80	7.00	4.80	8.7
June-97	162	AA	7.00	7.10	4.80	8.1
Investment Advisers						
June-98	93	AA+	5.74	6.18	4.83	8.3
June-97	80	AAA	6.75	6.70	4.73	9.1
Miller Anderson & Sherrerd						
June-98	245	AA+	7.41	6.70	4.00	9.7
June-97	209	AA+	6.96	7.60	4.70	8.4
Standish, Ayer & Wood						
June-98	319	AA+	7.27	6.56	4.69	9.2
June-97	233	AA+	7.04	6.78	4.58	7.4
Western Asset Management						
June-98	190	AA	6.30	6.73	4.92	9.1
June-97	184	AA-	6.32	7.28	5.31	12.4
Lehman Aggregate						
June-98	6,909	Agency	7.03	6.13	4.49	8.7
June-97	6,055	Agency	7.19	6.79	4.62	8.7

#### EXTERNAL ACTIVE BOND MANAGERS

#### Sector Weights FY1997-1998 (In Percentages)

							High	
	Gov't.	Corp.	Mtgs.	ABS	Misc.	Intl.	Yield	Cash
American Express Asset	Management							
June-98	48	31	16	2 2	0	0	8	3
June-97	50	31	14	2	0	0	8	3
BEA Associates							5.5	
June-98	28	41	32	6	0	0	10	0
June-97	19	32	37	5	0	0	10	7
Investment Advisers							2	
June-98	26	21	33	16	0	0	0	3
June-97	34	22	28	11	0	0	0	6
Miller Anderson & Sh	nerrerd							
June-98	8	23	54	10	0	2	9	0
June-97	17	24	41	2	0	3	7	13
Standish, Ayer & Wo							4.0	
June-98	17	37	36	6	0	7	10	1 7
June-97	18	41	22	4	0	8	9	7
Western Asset Manag	gement							
June-98	24	22	48	16	6	0	10	0
June-97	24	21	44	5	7	0	4	0
Lehman Aggregate							0	0
June-98	48	21	31	1	0	0	0	0
June-97	51	19	30	1	0	0	0	0

#### Abbreviations:

Gov't. Government securities
Corp. Corporate securities
Mtgs. Mortgage securities
ABS Asset Backed securities

Misc. Miscellaneous or other
Int'l. Non-dollar securities

Hi-Yld Securities rated below investment grade

# EXTERNAL SEMI-PASSIVE BOND MANAGERS Portfolio Characteristics June 1997 - June 1998

	#Of Issues	Avg. Qual.	Coupon	Yield To Mat.	Dur.	Term To Mat.
	135465	Quai.	Coupon	To Mat.	Dui.	TO MAL.
BlackRock Financial						
June 98	698	AA+	6.38%	6.15%	4.6 Yrs.	9 Yrs.
June-97	711	AA+	7.01	6.91	4.52	9.30
Goldman Sachs Asset Mana	agement					
June 98	362	AAA-	6.52	6.47	4.58	7.19
June-97	197	AAA-	5.78	7.07	4.55	7.25
Lincoln Capital Manageme	nt					
June 98	956	AAA	7.58	6.14	4.65	8.37
June-97	1035	AAA	7.67	7.82	4.68	8.24
Lehman Aggregate						
June 98	6,909	Agency	7.03	6.13	4.49	8.73
June-97	6,055	Agency	7.19	6.79	4.62	8.74

#### Sector Weights

June 1997 June 1998 (In Percentages)

	Gov't.	Corp.	Mtgs.	ABS	Misc.	Cash
Blackrock Financial						
June 98	36	21	25	14	0	4
June-97	22	20	33	18	1	6
Goldman Sachs Asset Ma	nagement					
June 98	19	30	35	12	0	1
June-97	26	28	35	11	0	1
Lincoln Capital Managen	nent					
June 98	35	20	29	14	0	2
June-97	41	17	30	11	0	1
Lehman Aggregate						
June 98	48	21	31	1	0	0
June-97	51	19	30	1	0	0

#### EXTERNAL BOND MANAGERS

#### Annualized Performance Summary Periods Ending June 30, 1998

	1 1	Year	3 Years		5	Years
	Actual	Benchmark	Actual	Benchmark	Actual	Benchmark
Active Managers						
American Express Asset Mgmt. (1)	11.2%	10.5%	7.9%	8.0%	7.1%	7.0%
BEA Associates	11.1	10.5	8.6	7.9	7.5	6.9
Investment Advisers	10.0	10.5	7.7	7.9	6.2	6.9
Miller Anderson & Sherrerd	9.9	10.5	9.0	7.9	7.4	6.9
Standish Ayer & Wood	10.1	10.5	8.6	7.9	7.0	6.9
Western Asset Management	12.7	10.5	9.7	7.9	8.4	6.9
Semi-Passive Managers						
BlackRock Financial	11.0	10.5				
Goldman Sachs Asset Management	10.9	10.5	8.3	7.9	7.4	6.9
Lincoln Capital Management	10.9	10.5	8.0	7.9	7.0	6.9
Aggregate (2)	11.0%		8.5 %		7.3%	
Capital Markets Data						
Lehman Aggregate (3)	10.5%		7.9%		6.9%	
90 Day Treasury Bills	5.3		5.3		4.9	
Inflation	1.7		2.2		2.5	

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

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

<sup>(3)</sup> 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 1998

Local Returns	State Street Global Advisors	Brinson Partners	Marathon Asset Mgmt.	Rowe Price- Fleming Int'l.	Scudder Kemper Investments
Country Selection	0.1	3.1	-2.6	-0.5	1.9
Stock Selection	1.4	-2.2	-4.5	-1.0	0.1
Timing	-0.2	-0.1	-0.6	-0.6	-0.7
Currency Returns					
Currency Effect	-1.2	0.0	0.0	-0.5	-0.4
Hedging Activity	0.0	-1.1	0.1	0.0	0.1
Timing	0.1	0.1	-0.4	1.0	1.3
Base Return Total Value Added	0.0%	-0.4%	-7.5%	-1.4%	2.2%

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 relative to 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 return.

Currency Effect - The difference between the currency effect of a manager's unhedged portfolio and the benchmark that is caused 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 1998

Local Returns	Genesis Asset Managers Int'l.	Montgomery Asset Mgmt.
Country Selection	11.6	2.9
Stock Selection	-10.2	-8.8
Timing	0.4	-0.1
Currency Returns		
Currency Effect	-1.1	-0.4
Hedging Activity	0.0	0.0
Timing	5.4	7.2
Base Return Total Value Added	4.9%	-0.1%

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 relative to 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 return.

Currency Effect - The difference between the currency effect of a manager's unhedged portfolio and the benchmark that is caused 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, 1998

	1 Year		3 Years		5 Ye	ears
	Actual	Benchmark	Actual	Benchmark	Actual	Benchmark
Active EAFE						2 2 22
Brinson Partners (1)	5.4%	5.9%	16.1%	10.6%	11.7%	10.0%
Marathon Asset Mgmt. (2)	-1.9	5.9	8.9	10.6		
Rowe Price-Fleming Int'l. (2)	4.1	5.9	13.3	10.6		
Scudder Kemper Investments (2)	7.8	5.9	16.7	10.6		
Active Emerging Markets						
City of London Investment Mgmt. (3)	-29.4	-39.1				
Genesis Asset Managers Int'l. (4)	-34.7	-39.1				
Montgomery Asset Management (4)	-39.6	-39.1				
Passive EAFE						
State Street Global Advisors (5)	5.8	5.9	10.7	10.6	10.4	10.0
Equity Only*	-0.5	-1.1	10.4	8.3	10.2	8.6
Total Program**	1.2%	-1.1%	11.8%	8.3%	11.0%	8.6%
Capital Markets Data						
EAFE		6.1%		10.7%		10.0%
EAFE Free		5.9		10.6		10.0
EMF		-39.1		-9.3		0.4

- \* 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

Cummulative Dollar Value Added (Since inception, December 1, 1995) \$176,453,499

The currency overlay program, implemented by Record Treasury Management, was phased-in from Dec. 95-Nov.96.

## ALTERNATIVE INVESTMENTS -REAL ESTATE June 30, 1998

BASIC FUNDS	TOTAL \$ COMMITMENT	FUNDED \$ COMMITMENT	UNFUNDED \$ COMMITMENT	PERIOD (YEARS)
AETNA	\$42,376,529	\$42,376,529	\$0	16.2
AEW				
Fund III	20,000,000	20,000,000	0	12.8
Fund IV	15,000,000	15,000,000	0	11.8
Fund V	15,000,000	15,000,000	0	10.5
AMERICAN REPUBLIC	1	1	0	8.4
COLONY CAPITAL				
Colony Investors II	40,000,000	35,540,364	4,459,636	3.2
Colony Investors III	100,000,000	9,091,532	90,908,468	0.5
EQUITABLE PRIME PROPERTY	40,000,000	40,000,000	0	16.7
FIRST ASSET REALTY	916,185	916,185	0	4.2
HEITMAN				
Fund I	20,000,000	20,000,000	0	13.9
Fund II	30,000,000	30,000,000	0	12.6
Fund III	20,000,000	20,000,000	0	11.4
Fund V	20,000,000	20,000,000	0	6.6
LASALLE INCOME PARKING FUND	15,000,000	14,644,401	355,599	6.8
TA REALTY ASSOCIATES				
Fund III	40,000,000	39,200,000	800,000	4.1
Fund IV	50,000,000	46,500,000	3,500,000	1.4
RREEF USA FUND III	75,000,000	75,000,000	0	14.2
TCW				
Fund III	40,000,000	40,000,000	0	12.9
Fund IV	30,000,000	30,000,000	0	11.7
EQUITY OFFICE PROPERTIES TRUS	T 140,388,854	140,388,854	0	6.6
TOTAL REAL ESTATE (BASICS)	\$753,681,569	\$653,657,866	\$100,023,703	

POST FUND	TOTAL \$ COMMITMENT	FUNDED \$ COMMITMENT	UNFUNDED S COMMITMENT	PERIOD (YEARS)
COLONY INVESTORS II	\$40,000,000	\$35,540,364	\$4,459,636	3.2
WESTMARK COMMERCIAL				
Mtg. Fund II	13,500,000	13,397,500	102,500	1.6
Mtg. Fund III	21,500,000	20,264,000	1,236,000	1.6
Mtg. Fund IV	14,300,000	3,902,326	10,397,674	0.5
TOTAL REAL ESTATE (POST)	\$89,300,000	\$473,104,190	\$416,195,810	
TOTAL REAL ESTATE	\$842,981,569	\$726,762,056	\$116,219,513	

## ALTERNATIVE INVESTMENTS – PRIVATE EQUITY June 30, 1998

	TOTAL	FUNDED \$ COMMITMENT	UNFUNDED	PERIOD (YEARS)
BASIC FUNDS	\$ COMMITMENT	3 COMMITMENT	3 COMMITMENT	(IEAKS)
ALLIED	\$5,000,000	\$5,000,000	\$0	12.8
BANK FUND				
Fund III Trust	20,000,000	20,000,000	0	5.7
Fund IV Trust	25,000,000	25,000,000	0	2.4
Fund V Trust	48,000,000	0	48,000,000	0.0
BLACKSTONE PARTNERS II	50,000,000	42,271,743	7,728,257	4.6
BRINSON PARTNERS				
VPAF I	5,000,000	5,000,000	0	10.1
VPAF II	20,000,000	18,579,998	1,420,002	7.6
CHURCHILL CAPITAL PARTNERS II	20,000,000	20,000,000	0	5.7
CONTRARIAN CAPITAL FUND II	37,000,000	25,918,535	11,081,465	1.1
CORAL PARTNERS				
Fund I (Superior)	7,011,923	7,011,923	0	12.0
Fund II	10,000,000	8,135,294	1,864,706	7.9
Fund IV	15,000,000	10,500,000	4,500,000	3.9
Fund V	15,000,000	1,535,815	13,464,185	0.0
DSV	10,000,000	10,000,000	0	13.2
FIRST CENTURY	10,000,000	10,000,000	0	13.6
FOX PAINE FUND I	40,000,000	497,971	39,502,029	0.2
GOLDER THOMA				
Fund III	14,000,000	14,000,000	0	10.7
Fund IV	20,000,000	19,000,000	1,000,000	4.4
Fund V	30,000,000	19,500,000	10,500,000	2.0
GTCR GOLDER RAUNER FUND VI	90,000,000	0	90,000,000	0.0
HELLMAN & FRIEDMAN III	40,000,000	25,242,969	14,757,031	3.8
CRESCENDO VENTURES I	1,146,890	1,146,890	0	7.3
CRESCENDO VENTURE FUND II	15,000,000	8,394,773	6,605,227	1.5
IMR PARTNERSHIP	15,000,000	1,524,900	13,475,100	5.9
INMAN & BOWMAN	7,500,000	7,500,000	0	13.1
KOHLBERG KRAVIS ROBERTS				
1984 Fund	25,000,000	25,000,000	0	14.1
1986 Fund	18,365,339	18,365,339	0	12.2
1987 Fund	145,950,000	145,950,000	0	10.6
1993 Fund	150,000,000	150,000,000	0	4.5
1996 Fund	200,000,000	72,778,675	127,221,325	1.8
MATRIX				
Fund II	10,000,000	10,000,000	0	12.9
Fund III	10,000,000	10,000,000	0	8.2
NORWEST VENTURE CAPITAL	10,000,000	10,000,000	0	14.5
PIPER JAFFRAY HEALTHCARE	10,000,000	5,600,000	4,400,000	1.3
SUMMIT PARTNERS				
Fund I	10,000,000	10,000,000	0	13.5
Fund II	30,000,000	28,500,000	1,500,000	10.1
Fund V	25,000,000	2,500,000	22,500,000	0.2
T. ROWE PRICE	189,675,452	189,675,452	0	10.6
THOMA CRESSEY FUND VI	35,000,000	0	35,000,000	0.0
WARBURG PINCUS VENTURE PARTI		45,000,000	5,000,000	3.5
WARBURG PINCUS EQUITY PARTNE		3,000,000	97,000,000	0.0
WELSH CARSON FUND VIII	100,000,000	0	100,000,000	0.0
ZELL/CHILMARK	30,000,000	30,000,000	0	8.0
TOTAL PRIVATE EQUITY (BASICS)	\$1,718,649,604	\$1,062,130,277	\$656,519,327	

## ALTERNATIVE INVESTMENTS – PRIVATE EQUITY (con't) June 30, 1998

POST FUND	TOTAL S COMMITMENT	FUNDED \$ COMMITMENT	UNFUNDED \$ COMMITMENT	PERIOD (YEARS)
CITICORP MEZZANINE	\$40,000,000	\$16,569,686	\$23,430,314	3.5
KLEINWORT BENSON MEZZANINE	25,000,000	15,861,589	9,138,411	2.7
SUMMIT PARTNERS				
Sub Debt Fund I	20,000,000	18,000,000	2,000,000	4.3
Sub Debt Fund II	45,000,000	15,750,000	29,250,000	0.9
TCW/CRESCENT MEZZANINE	40,000,000	30,812,065	9,187,935	2.2
T. ROWE PRICE - POST	3,504,967	3,504,967	0	1.3
TOTAL PRIVATE EQUITY (POST)	\$173,504,967	\$100,498,307	\$73,006,660	
TOTAL PRIVATE EQUITY	\$1,892,154,571	\$1,162,628,584	\$729,525,987	

#### ALTERNATIVE INVESTMENTS – RESOURCE June 30, 1998

		,		
BASIC FUNDS	TOTAL \$ COMMITMENT	FUNDED \$ COMMITMENT	UNFUNDED \$ COMMITMENT	PERIOD (YEARS)
FIRST RESERVE CORP.				
AMGO I	\$15,000,000	\$15,000,000	\$0	16.8
AMGO II	7,000,000	7,000,000	0	15.4
First Reserve Fund SEA	12,300,000	12,300,000	0	10.1
First Reserve Fund V	16,800,000	16,800,000	0	8.2
First Reserve Fund VII	40,000,000	28,460,450	11,539,550	2.0
First Reserve Fund VIII	100,000,000	2,976,439	97,023,561	0.2
APACHE III	30,000,000	30,000,000	0	11.5
MORGAN OIL & GAS	15,000,000	15,000,000	0	9.9
SCF				
SCF Fund II	17,000,000	14,847,529	2,152,471	6.9
SCF Fund III	25,000,000	18,653,740	6,346,260	3.0
SCF Fund IV	50,000,000	4,120,000	45,880,000	0.2
TOTAL RESOURCE (BASICS)	\$328,100,000	\$165,158,158	\$162,941,842	
POST FUND	TOTAL \$ COMMITMENT	FUNDED \$ COMMITMENT	UNFUNDED \$ COMMITMENT	PERIOD (YEARS)
100110110				(/
MERIT ENERGY PARTNERS				
Merit Energy Partners B	\$24,000,000	\$11,457,658	\$12,542,342	2.0
Merit Energy Partners C	50,000,000	0	50,000,000	0.0
TOTAL RESOURCE (POST)	\$74,000,000	\$11,457,658	\$62,542,342	
TOTAL RESOURCE	\$402,100,000	\$176,615,816	\$225,484,184	

#### Time-Weighted Rate of Return

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

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

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

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

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

Where:

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

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

C; = 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, 1999 Benefit Increase

Actuarial value of required reserves at Jan. 1, 1999  Less: Reserves not eligible for increase  Actuarially determined eligible reserves at Jan. 1, 1999	\$12,612,634,000 <u>681,840,000</u> 11,930,794,000
CPI inflation rate capped at 2.5%	1.500%
Dollar cost of inflationary increase	178,961,910
June 30, 1998 total required reserves	12,826,749,000
June 30, 1998 total required reserves	
adjusted for inflationary increase	13,005,710,910
Market value of Assets at June 30, 1998	17,094,674,371
Less: Inflation adjusted required reserves	13,005,710,910
Current year excess market value	4,088,963,461
Negative balance carry forward .	2,217,989,463
Excess market value available for	
investment based benefit increase	1,870,973,998
Divided by 5 year pay out period	5
Current year portion of excess market value	374,194,800
Second year portion	343,426,405
Third year portion	206,727,061
Fourth year portion	155,162,710
Fifth year portion	-86,222,761
Total five year excess market value	993,288,215
Greater of current year excess market value	
or cost of transition adjustment	993,288,215
Divided by eligible required reserves at Jan. 1, 1999	11,930,794,000
Investment based increase for FY98	8.3254%
Summary:	
Investment Based Benefit Increase	8.3254%
Inflation Based Benefit Increase	1.5000%
Total Benefit Increase	9.8254%
Total Dollar Value of January 1, 1999 Benefit Increase	\$1,172,250,125

	Stock	Stock	Bond	Bond	Short-Term
Broker	<b>S Volume</b>	<b>\$</b> Commissions	\$ Volume	<b>S</b> Commissions	\$ Volume
A & C BROKERAGE	0	0	38,045,765	0	0
ABD SECURITIES	8,718,949	5,741	0	0	0
ABG	813,846	445	0	0	0
ABN AMRO SECURITIES	5,415,213	5,564	113,140,398	0	0
ABN AMRO, HOARE, GOVETTE	8,237,297	14,478	0	0	0
ABNER HERRMAN & BROCK	152,902	184	0	0	0
ACCIONES Y VALORES	7,275,086	4,198	0	0	0
ADAMS HARKNESS & HILL	20,967,858	7,890	0	0	0
ADVEST CO.	1,195,735	733	10,144,482	0	0
AFIN SECURITIES	4,131,365	1,721	0	0	0
AIG CAPITAL	0	0	72,218,088	0	0
ALFRED BERG	2,075,000	1,236	0	0	0
ALLEN & COMPANY	673,962	270	0	0	0
ALPHA MANAGEMENT INC	23,980,082	23,689	0	0	0
AMADON CORPORATION	7,180,234	5,954	0	0	0
AMERICAN EXPRESS CREDIT	0	0	0	0	144,829,981
AMERICAN GENERAL FINANCE	0	0	0	0	264,336,417
AMES (A. E. ) & CO	3,574	0	551,463	0	0
AMHERST SECURITIES GROUP INC.	0	0	5,003,907	0	0
ANTHONY F. CASTELLANO	0	0	0	0	0
ANVIL INST	877,949	492	0	0	0
ANZ	390,264	954	0	0	0
ARBOR TRAD	0	0	98,685,644	0	0
ARCADIA INVESTMENT MANAGEME	4,455,862	8,685	0	0	0
ARIZONA STOCK EXCHANGE	14,693	5	0	0	0
ARNHOLD	30,640,205	13,458	0	0	0
ARNOLD S.	72,006	253	0	0	0
ASESORES BURSATILES	1,708,878	51	0	0	0
ASIA EQUITY	1,105,187	400	0	0	0
ASSET TRANSFER	0	0	9,200,957	0	0
ASSOC CORP OF N AMER	0	0	0	0	971,222,949
ASSOC. FIRST CAPITAL	0	0	0	0	7,898,789
AUBREY G LANSTON	0	0	185,226,031	0	0
AUERBACH GRAYSON	962,306	1,608	0	0	0
AUTRANET	44,464,094	61,883	0	0	0
AVCO FINANCIAL SERVICES	0	0	0	0	74,225,905
B-TRADE SERVICES LLC	1,910,123	1,266	0	0	0
BA SECURITIES, INC.	0	0	410,351,839	0	1,139,727,711
BAIRD PATRICK AND CO	0	0	6,104,424	0	0
BAIRD, ROBERT W & CO.	125,902	102	7,840,592	0	0
BANC ONE CAPITAL CORP.	0	0	7,459,660	0	0
BANCO BOZANO SIMONSEN (BBS)	130,304	419	0	0	0
BANCO DE CARACAS	678,899	9	0	0	0
BANCO GENERAL DE NEGOCIOS SA	2,757,866	0	0	0	0
BANCO NACIONAL DE MEXICO	1,849,923	760	0	0	0
BANCO ROBERTS BEUNOS AIRES	300,000	0	0	0	0
BANCO SANTANDER DE NEGOCIOS	1,730,769	36	0	0	0
BANK AM BELLEVUE ZURICH	6,190,093	16,123	0	0	0
BANK AMERICA	0	0	0	0	14,200,376
BANK ICATU	94,774	415	0	0	0
BANK IN LIECHTENSTEIN	1,331,294	449	0	0	0
BANK INDOSUEZ	7,606	16	0	0	0
BANK J. VONTOBEL, ZURICH	1,274,052	2,260	0	0	0
BANK JULIUS	5,577,957	8,425	0	0	0
BANK OF AMERICA	0	0	19,751,649	0	5,985,500
BANK OF NOVA SCOTIA NEW YORK	146,728	394	0	0	0
BANK OF NY SECURITIES INC	249,586	0	2,459,835	0	24,412,875
BANKERS TRUST	436,250	0	15,499,376	0	36,325,587
BANQUE PARIBAS	976,620	2,013	0	0	0
		200			

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
BARCLAYS AMERICAN CORP	14,765	0	1,554,844	0	0
BARCLAYS BANK	91,457	1	18,562,876	0	0
BARCLAYS DEZOETE WEDD	0	0	128,090,770	0	2,464,587
BARING SECURITIES	42,893,193	29,437	9,210,135	20	0
BARNARD JACOBS AND CO (PTY) LT	5,996,685	2,586	0	0	0
BARRETT & CO.	70,386	163	0	0	0
BARRINGTON TRADING CO	7,241,864	7,260	0	0	0
BEAR, STEARNS & CO.	916,401,934	634,123	1,720,636,715	0	0
BELL SECURITIES	748,942	1,787	0	0	0
BENEFICIAL CORP	0	0	0	0	110,083,304
BERNARD L MADOFF	159,568	0	0	0	0
BERNSTEIN SANFORD	128,283,260	119,284	0	0	0
BHF SECURITIES	2,029,062	2,131	219,687	0	0
BILL PARKER	287,892	581	0	0	0
BISHOP ROSEN + CO. INC.	4,260,783	5,600	0	0	0
BISHOPGATE UNIT TRUST MGMT CO	267,432	0	0	0	0
BLACKFORD SECURITIES CORP	9,889,826	11,214	0	0	0
BLAIR & COMPANY	36,634,746	20,947	2,640,903	0	0
BLAYLOCK	0	0	40,937,600	0	0
BNASBT BONY/ABN AMRO SEC. INC.	0	0	7,737,649	0	0
BNNCM BONY NATIONS BANC CAP	0	0	3,610,718	0	0
BNP SECURITIES	1,416,650	349	0	0	0
BOSTON INST. SERVICES	300,288	600	0	0	0
BOZANO SIMONSEN	403,857	1298	0	0	0
BRANDT (ROBERT) & CO	6,982,394	7,672	0	0	0
BRICK SECURITIES	252,841	342	0	0	0
BRIDGE TRADING CO.	245,961,584	263,440	0	0	0
BROADCORT CAPITAL	322,797,709	390,492	0	0	0
BROWN (ALEX) & SONS INC.	385,462,852	362,317	0	0	0
BROWN BROS. HARRIMAN	6,186,629	5,637	0	0	0
BRUNSWICK	1,390,819	0	0	0	0
BT INT	125,335	0	0	0	0
BT SECURITIES CORP	0	0	6,204,256	0	91,087,468
BUCKINGHAM RESEARCH GRP	6,502,902	8,246	0	0	0
BUNTING WARVURGER SEC	1,604,605	3,119	0	0	0
BURDETT BUCKERIDGE & YOUNG L	85,664	170	0	0	0
BURNS FRY & TIMMINS	67,633	137	0	0	0
BV CAPITAL	1,020,549	2,028	0	0	0
BZW SECS	3,541,101	3,853	14,171,137	57	0
C.J. LAWRENCE	5,471	3	52,022,880	0	0
C.L. KING & ASSOC.	1,651,565	2,058	0	0	0
C.S.F.B.	2,889,602	0	0	0	0
CAMBRIDGE INTERNATIONAL	0	0	778,770	0	0
CANNON SEC., INC.	2,243,681	1,275	0	0	0
CANTOR FITZGERALD	202,447,730	164,297	70,578,596	0	0
CAPEL, JAMES	127,764,729	232,319	77,639	6	0
CAPITAL INST. SERVICES	182,399,759	186,084	0	0	0
CARNEGIE	416,412	125	0	0	.0
CARROLL MCENTEE & MCG	0	0	15,021,054	0	0
CASPIAN SECURITIES	9,110,363	23,524	0	0	0
CATHAY FINANCIAL	5,372,296	5,244	0	0	0
CAZENOVE & CO.	14,593,508	24,473	0	0	0
CENTRAL INVESTMENT	7,352,537	137	0	0	0
CHAPMAN COMPANY	271,749	425	0	0	0
CHARLES, AK	1,191,832	1,395	0	0	0
CHARTERHOUSE TILNEY	129,569	427	0	0	0
CHASE MANHATTAN BANK	0	0	484,071,952	0	35,278,642
CHASE SECURITIES INC	0	0	85,396,284	0	474,909,872
CHEMICAL BANK	0	0	136,337,530	0	0

	Stock	Stock	Bond	Bond	Short-Term
Broker	S Volume	<b>\$</b> Commissions	\$ Volume	<b>\$ Commissions</b>	\$ Volume
CHEMICAL SECURITIES INC	0	0	1,049,764	0	0
CHEUVREUX	4,520,741	2,607	0	0	0
CHEVRON OIL FIN. CO.	0	0	0	0	97,870,494
CHICAGO CORP	98,466,588	84,292	14,234,560	0	0
CIBC/WOOD GUNDY	0	0	1,983,680	0	161,533,706
CIMB SEC. SDN	2,130,287	5,481	28,856	153	0
CISF SECURITIES	417,749	0	0	0	0
CIT GROUP HOLDINGS	0	0	0	0	297,594,797
CITATION GROUP	135,145,129	124,624	0	0	0
CITIBANK	152,257	756	21,747,578	0	246,385,989
CITICORP	0	0	33,287,445	0	24,513,250
CITICORP SECURITIES INC	0	0	17,833,700	0	1,154,834,033
CL GLAZER INC.	19,122	26	0	0	0
CLARKE & CO	0	0	11,972,910	0	0
CLEARY GULL REILAND	3,349,366	2,032	3,210,000	0	0
COLIN HOCHSTIN	0	0	0	0	0
COMMERCIAL CREDIT CO.	0	0	0	0	415,268,804
COMMERZBANK AG	3,848,966	6,405	0	0	0
CONNING & COMPANY	16,084,294	16,091	0	0	0
COOK INVESTMENT CO.	0	0	3,074,652	0	0
CORESTATES FINANCIAL	0	0	3,300,858	0	0
COUNTY NATWEST SEC CORP USA	450,761,646	188,076	811,751	0	0
COVATO LIPSITZ INC.	121,484	112	0	0	0
COWEN&CO	91,089,530	94,075	0	0	0
CRAIG-HALLUM INC	461,585	0	0	0	0
CREDIT ANSTALT	1,483,921	184	0	0	0
CREDIT LYONNAIS	21,081,492	18,969	132,921	331	0
CREDIT SUISSE	2,236,285	384	12,216,300	0	
CREDIT SUISSE FIRST BOSTON LTD	1,145,076	994	12,210,300	0	0
CREDITANSTALT BANK	2,924,409	345	0	0	0
CREDITO ITALIAN INTL	217,347	11	0	0	0
CRESVALE LIMITED LONDON	806,416	148	0	0	0
CRESVALE SEC. INC. NEW YORK	2,064,655	327	0	0	0
CREWS & ASSOCIATES	0	0		0	0
CROSBY SECURITIES	8,378,140	20,460	2,000,204	-	0
CROSSING NETWORK	1,405,395	267	0	0	0
CRT GOVT SECURITIES LTD	1,403,393	0		0	0
CRUTTEDEN GUST & MERH	294,113	352	1,168,660	0	0
CYRUS J. LAWRENCE	309,100	0	0	0	0
DAEWOOD SECURITIES CO., LTD	1,097,600		0	0	0
DAIN RAUSCHER INC	30,932,403	24.020	0	0	0
DAIWA SEC. AMERICA		24,029	51,171,592	0	0
DAKIN SECURITIES	4,217,462	72	19,775,505	0	0
DAVIS	39,310	0	0	0	0
DEAN WITTER REYNOLDS	379,795	1,560	0	0	0
	0	0	139,462,681	0	73,000,000
DEERE (IOUN) CARITAL CORR	0	0	0	0	126,420,267
DEERE (JOHN) CAPITAL CORP	0	0	0	0	81,309,611
DELAFIELD HAR. TABELL	1,335,829	2,616	0	0	0
DESCAP SEC. INC.	0	0	6,189,147	0	0
DEUTSCHE B	812,630	1,542	15,286,201	0	0
DEUTSCHE BANK CAPITAL	29,967,821	52,044	376,907,574	0	0
DEUTSCHE BANK CUSTODY SERVIC	0	0	180,674	0	0
DEUTSCHE BANK GOVT SEC INC	119,500,589	102,048	1,561,604,897	0	2,278,060,564
DEUTSCHE MORGAN GREINFELL	39,633,081	447,318	167,389,167	0	0
DEUTSCHE MORGAN GREINFELL (L	0	0	3,231,518	0	0
DEVELETOGLOU ATHENS	76,208	14	0	0	0
DIGICON	1,875,270	2,088	0	0	0
DILLON, READ	7,713,627	5,615	0	0	1,394,148
DLJ FIXED INCOME	0	0	365,396,084	0	0

## COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	S Volume
DMG AND PARTNERS SECS.	0	0	445,816	0	0
DOMINICK & DOMINICK	925,576	375	0	0	0
DOMINION SEC. H & P	170,589	103	0	0	0
DONALD & CO.	474,523	606	0	0	0
DONALDSON LUFKIN	286,868	2	147,717,484	0	10,728,000,000
DONGBANG PEREGRINE SECURITIES	0	0	154,275	0	0
	2,258,846	9	0	0	0
DONGWON SECURITY	1,034,165	3	0	0	0
DONGYANG		391	0	0	0
DOYLE, PATERSON, & BROWN	156,733		terrore and the second	0	0
DRESDNER KLEINWORT BENSONS	9,637,961	3,765	3,224,591	0	0
DRESDNER SEC (USA) INC	3,844	13	11,333,379	0	0
DUNLEVY	2,398,167	1,610	0	0	0
EDGE SECURITIES	53,172	30	0		
EDWARDS & CO	774,386	649	0	0	0
EDWARDS A.G. & SONS	42,000	0	1,748,303	0	0
ENSKILDA SECURITIES	5,725,461	3,297	0	0	0
EQUITABLE SECURITIES	10,298,766	14,124	1,011,750	0	0
ERNST & CO.	72,146,554	104,383	0	0	0
ESPONOSIA PARTNERS	3,205,004	115	0	0	0
EUROMOBILIARE	5,642,114	14	0	0	0
EWING CAPITAL, INC.	170,091	0	0	0	0
EWING, ALLEN C+CO	2,431,980	0	0	0	0
EXANE, PARIS	5,789,837	2,879	0	0	0
EXECUTION SERVICES INC	44,177,603	44,092	0	0	0
FACTSET DATA	67,317,850	82,778	0	0	0
FAGENSON & CO	92,917	85	0	0	0
FATOR	4,364,556	9,802	0	0	0
FBS INVESTMENT SERV. INC.	0	0	0	0	2,469,950
FC FINANCIAL SERVICES	409,656	858	0	0	0
FELSETTE & CO.	0	0	2,613,195	0	0
FHLMC	0	0	10,206,250	0	0
FIBA NORDIC SEC	2,707,518	803	0	0	0
FIDELITY	164,082,162	164,280	0	0	0
FIRST ALBANY	8,672,040	4,863	6,521,896	0	0
FIRST ANALYSIS SEC. CORP.	21,971,996	22,810	0	0	0
FIRST BANK NAT'L ASSN.	0	0	0	0	13,000,000
FIRST BOSTON CORPORATION	473,072,448	441,163	3,046,232,563	0	15,532,243,427
FIRST CHICAGO CAP MKTS INC	0	0	21,226,189	0	275,016,642
FIRST CHICAGO CORP	0	0	6,162,406	0	0
FIRST OPTIONS OF CHICAGO	589,089	452	0	0	0
FIRST RESOURCES	110,470	37	0	0	0
FIRST TRUST	0	0	2,283	0	26,070,409
FIRST UNION BROKERAGE SERVICE	0	0	2,631,026	0	0
FIRST UNION CAP MKTS	0	0	30,084,071	0	0
FISCHERPARTNERS	53,412	25	0	0	0
FLEMING (ROBERT) INC	1,793,228	1,402	0	0	0
	19,565,254	22,513	0	0	0
FLEMING SECURITIES LTD.	6,466	11	0	0	0
FLOWCAP INC.	0,400	0	0	0	594,981,764
FORD FINANCIAL SERVICES		5,061	0	0	0
FOURTEEN RESEARCH CORP.	4,681,007		0	0	0
FOX PITT KELTON INC	53,912,335	63,347 7,127	0	0	0
FRANK RUSSEL	3,763,034			0	0
FREIMARK BLAIR	14,925,688	18,618	0	0	0
FRIEDMAN, BILLINGS & RAMSEY	11,160,411	3,822	0		0
FRIEND (L.H.) & CO.	809,457	1,770	0	0	and the second of the second
FUJI GOVERNMENT SEC	0	0	0	0	12,120,152
FUJI SECURITIES	0	0	39,938,000	0	26,990,388
FUNDING SECURITIES, INC.	0	0	2,011,766	0	0
FURMAN SELZ MAGER	82,873,381	45,315	0	0	0
		0.4			

Broker	Stock S Volume	Stock	Bond	Bond	Short-Term
G K. GOH		S Commissions	\$ Volume	\$ Commissions	\$ Volume
GARANTIA INC.	1,598,697	4,713	0	0	0
	450,052	1,553	0	0	0
GARANTIA INVESTMENTOS	936,137	3,384	0	0	0
GARTNER CROUP	257,874	456	0	0	0
GARTNER GROUP	238,773	621	0	0	0
GELDERMANN SECURITIES	198,473	216	0	0	0
GENERAL ELEC CAPITAL CORP	0	0	0	0	986,217,394
GENERAL MOTORS ACCEPTANCE	0	0	0	0	67,924,992
GENESIS  CLEACHED NATIVECT DIS	2,498,601	3,900	0	0	0
GLEACHER NATWEST, INC.	0	0	2,000,000	0	0
GLOBAL SECURITIES	10,256,876	0	0	0	0
GMAC FINANCIAL SERVICES	0	0	0	0	240,469,161
GOLDIS PITTSBURG INS	857,732	875	0	0	0
GOLDMAN SACHS & COMPANY	751,232,858	542,403	5,432,835,852	193,084	1,653,434,254
GOLDSMITH & HARRIS	973,025	750	0	0	0
GOODBODY STOCKBROKERS	471,794	4,378	0	0	0
GORDON CP	10,554,070	23,163	0	0	0
GORDON HASKETT & CO.	271,253	294	0	0	0
GRANTCHESTER SECS. INC.	0	0	421,475	0	0
GREENFIELD ARBITRAGE PARTNER	0	0	220,656,935	0	0
GREENLINE INVESTORS SVCS. INC.	4,609,060	10,851	0	0	0
GREENWICH CAPITAL MARKETS IN	0	0	2,786,672,954	0	6,117,000,000
GRUNTAL & COMPANY	5,046,413	3,648	3,944,835	0	0
GRUNTEL & CO UC CAP MKTS	0	0	3,315,236	0	0
GRUPO MONEDA	150,815	61	0	0	0
GUZMAN & CO.	25,586,207	15,627	0	0	0
GX CLARKE	0	0	0	0	3,135,861
HALL INTER	3,398,475	831	0	0	0
HAMBRECHT & QUIST	2,370,231	109	0	0	0
HAMPSHIRE SEC. INC.	101,531	0	0	0	0
HANIFIN	934,643	2,076	0	0	0
HARBK-HARRIS TR & SAVINGS BK T	97,800	60	0	0	0
HBSC SECURITIES	0	0	30,744,471	0	0
HEFLIN & CO.	'744,952	1,350	0	0	0
HENDERSON CROSTHWAIT	1,797,840	5,922	0	0	0
HENNINGS & ASSOCIATES	0	0	0	0	9,957,025
HERZOG HEINE GEDVID	21,419,085	7,830	5,624,925	0	0
HG ASIA SECURITIES	4,553,420	13,579	0	0	0
HIBBARD & OCONNOR GOVERNMEN	0	0	0	0	0
HOARE GOVETT	61,417,011	148,838	0	0	0
HOENIG & CO.	70,504,912	150,509	0	0	0
HONG KONG & SHANG HIGH BANKI	0	0	20,446,044	0	0
HONG KONG BANK	0	0	6,365,012	0	0
HOPPER SOLIDAY & CO.	0	0	1,254,207	0	
HOUSEHOLD FINANCE	0	0	0	0	0
HOUSEHOLD INTERNATIONAL	0	0	0	0	29,743,333
HOWARD WEIL LABOUISSE FRIEDRI	77,707	100	0	0	166,532,140
HSBC INVESTMENT BANK	640,952	1,598	0		0
HSBC JAMES CAPEL	9,799,874	9,312	0	0	0
HSBC SECURITIES INC	17,227,376			0	0
IBES	1,597,800	90,749	13,415,370	0	0
IBM CREDIT CORP	1,397,800	1,670	0	0	0
ILLINOIS CO. (THE)		0	0	0	83,460,754
INDOSUEZ CAPITAL SECURITIES	134,396	2.010	0	0	0
ING SECURITIES	857,780	3,010	0	0	0
INSTINET	1,041,425	888	2,533,731	0	0
INSTITUTIONAL M	982,374,417	444,316	0	0	0
INTERACCIONES	0	0	30,189,359	0	0
INTERACCIONES INTERMOBILIARE SEC.	7,873,003	5,560	0	0	0
INTERWOODILIARE SEC.	5,718,367	10	0	0	0

## COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	\$ Commissions	\$ Volume	\$ Commissions	\$ Volume
INTERSIM S.P.A.	221,739	0	0	0	0
INTERSTATE	40,128,351	49,450	688,009	0	0
INVEMED ASSOCIATES	269,479	546	0	0	0
INVENIED ASSOCIATES INVERLAT INTERNATIONAL	344,463	121	0	0	0
INVESTMENT & INSURANCE CONSU	1,938,300	6,715	0	0	0
INVESTMENT & INSURANCE CONSU	2,533,074,865	1,540,529	0	0	0
ISI GROUP	12,114,072	11,232	0	0	0
J C BRADFORD & CO	7,886,401	10,473	10,253,057	0	0
J P MORGAN & CO	663,325	637	123,618,072	0	0
	240,727,077	224,292	1,056,233,087	0	999,762,973
J P MORGAN SECURITIES INC J. L. AUERBACH & CO (LONDON)	0	0	1,106,204	0	0
	519,896	1,007	0	0	0
J.B. WERE & SON	12,234,211	11,517	0	0	0
JAMES CAPE JANNEY MONTGOMERY SCOTT	7,953,014	4,813	0	0	0
	189,318	61	0	0	0
JARDEN & CO.	2,611,261	1,124	0	0	0
JARDINE FLEMING	2,011,201	0	0	0	0
JARED MULCAY & COMPANY INC.	7,277,130	5,646	0	0	0
JAVELIN SECS.		2,196	0	0	0
JB WERE AND SON MELBOURNE	1,087,242	391	0	0	0
JEAN PIERRE PINATTON	7,785,398	261,656	1,626,094	0	0
JEFFERIES & CO	198,096,927	1,830	0	0	0
JOHNSON RICE & CO	1,429,466	53,273	0	0	0
JONES & ASSOCIATES	50,766,646	1,752	0	0	0
JOSEPHTHAL & CO.	4,363,080	0	12,553,022	0	44,690,044
JP MORGAN	346,979	173	0	0	0
JPP EURO SECURITIES		5,106	0	0	0
KALB VOORHIS & CO	4,949,210	177	0	0	0
KEANE SECURITIES	216,850	9,674	411,477	0	5,000,000
KEEFE BRUYETTE & WOOD	10,942,765	17,791	0	0	0
KEMPER CAP	11,278,667	0	29,961,447	0	1,928,040
KEY CAPITAL MKTS		3,048	0	0	0
KIM. ENG. SEC.	1,035,919	0	537,948	0	0
KINNARD (JOHN G.) & CO	3,710,914	18,450	0	0	0
KLEINWORTH BENSON INC	32,015,299	18,430	0	0	0
KNIGHT SECURITIES	2,260,903	0	0	0	0
LADENBURG THALMAN & CO.	1,353,161	0	0	0	137,557,010
LAMBERSON KNIGHT	0	0	1,149,356	0	0
LANSTON CO	2,806,115	6,243	0	0	0
LARCO		198	0	0	0
LASKER STONE AND STERN	306,060 1.353,783	1,388	1,308,088	0	0
LAZARD FRERES & CO	2,877,575	695	36,201,373	0	0
LEGG MASON	1,606,457,145	1,433,034	4,399,927,901	256	1,204,740,338
LEHMAN BROTHERS INC	1,000,437,143	0	2,570,342,863	0	848,230,761
LEHMAN GOVT SECURITIES	198,540,923	192,190	0	0	0
LEWCO SECURITIES INC.	7,456,001	9,094	0	0	0
LIPPER ANALYTICAL DIST		5,277	0	0	0
LOMBARD WALL INC	2,606,514	0	30,655,078	0	0
LORRAINE L BLAIR INC	216,393,815	253,196	63,820,259	0	0
LYNCH, JONES & RYAN	210,393,813	255,170	1,156,882	0	0
M A SIDEL & COMPANY	0	0	26,443,524	0	0
M L PIERCE FENNER		404	0	0	0
MACQUARIE EQUITIES	206,582	1,380	0	0	0
MAGNA SECURITIES CORP	1,017,525	5,268	3,425	2	0
MALONEY & CO	5,283,363	5,200	0,429	0	0
MANSION HOUSE SECURITIES	166,417	0	2,895,650	0	0
MANUFACTURERS CORRESPONDEN		467	2,893,030	0	0
MAXUS CORP	313,852		0	0	0
MAY DAVIS	101,022	134	0	0	0
MAY FINANCING	1,751,319	1,140	U	V	U

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	<b>S</b> Commissions	\$ Volume	<b>S</b> Commissions	\$ Volume
MAYER & SCHWEITZER INC	6,714,104	0	0	0	0
MCDONALD & COMPANY	7,921,553	6,937	65,715,608	0	0
MCGRAW HILL	3,078,840	2,865	0	0	0
MCINTOSH & CO.	105,053	30	0	0	0
MELLON CAPITAL MKTS	0	0	0	0	11,658,275
MELLON FINANCIAL MKTS	0	0	1,802,242	0	0
MELVIN SECURITIES (CLARK & CO)	18,927	25	0	0	0
MENDHAM CAPITAL	0	0	1,088,516	0	0
MERRILL LYNCH P F & S	1,061,546,387	872,806	6,665,488,669		
MESIROW AND COMPANY	719,600			1,065	1,452,857,895
MESIROW FINANCIAL INC	719,000	0	26,325,405	0	0
MHBDC-MHT BROKER - DEALER	0		40,508,672	0	0
MIDWEST RESEARCH	100	0	369,078	0	0
	607,424	635	0	0	0
MIDWOOD SECURITIES	6,480,363	7,800	732,816	0	0
MILDESA SERVICIOS BURSATILES	487,517	1,715	0	0	0
MILLER JOHNSON & KEANE	16,750	0	0	0	0
MILLER SEC. INC.	121,127	0	0	0	0
MONNESS CRESPI HARDT	325,637	0	0	0	0
MONTGOMERY SECURITIES	258,286,147	217,232	9,764,920	0	0
MONTREAL TRUST COMPANY CANA	312,097	85	0	0	0
MOORS & CABOT	187,589	191	665,327	0	0
MORGAN GRENFELL	2,849,601	5,892	.0	0	0
MORGAN GUARANTY	0	0	783,145	0	0
MORGAN KEGAN INC.	5,230,862	3,118	1,409,160	0	0
MORGAN STANLEY & CO	924,448,418	420,555	3,031,711,448	0	1,547,206,375
MULLER AND COLE	150,417	53	0	0	0
MURPHY, MARSEILLES, SMITH & NA	696,369	528	0	0	0
NAT WEST BANK USA	0	0	6,524,375	0	0
NATIONAL FINANCIAL	2,864,556	2,373	798,200	0	0
NATIONAL SECURITIES CORP	140,000	0	0	0	. 0
NATIONS BANK	0	0	117,250,859	0	1.00
NATIONSBANC CAPITAL MKTS INC	0	0	53,255,411	0	4,989,325
NATIONSBANK	0	0	3,250,150	0	2,279,204,836
NATWEST SECURITIES	10,433,640	20,386			0
NBC CAP MKTS CORP INC	0,455,040	20,380	2,244,351	0	0
NEUBERGER & BERMAN	36,651,222	41,574	7,921,888	0	0
NEW CREST CAP INC.	3,542,032		0	0	0
NEWBRIDGE SECURITIES		8,781	0	0	0
NIKKO SECURITIES	278,745,476	298,840	0	0	0
NIKMBS NIKKO SEC. INTL.	6,630,752	92	104,161,193	0	5,031,688,887
NOMURA BANK	0	0	861,513	0	0
NOMURA SECURITIES INTL	0	0	21,133,812	0	0
	27,178,945	6,206	932,581,850	0	0
NORDBANKEN	816,090	366	0	0	0
NORWEST CORP	0	0	0	0	14,000,000
NORWEST FINANCIAL INC	0	0	0	0	57,167,592
NORWEST INVESTMENT SERV INC	0	0	0	0	107,990,816
NUTMEG SECURITIES	3,438,261	8,316	0	0	0
O'NEIL (WM COMPNY INC	3,813,493	7,127	0	0	0
ODDO DESACHE' PARIS	951,748	397	0	0	0
OFEK SEC AND INV	1,198,059	824	0	0	0
OLDE & CO	915,259	3,080	0	0	0
OPPENHEIMER & CO	194,680,069	177,774	15,732,250	0	0
ORD MINNETT	21,850,072	51,822	0	0	0
ORMES CAPITAL	366,233	654	0	0	0
OSCAR GRUSSMAN	574,828	978	0	0	0
OTA LTD PARTNERSHIP	2,817,760	2,334	0	0	0
OUTWATER & WELLS, INC.	533,958	465	0	0	0
PACIFIC CR	261,769	347	0	0	0
PACIFIC GROWTH EQUITIES	2,517,667	0	0	0	0
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#### COMMISSIONS AND TRADING VOLUME

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	<b>S</b> Commissions	\$ Volume	<b>S</b> Commissions	\$ Volume
PACTUAL	4,709,318	13,727	0	0	0
PAINE WEBBER INC	2,481,160	1,870	144,033,594	0	11,972,000,000
PAINE WEBBER J & C	371,678,494	409,038	1,466,703,431	0	42,339,108
PANMURE GORDON	4,525,657	11,941	0	0	0
PARIBAS CAPITAL MARKETS	1,632,573	679	0	0	0
PARIBAS CO	12,615,174	10,540	9,101,342	0	0
PAULI & CO	398,672	0	0	0	0
PAULSEN, DOWLING	975,584	1,307	0	0	0
PCS SECURITIES INC.	12,968,363	20,060	0	0	0
PENSION CONSULTING SERV	156,622	131	0	0	0
PEREGRINE SECURITIES	10,311,370	78,940	6,097,841	0	0
PEREMEL & COMPANY INC	0	0	8,271,295	0	0
PERSHING	425,521,373	336,355	1,369,530,215	0	0
PETERS & CO.	5,250,382	48,791	0	0	0
PHILEO ALLIED SECURITIES	4,735,194	11,827	0	0	0
PHILLIPS & DREW	625,832	801	0	0	0
PICTET & CO	4,030,305	8,205	0	0	0
PINNACLE FINANCIAL	88,647	53	0	0	0
PIPER JAFFRAY INC	76,136,937	28,464	142,421,751	0	4193758
POSIT	9,804	8	0	0	0
PRESSPRICH (R.W.) & COMPANY	0	0	690,000	0	0
PRUDENTIAL	487,885	200	12,370,510	0	0
PRUDENTIAL FUNDING CORP	0	0	0	0	318,793,074
PRUDENTIAL SECURITIES INC	226,524,262	267,490	824,663,121	0	1,833,500,000
PRYOR MCCLENDON	17,708,210	22,678	0	0	0
PUNK ZIEGE	6,562,969	3,282	0	0	0
RABO BANK	3,576,370	3,953	0	0	0
RABO EFFECTENBANK NV AMSTER	479,032	574	0	0	0
RABOBANK NETHERLANDS	178,532	223	0	0	0
RASHID HUSSAIN	2,287,089	3,503	0	0	0
RAUSCHER P	6,069,297	10,972	0	0	0
RAYMOND JAMES & ASSOCIATES	31,288,976	25,071	2,000,000	0	0
RBC DOMINION SECURITIES	38,497,759	37,412	0	0	0
RIZAL COMMERCIAL BANKING	182,303	63	0	0	0
ROBBINS	35,820	47	0	0	
ROBERT BRANDT & CO	26,511	44	0	0	0
ROBERT FLEMING	10,468,836	17,373	0	0	0
ROBERT W. BAIRD & CO	36,304,457	5,250	10,790,839	0	0
ROBERTSON COLMAN & STEPHENS	55,886,952	10,884	0	0	0
ROBINSON-HUMPHREY CO	22,448,853	18,404	0	0	0
ROCHDALE SECURITIES CORP	17,989,901	19,064	0 207 202 124		12 656 570 677
SALOMON BROTHERS	434,862,395	573,626	9,307,382,134	11,268	13,656,570,677
SALOMON SMITH BARNEY HOLDIN	1,180,708	2,150	0	0	0
SANFORD BERNSTEIN	93,686	105	0	0	0
SANTANDER INVESTMENT SEC'S.	9,175,017	8,974	0	0	0
SASSON (HONG KONG)	75,364	256	0	0	0
SASSOON SECURITIES	2,013,676	6,888	6,206,265	0	0
SBC WARBURG, LONDON	9,116,163	5,182 90	0,200,203	0	0
SCHAENEN JACOBS ETHRIDGE & CO	38,834	1,877	0	0	0
SCHRODER SECURITIES	12,050,080		0	0	0
SCOTI & STRINGEELLOW	2,077,290	3,957	0	0	0
SCOTT & STRINGFELLOW	3,346,131	6,048 53,883	0	0	0
SELFINANCIAL SCVS.	30,793,815		0	0	0
SELLIER S.A.	13,805,888	17,280 378	0	0	0
SELLIER S.A.	764,872 166,463	188	0	0	0
SHARPE CAPITAL INC., NY	100,403	0	321,065,205	0	0
SHEARSON LEHMAN AMER EXPRES	7,861,957	158	0	0	0
SHERWOOD SECURITIES	65,229	46	0	0	0
SHIELDS CAPITAL CORP	03,229				0

Broker	Stock \$ Volume	Stock	Bond	Bond	Short-Term
SIFF MARKS+OAKLEY		S Commissions	\$ Volume	\$ Commissions	\$ Volume
	40,287		0	0	0
SIGMA SECS, ATHENS SIMMONS & COMPANY	5,532,102	37 422	0	0	0
	166,718		0	0	0
SIMMONS FIRST NATL BANK SLAVENBURG OYEN		0	39,318,988	0	0
	319,940,270		113,775,382	0	0
SLOATE, WIESMAN	17,987,462	20,806	0	0	0
SMITH BARNEY & COMPANY SMITH BARNEY SHEARSON INC	262,392	833	174,109,251	0	946,000,000
SOCIETE GENERAL	532,482	0	0	0	0
	9,554,359	6,562	6,339,003	0	0
SOUNDVIEW	34,429,170	10,943	0	0	0
SOUTHEAST RESEARCH PARTNERS	2,049,690	2,545	0	0	0
SOUTHWEST SECURITIES	0	0	5,413,676	0	0
SPEAR, LEEDS & KELLOGG	1,884,120	1,000	9,435,035	0	0
SPROTT SECURITIES	382,072	861	0	0	0
SPS CLEARING	0	0	0	0	0
SSGA EXTERNAL	12,536,946	0	0	0	0
ST OF LA DEP OF TREASURY	178,255	17	0	0	0
STANDARD & POOR SECURITIES	210,550,410	282,461	0	0	0
STANDARD BANK OF SA JOHANNES	3,755,287	2,551	0	0	0
STATE BOARD OF INVESTMENT	0	0	26,268,602	0	22,462,680
STATE ST BK & TRUST	3,274,205,467	6,755	943,661,320	0	27,446,909,451
STECHLER ASSOC	0	0	117	0	0
STEPHEN ROSE & PART	3,002,554	10,505	0	0	0
STEPHENS, INC.	192,458	270	0	0	0
STOCK BEECH	4,807,749	0	2,245,240	0	0
STUART FRANKLE	243,830	337	0	0	0
SUN COAST CAPITAL GROUP INC.	0	0	228,771	0	0
SUTRO AND COMPANY INC.	8,369,425	18,066	0	0	0
SVENSKA HANDELSBANKEN	2,355,918	952	0	0	0
SWISS BANK	48,980,413	43,678	117,789,020	2,598	7,692,255
T. HOARE & CO. LTD.	624,768	780	0	0	0
TA SECURITIES MALAYSIA	1,555,857	5,615	0	0	0
TEXACO INC	0	0	0	0	137,245,254
THE SENACA	0	0	4,018	0	0
THOMASON INV	2,367,192	3,792	0	0	0
THOMSON INSTITUTIONAL SERVICE	1,841,576	3,648	0	0	0
TIR SECURITIES	7,703,869	20,036	0	0	0
TONGE CO.	2,802,362	3,419	0	0	0
TORONTO DOMINION SEC INC	0	0	4,378,252	0	149,152,693
TRAVELERS GROUP INC	0	0	0	0	19,974,064
TRENDANALYSIS SECURITIES, INC.	2,528,234	1,900	0	0	0
TUCKER, ANTHONY & R.L. DAY, IN	4,939,770	3,120	0	0	0
U.S. BANCORP INVESTMENT	0	0	0	0	58,208,608
U.S. CLEARING	84,132,380	47,004	0	0	0
UBS PHILLIPS & DREW SEC.	0	0	907,500	0	0
UBS SECURITIES	6,863,711	8,232	89,628,870	0	0
UBS-DB CORPORATION	122,753,094	129,329	927,036,376	0	0
UNIBANK	0	0	465,797	0	0
UNION BANK OF L.A.	14,236,880	9,957	2,218,535	0	0
UNION BK SWITZLD (BASLE)	0	0	24,631,938	0	0
UNTERBURG HARRIS & DESANTIS	2,696,227	0	0	0	0
UTENDAHL	0	0	3,000,469	0	0
VALORES MEXICANA	1,202,061	447	0	0	0
VECTOR SECURITIES INC	697,664	1,360	0	0	0
VICKER BALLAS	169,871	58	0	0	
VILAS & HICKEY	0	0	0	0	0
VOLPE & COVINGTON	89,420	0	0	0	0
VOLPE WELT	2,903,519	1,845	0	0	0
VONTOBEL	5,229,950	10,666	0		0
S. S	5,447,730	10,000	0	0	0

#### **COMMISSIONS AND TRADING VOLUME**

## By Broker for Fiscal Year 1998

	Stock	Stock	Bond	Bond	Short-Term
Broker	\$ Volume	<b>\$</b> Commissions	\$ Volume	<b>\$</b> Commissions	\$ Volume
VOTORANTIM BROKERAGE	491,976	1,168	0	0	0
W.I. CARR	13,895,045	6,747	0	0	0
WACHOVIA BANK	0	0	0	0	13,870,500
WACHOVIA BANK N.A.	0	0	12,260,495	0	362,105,252
WAGNER STOTT & CO.	17,424,004	14,580	0	0	0
WAINWRIGHT SECURITIES	2,507,872	2,000	0	0	0
WALSH GREENWOOD	2,587,976	1,524	0	0	0
WARBURG S.G.	63,933,982	52,051	0	0	0
WASSERSTEI	250,600	600	0	0	0
WATERHOUSE SECS. INC	345,300	1,210	0	0	0
WATKINS & COMPANY	0	0	2,553,125	0	0
WEEDEN & COMPANY	130,670,165	159,700	0	0	0
WEISS	70,909,857	153,234	0	0	0
WELLS FARGO BANK	2,434	0	0	0	0
WERTHEIM & CO	63,536	101	0	0	0
WERTHEIM SCHRODER & CO INC	1,185,024	1,472	0	0	0
WESSELS, ARNOLD	26,003,409	6,246	0	0	0
WESTMINSTER	31,282,676	77,515	0	0	0
WHEAT FIRST SECURITIES	0	0	10,480,363	0	19,577,635
WHEATON FIRST SECURITIES INC	11,166,903	15,409	0	0	0
WICAR	2,267,821	5,554	0	0	0
WICK SECURITIES INC	425,353	1,250	0	0	0
WILLIAM HEWLETT ASSOC.	0	0	12,324,429	0	0
WILLIAMS	0	0	0	0	21,306,048
WILLIAMS CAP GROWTH	41,331,239	35,988	0	0	25,670,306
WILLIAMS CAP GRP LP	0	0	0	0	34,453,022
WILSHIRE ASSOCIATES	9,199,077	32,714	0	0	0
WOOD & CO.	16,609	5	0	0	0
WOOD GUNDY & COMPANY	4,852,192	8,336	0	0	19,630,333
ZANNEX SECURITIES	525,701	960	0	0	0
ZIONS CAPITAL MARKETS	0	0	20,031,218	0	6,781,773
BROKER NOT AVAILABLE*	5,030,859,396	145,358	2,759,989,189	0	15,212,097,474
ALL BROKERS COMBINED	\$26,862,080,784	\$16,325,693	\$56,950,676,829	\$208,840	\$131,003,150,404

<sup>\*</sup> Includes transactions where broker data was imcomplete, income reinvestment transactions and transfers and adjustments between funds.

Note: Totals may not add due to rounding.

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## 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 State of Minnesota's Supplemental Investment Fund and the Post Retirement Investment Fund for the year ended June 30, 1998, as shown on pages 104 to 109. 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.

The financial statements present only the Supplemental Investment Fund and the Post Retirement Investment Fund 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.

Except as discussed in the following paragraph, 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 misstatements. 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.

Governmental Accounting Standards Board Technical Bulletin 98-1, Disclosures about Year 2000 Issues, requires disclosure of certain matters regarding the year 2000 issue. The Minnesota State Board of Investment has included such disclosures in Note 1. Because of the unprecedented nature of the year 2000 issue, its effects and success of related remediation efforts will not be fully determinable until the year 2000 and thereafter. Accordingly, sufficient audit evidence does not exist to support the Minnesota State Board of Investment's disclosures with respect to the year 2000 issue made in Note 1. Further, we do not provide assurance that the Minnesota State Board of Investment's Investment is or will be year 2000 ready, that the Minnesota State Board of Investment's

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

year 2000 remediation efforts will be successful in whole or part, or that parties with which the Minnesota State Board of Investment does business will be year 2000 ready.

In our opinion, except for the effects of such adjustments, if any, as might have been determined to be necessary had we been able to examine evidence regarding year 2000 disclosures, the financial statements referred to above represent fairly, in all material respects, the net assets and participation of the Supplemental Investment and the Post Retirement Investment Funds of the State of Minnesota at June 30, 1998, and the results of their operations and changes in their net assets for the year then ended, in conformity with generally accepted auditing standards.

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 112 to 134 are presented for the purpose of additional analysis and are not a required part of the Supplemental Investment and Post Retirement 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 have also issued a report dated December 1, 1998, on our consideration of the State Board of Investment's control structure and compliance with laws and regulations.

James R. Nobles Legislative Auditor

James R. Volely

Claudia J. Gudvangen, CPA Deputy Legislative Auditor

December 1, 1998

## STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF ASSETS AND LIABILITIES JUNE 30, 1998 AMOUNTS IN (000)'S

	SUPPLEMENTAL INVESTMENT FUND TOTAL(5)		POST RETIREME INVESTMENT FUND (6)	
ASSETS:				
Investments (at market value) (2),(3):				
Common Stock	\$	870,337	\$	11,621,679
Alternative Equities		0		0
Fixed Income Securities		293,069		4,992,469
Short Term Securities		81,153		416,178
Short Term Securities-Lending Collateral(4b)		122,625		1,750,467
Total Investments (4a)	\$	1,367,184	\$	18,780,793
Cash		0		0
Security Sales Receivable		0		0
Accounts Receivable-Fee Refunds		0		0
Accounts Receivable-Mortality		0		34,019
Accounts Receivable-Participants		0		37,748
Accrued Interest		2,241		0
Accrued Dividends		0		0
Accrued Short Term Gain		386		1,690
Reserve Adjustment		0		0
TOTAL ASSETS	\$	1,369,811	\$	18,854,250
LIABILITIES:				
Management Fees Payable		234		6,318
Security Purchases Payable		0		0
Accounts Payable-Participants		0		0
Accounts Payable-Mortality		0		2,358
Payable to MSRS		0		433
Reserve Adjustment		0		0
Securities-Lending Collateral (4b)		122,625		1,750,467
TOTAL LIABILITIES	\$	122,859	\$	1,759,576
NET ASSETS AT JUNE 30, 1998	\$	1,246,952	\$	17,094,674

# STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1998 AMOUNTS IN (000)'S

	IN	PLEMENTAL VESTMENT ND TOTAL	POST RETIREMENT INVESTMENT FUND	
FROM INVESTMENT ACTIVITY:				
Net Investment Income	\$	81,961	\$	1,615,342
Realized Gains (Losses)		11,636		238,646
Unrealized Gains (Losses)		129,613		878,191
TOTAL INCOME	\$	223,210	\$	2,732,179
Less Distribution To				
Participant Accounts		(223,208)		(1,726,541)
<b>Undistributed Dedicated Income</b>		0		(127,447)
Net Change In Undistributed Income	\$	2	\$	878,191
FROM PARTICIPANT TRANSACTIONS:				
Additions To Participant Accounts		(2.100		1 252 511
Participant Contributions		63,189		1,253,711
Income Distribution		223,208		1,726,541
Income To Be Distributed	-\$	286,397	\$	127,447 3,107,699
Total Additions	Þ	200,397	Þ	3,107,099
Deductions From Participant Accounts Withdrawals		29,317		1,214,674
Total Deductions	\$	29,317	\$	1,214,674
Net Change In Participation	\$	257,080	\$	1,893,025
TOTAL CHANGE IN ASSETS	\$	257,082	\$	2,771,216
NET ASSETS:				
Beginning Of Period		989,870		14,323,458
End Of Period	\$	1,246,952	\$	17,094,674

## STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1998 AMOUNTS IN (000)'S

	INV	LEMENTAL ESTMENT ND TOTAL	POST RETIREMENT INVESTMENT FUND	
INVESTMENT INCOME:				
Interest	\$	17,018	\$	420,997
Dividends		60,857		1,190,370
Short Term Gains		4,550		21,770
Security Lending Gross Earnings(4c)		6,488		115,109
Less: Borrower Rebates		(5,949)		(105,960)
Less: Fees Paid to Agents		(161)		(2,875)
<b>Security Lending Net Earnings</b>		378		6,274
Income Before Expenses	\$	82,803	\$	1,639,411
Management Fees		842		24,069
NET INCOME	\$	81,961	\$	1,615,342
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS Realized:				
<b>Proceeds From Sales</b>	\$	99,788	\$	1,186,177
Cost Of Securities Sold		88,152		947,531
Net Realized Gain (Loss) Unrealized:	\$	11,636	\$	238,646
<b>Beginning Of Period</b>		126,951		1,225,579
End Of Period		256,564		2,103,770
Increase (Decrease) In				
Unrealized Appreciation	\$	129,613	\$	878,191
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS	\$	141,249	\$	1,116,837

## NOTES TO THE FINANCIAL STATEMENTS JUNE 30, 1998

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

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

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

Risk Categories: At June 30, 1998, 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 collateralized by at least 100% of the value of loaned securities. 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 reduces the state's investment risk for repurchase agreements.

Security Valuation: All securities are valued at market except for U.S. Government short-term securities and commercial paper, which are valued at market less accrued interest. Accrued short-term interest is recognized as income as part of "Short-Term Gain". For long-term fixed income securities the SBI 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. The basis for determining the fair value of investments that are not based on market quotations includes audited financial statements, analysis of future cash flows, and independent appraisals.

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

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

Amortization of Fixed Income Securities: 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 US 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. The collateral held and the market value of securities on loan for the State Board as of June 30, 1998 were \$4,140,446,524 and \$4,005,920,005 respectively.

The SBI utilizes State Street Bank (SSB) to manage its Securities Lending program. SSB provides the SBI indemnification in the event a borrower defaults by failing to return a loaned security.

Year 2000 (Y2K) Readiness: Technical issues associated with the arrival of the year 2000 have the potential of severely disrupting certain types of business activity, including investment management, which relies heavily on computer systems. The usage of two digits (i.e., 99) to represent the year in many older computer programs, data files or chips may be recognized incorrectly when the year 2000 arrives. To eliminate the problem, all software, data and hardware that relies on a two-digit field to represent the year must be converted to four digits prior to December 31, 1999. The SBI has been planning for this event for several years to insure that it will not be adversely impacted.

- The SBI utilizes State Street Bank (SSB) as its custodial bank. Various state and federal regulators have imposed strict Y2K readiness standards and compliance reporting requirements on banks, including SSB. The management of State Street Bank has provided assurances that the software they use to provide custody services to the SBI have been tested and the required remediation has been completed.
- The SBI uses Financial Controls Systems (FCS) as its accounting system vendor. The management of FCS has provided assurances that the software they use to provide services to the SBI have been tested and the required remediation has been completed.

## NOTES TO THE FINANCIAL STATEMENTS JUNE 30, 1998

 The SBI utilizes a number of firms to provide investment management services for its Investment Trust Funds. The management of these financial services firms has been asked to provide assurances that computer software and systems utilized in the management of SBI assets are Y2K compliant.

#### 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, 1998, the cost of investments for the Investment Trust Funds, excluding security lending collateral, was:

Supplemental Investment Fund \$ 987,995,498 Post Retirement Fund \$14,926,555,758

#### 4. LOANED SECURITIES

4(a) The market value of loaned securities outstanding at June 30, 1998 was:

Supplemental Investment Fund \$ 128,486,348 Post Retirement Fund \$ 1,958,146,185

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 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 1998 the fund included seven separate accounts with different investment objectives. Financial information on the individual accounts is shown on pages 112 to 125 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, 1998. It includes a 6% 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, 1998 net market value in excess of Required Reserves is available for distribution as an investment based benefit increase to pension fund participants in January 1999.* 

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, 1998 are eligible to receive the January 1, 1999 benefit increase.

Inflation Based Benefit Increase 1.5000%
Investment Based Benefit Increase 8.3254%
Total Benefit Increase 9.8254%

### 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. Our master custodian, State Street Bank and Trust hold the assets of the pooled accounts. Financial information on these pooled accounts is shown on pages 126 to 133 of this report.

## STATE BOARD OF INVESTMENT INVESTMENT TRUST FUNDS SCHEDULE OF PARTICIPATION JUNE 30, 1998 AMOUNTS IN (000)'S

	IN	PLEMENTAL VESTMENT ND TOTAL	POST RETIREMENT INVESTMENT FUND		
Teacher's Retirement Fund	\$	0	\$	5,570,230	
Public Employees Retirement Fund		0		3,929,426	
State Employees Retirement Fund		0		1,813,037	
Public Employees Police & Fire Fund		0		584,050	
Public Employees Consolidation Fund		0		573,234	
Highway Patrolmen's Retirement Fund		0		185,313	
Legislators & Survivors Retirement Fund		0		24,748	
Correctional Employees Retirement Fund		0		79,770	
Judges Retirement Fund		0		66,941	
Income Share Account		574,671		0	
Growth Share Account		277,992		0	
Money Market Account		47,363		0	
Common Stock Index Account		212,474		0	
International Stock Account		24,503		0	
Bond Market Account		34,973		0	
Fixed Interest Account		75,002		0	
TOTAL PARTICIPATION	\$	1,246,978	\$	12,826,749	
Adjustments					
Unrealized Appreciation					
(Depreciation) of Investments		0		2,103,770	
Undistributed Earnings		(26)		2,164,155	
NET ASSETS	\$	1,246,952	\$	17,094,674	

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	Supplemental Investment Fund Combining Statements11
	Pooled Investment Account Statements
	Footnotes to Supplemental Financial Statements 13

# STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL INVESTMENT FUND SCHEDULE OF ASSETS AND LIABILITIES JUNE 30, 1998 AMOUNTS IN (000)'S

	5	INCOME SHARE ACCOUNT		GROWTH SHARE ACCOUNT		ONEY ARKET COUNT
ASSETS:						
Investments (at market value) (2), (3):						
Common Stock	\$	355,187	\$	278,151	\$	0
Alternative Equitites		0		0		0
Fixed Income Securities		185,227		0		0
<b>Short Term Securities</b>		32,198		0		47,144
Securities-Lending Collateral (4b)		77,708		17,552		0
<b>Total Investments (3)</b>	\$	650,320	\$	295,703	\$	47,144
Cash		0		0		0
Security Sales Receivable		0		0		0
Account Receivable- Fee Refunds		0		0		0
Account Receivable-Mortality		0		0		0
Account Receivable-Participants		0		0		0
Accrued Interest		1,916		0		0
Accrued Dividend		0		0		0
Accrued Short Term Gain		162		0		219
TOTAL ASSETS	\$	652,398	\$	295,703	\$	47,363
LIABILITIES:						
Management Fees Payable		17		159		1
Security Purchases Payable		0		0		0
<b>Accounts Payable-Participants</b>		0		0		0
<b>Options Premiums Received</b>		0		0		0
Securities-Lending Collateral (4b)		77,708		17,552		0
TOTAL LIABILITIES	\$	77,725	\$	17,711	\$	1
NET ASSETS AT JUNE 30, 1998	\$	574,673	\$	277,992	\$	47,362

STOCK INDEX CCOUNT	INTERNATIONAL SHARE ACCOUNT		M	BOND MARKET ACCOUNT		FIXED INTEREST ACCOUNT		PLEMENTAL VESTMENT IND TOTAL
\$ 212,483	\$	24,516	\$	0	\$	0	\$	870,337
0		0		0		0		0
0		0		34,981		72,861		293,069
0		0		0		1,811		81,153
18,609		5,077		3,679		0		122,625
\$ 231,092	\$	29,593	\$	38,660	\$	74,672	\$	1,367,184
0		0		0		0		0
0		0		0		0		0
0		0		0		0	0	
0		0		0		0		0
0		0		0		0		0
0		0		0		325		2,241
0		0		0		0		0
0		0		0		5		386
\$ 231,092	\$	29,593	\$	38,660	\$	75,002	\$	1,369,811
8		14		9		26		234
0		0		0		0		0
0		0		0		0		0
0		0		0		0		0
18,609		5,077		3,679		0		122,625
\$ 18,617	\$	5,091	\$	3,688	\$	26	\$	122,859
\$ 212,475	\$	24,502	\$	34,972	\$	74,976	\$	1,246,952

# STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL INVESTMENT FUND COMBINING STATEMENT OF CHANGES IN NET ASSETS YEAR ENDED JUNE 30, 1998 AMOUNTS IN (000)'S

	5	NCOME SHARE CCOUNT	S	ROWTH SHARE CCOUNT	MA	ONEY ARKET COUNT
FROM INVESTMENT ACTIVITY:	_			10.550		0.745
Net Investment Income	\$	24,469	\$	40,552	\$	2,745
Realized Gains (Losses)		9,505		1,157		0
Unrealized Gains (Losses)		68,292		23,342		0
TOTAL INCOME		102,266		65,051		2,745
Less Distributions to participants Accounts	(\$	102,266)	(\$	65,051)	(\$	2,745)
<b>Undistributed Dedicated Income</b>		0		0		0
Net Change In Undistributed Income	\$	0	\$	0	\$	0
FROM PARTICIPANT TRANSACTIONS: Additions To Participant Accounts						
Participant Contributions		13,451		11,152		120
Income Distributions		102,266		65,051		2,745
Income To Be Distributed		0		0		0
<b>Total Additions</b>		115,717		76,203	V 9 <del></del>	2,865
<b>Deductions From Participant Accounts</b>						
Withdrawals		11,153		3,987		7,531
<b>Total Deductions</b>		11,153		3,987		7,531
Net change In Participation	\$	104,564	\$	72,216	(\$	4,666)
TOTAL CHANGE IN ASSETS	\$	104,564	\$	72,216	(\$	4,666)
NET ASSETS: Beginning Of Period	\$	470,108	\$	205,776	\$	52,028
End Of Period	\$	574,672	\$	277,992	\$	47,362
And Old Ville		,			_	

	STOCK INDEX ACCOUNT		INTERNATIONAL SHARE ACCOUNT		MARKET IN		FIXED INTEREST ACCOUNT		LEMENTAL ESTMENT ND TOTAL
\$	6,627	\$	1,070	\$	2,825	\$	3,673	\$	81,961
	461		95		52		366		11,636
	38,055		-845		265		504		129,613
	45,143		320	51	3,142	,	4,543		223,210
( \$	45,143)	(\$	320)	( \$	3,142)	( \$	4,541)	(\$	223,208)
	0		0		0		0		0
\$	0	\$	0	\$	0	\$	2	\$	2
	25,879		4,187		5,976		2,424		63,189
	45,143		320		3,142		4,541		223,208
	0		0		0		0		0
	71,022		4,507		9,118		6,965		286,397
	1,530		1,436		821		2,859		29,317
	1,530		1,436	1	821		2,859		29,317
\$	69,492	\$	3,071	\$	8,297	\$	4,106	\$	257,080
\$	69,492	\$	3,071	\$	8,297	\$	4,108	\$	257,082
\$	142,982	\$	21,432	\$	26,676	\$	70,868	\$	989,870
\$	212,474	\$	24,503	\$	34,973	\$	74,976	\$	1,246,952

# STATE BOARD OF INVESTMENT MINNESOTA SUPPLEMENTAL INVESTMENT FUND COMBINING STATEMENT OF OPERATIONS YEAR ENDED JUNE 30, 1998 AMOUNTS IN (000)'S

		NCOME SHARE CCOUNT	S	ROWTH SHARE CCOUNT	MONEY MARKET ACCOUNT	
INVESTMENT INCOME:						
Interest	\$	10,458	\$	0	\$	0
Dividends		12,139		41,026		0
Short Term Gains		1,732		8		2,748
Security Lending Gross Earnings (4c)		3,936		1,034		0
Less: Borrower Rebates		(3,632)		(947)		0
Less: Fees Paid to Agents		(90)		(26)		0
Security Lending Net Earnings		214		61		0
Income Before Expenses	\$	24,543	\$	41,095	\$	2,748
Management Fees		74		544		2
NET INCOME	\$	24,469	\$	40,551	\$	2,746
REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS Realized: Proceeds From Sales Cost Of Securities Sold	\$	76,104 66,599	\$	5,488 4,331	\$	0
Net Realized Gain (Loss)		9,505		1,157		0
Unrealized:						0
Beginning Of Period	\$	71,519	\$	20,832	\$	0
End Of Period	\$	139,811	\$	44,174	\$	0
Increase (decrease) In						
Unrealized Appreaciation		68,292		23,342		0
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENTS	\$	77,797	\$	24,499	\$	0

I	TOCK NDEX COUNT	S	INTERNATIONAL SHARE ACCOUNT		BOND MARKET ACCOUNT		FIXED INTEREST ACCOUNT		LEMENTAL ESTMENT D TOTAL
\$	0 6,590 0 905 (806) (29)	\$	0 1,102 2 287 (255) (11) 21	\$	2,845 0 0 326 (309) (5) 12	\$	3,715 0 60 0 0 0	\$	17,018 60,857 4,550 6,488 (5,949) (161) 378
\$	6,660	\$	1,125	\$	2,857	\$	3,775	\$	82,803
-\$	6,627	- \$	1,070	-\$	2,825	\$	3,673	\$	842 81,961
\$	1,539	\$	1,836	\$	823	\$	13,998	\$	99,788
	1,078		1,741		771		13,632		88,152
	461		95		52		366		11,636
\$	31,401	\$	2,220	\$	177	\$	802	\$	126,951
\$	69,456	\$	1,375	\$	441	\$	1,307	\$	256,564
	38,055		-845		264		505		129,613
\$	38,516	(\$	750)	\$	316	\$	871	\$	141,249

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
PARTICIPATION			
Adrian Fire	\$ 92,964	\$ 27,422	\$ 0
Alborn Fire	21,937	0	0
Alden Fire	0	8,616	0
Almelund Fire	24,744	44,468	0
Amboy Fire	0	0	0
Argyle Fire	9,190	9,193	0
Ashby Fire	1,149	0	15,780
Askov Fire	34,085	0	0
Audubon Fire	93,330	0	0
Austin Part-time Fire	42,344	28,701	0
Bagley Fire	20,151	0	51,705
Balsam Fire	95,715	74,420	0
Belle Plaine Fire	66,668	0	0
Bemidji Fire	219,737	0	95,797
Benson Fire	30,341	35,474	0
Bigfork Fire	7,827	32,706	0
Bird Island Fire	11,334	11,895	0
Biwabik Township Fire	13,704	0	0
Bloomington Fire	19,751,366	0	0
Bricelyn Fire	97,536	0	0
Brooklyn Park Fire	4,119,451	0	0
Brooten Fire	0	0	0
Buffalo Lake Fire	62,504	87,717	0
Caledonia Fire	35,877	10,365	0
Canby Fire	67,813	82,610	14,057
Carlton Fire	0	35,572	0
Center City Fire	56,180	8,833	0
Chaska Fire	525,480	0,055	0
Cherry Fire	51,993	10,738	6,517
Chisago City Fire	352,702	0	0
Chokio Fire	86,102	0	0
Clarkfield Fire	100,885	33,261	0
Clear Lake Fire	121,872	122,764	0
Cleveland Fire	0	0	4,083
Crane Lake Fire	21,557	17,343	5,715
Dawson Fire	174,836	133,589	0
Deer Creek Fire	44,114	15,490	0
Deerwood Fire	95,382	0	0
Delano Fire	0	13,423	0
Dover Fire	38,691	0	28,671
Edgerton Fire	85,114	0	0
Edina Fire	2,204,639	0	2,965
Elbow Lake Fire	158,930	37,949	0

STOCK INDEX ACCOUNT	INTERNATIONAL SHARE ACCOUNT		BOND MARKET ACCOUN		FIXED INTEREST ACCOUNT	SUPPLEMENT INVESTMI FUND TOT	ENT
\$ 0	\$	5,666	\$	0	\$ 0	\$ 126	5,052
7,892		0		0	0		,829
8,572		0		0	0		,188
0		0		0	0		,212
33,032		0	24,02	23	0	57	,055
0		0		0	0		,383
2,398		986	1,07	77	0		,390
0		0		0	0		,085
0		0		0	0		,330
0		0		0	0		,045
0		0	45,53		0		,393
0		0		0	0		),135
0		0	150.00	0	0		,668
80,244		125,336	158,98		0		,094
35,580		0	23,6		0		,014
32,294		8,470		0	0		,297
0		0		0	0		,229
4,598		0		0	0		3,302
1,505,368		0		0	0	21,256	
1 154 229		0		0	0		,536
1,154,238		0		0	0	5,273	
119,755		0		0	0		),755 ),221
0		4,974		0	0		,216
0		0		0	0		,480
35,198		19,293		0	0		,063
33,170		4,929		0	0		,942
Ö		0		0	0		,480
Ö		0		0	0		,248
0		0	103,93		0		,639
0		0		0	0		,102
8,973		0	29,5	15	0		,634
0		0		0	0	244	,636
3,675		0	2,43	39	0		,197
C		0		0	0	44	,615
0		0		0	0	308	3,425
0		0		0	0		,604
C		0		0	0		,382
13,385		0		0	0	26	5,808
17,057		0	30,13		0	114	,606
33,908		0		0	0	119	9,022
0		461,278		0	0	2,668	
(		0		0	0	196	5,879

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT	
Elk River Fire	\$ 0	\$ 115,558	\$ 460	
Elmore Fire	0	6,443	0	
Emmons Fire	29,052	26,997	0	
Excelsior Fire	1,048,271	437,127	0	
Farmington Cataract	56,940	0	0	
Fayal Fire	7,543	4,714	1,036	
Fergus Falls Fire	0	19,952	0	
Forest Lake Fire	408,408	0	0	
Frost Fire	8,672	9,473	0	
Golden Valley Fire	1,447,828	0	0	
Gonvick Fire	23,418	26,177	0	
Good Thunder Fire	102,846	61,228	0	
Grand Marais Fire	32,298	35,728	41,973	
Grand Meadow Fire	29,836	32,867	0	
Greenwood Fire	19,904	63,363	0	
Grey Eagle Fire	57,571	05,505	0	
Hackensack Fire	27,224	0	0	
Hamel Fire				
	189,445	180,834	19,809	
Harmony Fire		0	0	
Hawley Fire	65,480	(0.021	0	
Hayward Fire	31,018	60,931	0	
Hector Fire	305,134	0	0	
Henning Fire	32,724	19,396	0	
Hibbing Fire	2,248	2,993	0	
Holdingford Fire	6,111	6,508	0	
Holland Fire	25,242	0	12,343	
Hovland Fire	0	0	0	
Industrial Fire	26,321	0	0	
Isanti Fire	0	151,564	0	
Jacobson Fire	7,696	8,107	7,152	
Jordan Fire	45,115	41,199	0	
Kabetogama Fire	0	58,644	0	
Kandiyohi Fire	13,175	15,425	0	
Kelliher Fire	12,775	13,085	0	
Kimball Fire	30,264	33,442	0	
Lafayette Fire	90,602	19,052	0	
Lake City Fire	321,608	0	0	
Lake Crystal Fire	78,669	88,252	0	
Lakeville Fire	146,318	120,904	0	
Leaf Valley Fire	10,150	12,544	0	
Lewiston Fire	71,575	55,195	0	
Linwood Fire	286,089	0	0	
Littlefork Fire	57,778	10,738	0	
Lowry Fire		S. Carlo		
Madelia Fire	0	17.176	0	
wadella File	0	17,176	0	

STOCK INDEX ACCOUNT	INTERNATIONAL SHARE ACCOUNT	BOND MARKET ACCOUNT	FIXED INTEREST ACCOUNT	SUPPLEMENTAL INVESTMENT FUND TOTAL
\$ 114,689	\$ 0	\$ 0	\$ 0	\$ 230,707
12,849	0	0	0	19,292
27,130	6,292	0	0	89,471
145,252	0	51,736	0	1,682,386
64,262	0	0	0	121,202
3,646	800	1,264	0	19,003
19,859	0	0	0	39,811
106,787	0	0	0	515,195
9,381	0	0	0	27,526
1,637,059	0	101,615	0	3,186,502
0	0	0	0	49,595
61,694	27,966	0	0	253,734
0	0	56,119	0	166,118
32,480	0	0	0	95,183
0	0	7,389	0	90,656
0	8,294	0	0	65,865
0	0	0	0	27,224
0	16,257	0	0	406,345
12,804	8,280	0	0	21,084
30,844	0	0	0	96,324
81,458	0	0	0	173,407
0	0	0	0	305,134
37,695	19,643	18,759	0	128,217
4,754	1,646	0	0	11,641
6,461	0	0	0	19,080
8,887	0	7,740	0	54,212
9,352	0	0	0	9,352
28,320	0	0	0	54,641
75,418	73,085	0	0	300,067
0	0	0	0	22,955
0	0	15,437	0	101,751
0	0	0	0	58,644
15,682	0	10,143	0	54,425
13,019	0	0	0	38,879
28,736	0	0	0	92,442
23,087	0	7,145	0	139,886
0	0	0	0	321,608
87,297	0	0	0	254,218
485,518	0	0	0	752,740
0	0	0	0	22,694
0	0	0	0	126,770
0	0	0	0	286,089
41,879	0	0	0	110,395
34,605	0	0	0	34,605
16,969	0	0	0	34,145

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
Madison Fire	\$ 35,877	\$ 36,278	\$ 0
Madison Lake Fire	17,302	18,240	0
Mahtomedi Fire	286,586	0	0
Mapleton Fire	42,097	17,154	0
Mapleview Fire	36,726	52,710	0
Marine St Croix Fire	57,586	92,636	0
Mayer Fire	65,508	0	0
Maynard Fire	61,561	0	0
McDavitt Fire	37,231	30,518	0
McGrath Fire	5,765	2,895	0
McIntosh Fire	24,760	28,674	0
Medicine Lake Fire	339,103	0	0
Menahga Fire	41,381	0	0
Milan Fire	9,523	11,404	0
Minneota Fire	15,261	0	0
Minnetonka Fire	2,752,007	0	0
Montrose Fire	4,465	7,068	0
Morris Fire	27,881	40,144	0
Morristown Fire	183,104	0	0
New Brighton Fire	0	1,373,990	0
New Germany Fire	31,864	0	0
New Ulm Fire	53,034	0	0
New York Mills Fire	69,716	0	0
Nodine Fire	0	0	0
North Branch Fire	21,593	25,336	0
North Mankato Fire	57,427	66,637	0
Northfield Fire	762,730	325,406	0
Northrop Fire	5,125	0	0
Norwood Young America Fire	26,139	17,974	0
Oak Grove Fire	0	243,767	0
Osakis Fire	0	76,457	0
Ottertail Fire	124,868	0	0
Owatonna Fire	0	221,211	0
Pine Island Fire	95,107	66,612	0
Pipestone Fire	27,679	00,012	0
Randall Fire	22,253	137,226	0
Randolph Fire	79,832	0	
Redwood Falls Fire	44,547	0	0
Remer Fire	1,686	1,718	0
Renville Fire			0
Rice Lake Fire	23,414	28,757	0
Rosemount Fire	147,576	77,398	0
Roseville Fire	71,540	1 204 442	0
Rush City Fire	300,495	1,394,442	0
Ruthton Fire	37,092	49,257	0
reality I IIC	0	0	0

STOCK INDEX	INTERNATIONAL SHARE	BOND MARKET	FIXED INTEREST	SUPPLEMENTAL INVESTMENT
ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	<b>FUND TOTAL</b> \$ 108,386
\$ 36,231	11 292	<b>3</b> 0	\$ 0	\$ 108,386 46,824
0	11,282	0	0	286,586
0	0	0	0	59,251
0	6,132	22,142	0	117,710
54,148	0,132	23,331	0	227,701
102,614	0	0	0	168,122
0	0	0	0	61,561
0	5,691	13,730	0	87,170
0	0	2,568	0	11,228
28,599	0	0	0	82,033
63,232	0	0	0	402,335
0	0	41,680	0	83,061
11,551	0	0	0	32,478
0	0	10,298	0	25,559
0	0	0	0	2,752,007
8,171	0	0	0	19,704
40,309	20,424	0	0	128,758
298,886	0	0	0	481,990
0	0	889,095	0	2,263,085
0	0	0	0	31,864
236,808	0	0	0	289,842
0	0	10.051	0	69,716
21,099	9,556	18,851	0	49,506
25,269	12,274	0	0	84,472
133,149	0	0	0	257,213
496,671	0	0	0	1,584,807
0	0	0	0	5,125 44,113
0	0	0	0	243,767
87,554	11,383	6,831	0	182,225
07,554	0	0,051	0	124,868
0	0	0	0	221,211
0	0	0	0	161,719
28,856	0	0	0	56,535
65,082	0	0	0	224,561
99,978	0	0	0	179,810
0	0	19,887	0	64,434
1,713	1,637	0	0	6,754
0	0	16,650	0	68,821
76,105	0	76,239	0	377,318
0	0	0	0	71,540
1,389,542	497,390	1,392,737	0	4,974,606
77,180	0	0	0	163,529
35,678	0	0	0	35,678

	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	MONEY MARKET ACCOUNT
Sandstone Fire	\$ 98,538	\$ 0	\$ 0
Scandia Valley Fire	177,696	0	0
Schroeder Fire	0	43,975	0
Shakopee Fire	0	315,580	0
Sherburn Fire	131,644	0	0
Shevlin Fire	0	0	0
Silver Bay Fire	27,040	32,820	0
Solway Fire	21,526	0	0
Spring Lake Park Fire	827,112	1,190,240	0
Stephen Fire	39,330	61,072	0
Stewart Fire	44,708	0	0
St. Clair Fire	11,018	11,513	0
St. James Fire	0	30,407	0
St. Michael Fire	0	14,618	0
Stillwater Fire	171,996	185,220	0
Sturgeon Lake Fire	0	14,901	0
Thomson Township Fire	22,766	23,982	0
Tofte Fire	25,891	0	0
Truman Fire	26,349	29,297	0
Two Harbors Fire	0	101,369	0
Vergas Fire	106,605	0	0
Vermillion Lake Fire	58,667	0	0
Wabasha Fire	19,929	8,119	0
Waconia Fire	44,652	48,681	0
Warba-Feeley-Sago Fire	3,939	4,748	0
Warroad Area Fire	119,562	0	0
Williams Fire	9,302	8,292	0
Willow River Fire	0	17,284	0
Winnebago Fire	20,083	0	0
Woodbury Fire	1,087,785	755,213	247
Woodstock Fire	7,649	8,055	0
Wykoff Fire	64,471	0,033	0
Zumbro Falls Fire	89,425	12,596	0
Deferred Comp	165,737,181	116,186,659	27,675,316
Unclassified	114,258,842	49,324,156	9,546,145
PERA-DCP	4,895,616	2,790,904	625,223
Hennepin County	61,064,252	32,767,659	4,525,078
MnSCU	185,217,026	66,922,134	4,682,938
TOTAL PARTICIPATION	\$574,671,633	\$277,991,568	\$ 47,363,010
Adjustments Unrealized Appreciation	\$374,071,033	\$277,991,308	\$ 47,303,010
(Depreciation) of Investments	0	0	0
Undistributed Earnings	0	0	-572
NET ASSETS	\$574,671,633	\$277,991,568	\$ 47,362,438
	4571,071,055	Ψ277,771,300	Ψ 77,302,430

STOCK	INTERNATIONAL	BOND	FIXED	SUPPLEMENTAL
INDEX	SHARE	<b>MARKET</b>	<b>INTEREST</b>	INVESTMENT
ACCOUNT	ACCOUNT	ACCOUNT	ACCOUNT	FUND TOTAL
\$ 0	\$ 0	\$ 0	\$ 0	\$ 98,538
0	0	0	0	177,696
0	0	0	0	43,975
313,098	77,516	0	0	706,194
0	0	0	0	131,644
0	0	19,193	0	19,193
0	9,597	0	0	69,457
0	0	21,170	0	42,696
1,178,925	0	0	0	3,196,277
0	0	0	0	100,402
0	0	0	0	44,708
0	0	0	0	22,531
91,957	0	0	0	122,364
14,442	11,601	0	0	40,661
0	0	0	0	357,216
0	0	5,767	0	20,668
23,771	2,804	0	0	73,323
27,983	0	0	0	53,874
30,310	0	0	0	85,956
0	0	0	0	101,369
0	0	0	0	106,605
0	0	0	0	58,667
0	0	0	0	28,048
0	0	0	0	93,333
0	0	0	0	8,687
0	0	0	0	119,562
8,281	0	0	0	25,875
25,214	0	12,229	0	54,727
0	0	0	0	20,083
509,584	104,999	191,361	0	2,649,189
2,661	0	2,684	0	21,049
0	0	0	0	64,471
12,468	0	10,865	0	125,354
141,936,219	13,562,740	19,841,195	59,715,939	544,655,249
33,575,133	6,236,349	5,805,691	9,435,517	228,181,833
2,027,910	191,787	565,209	983,513	12,080,162
12,633,997	1,497,613	1,601,099	0	114,089,698
10,269,808	1,438,762	3,665,343	4,867,476	277,063,487
\$212,474,226	\$ 24,502,732	\$ 34,972,506	\$ 75,002,445	\$ 1,246,978,120
			V 100 400 100 4 7 800	
0	0	0	0	0
0	0	0	-25899	-26471
\$212,474,226	\$ 24,502,732	\$ 34,972,506	\$ 74,976,546	\$ 1,246,951,649

## STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF ASSETS AND LIABILITIES

## JUNE 30, 1998

## AMOUNTS IN (000)'S

	REAL ESTATE ACCOUNT		RESOURCE ACCOUNT	
ASSETS:				
Investments (at market value) (2),(3):				
Common Stock	\$	0	\$	0
Alternative Equities		715,197		155,469
Fixed Income Securities		0		0
<b>Short Term Securities</b>		5,116		2,279
Securities-Lending Collateral(4b)		0		0
<b>Total Investments</b>	\$	720,313	\$	157,748
Cash		0		1,704
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		2,632		0
Accrued Short Term Gain		10		10
TOTAL ASSETS	\$	722,955	\$	159,462
LIABILITIES:				
Management Fees Payable		0		0
Security Purchases Payable		0		0
Accounts Payable-Participants		0		0
Options Premiums Received		0		0
Securities-Lending Collateral(4b)		0		0
TOTAL LIABILITIES	\$	0	\$	0
NET ASSETS AT JUNE 30, 1998	\$	722,955	\$	159,462

VENTURE CAPITAL ACCOUNT(4)		CAPITAL BOND			DOMESTIC EQUITY ACCOUNTS		INTERNATIONAL EQUITY ACCOUNT		
\$	0	\$	93,050	\$	19,409,293	\$	5,128,750		
	987,374		0		0		0		
	0		9,227,194		301		1,035		
	13,755		979,471		212,372		100,350		
	0		1,017,550		1,498,762		1,096,696		
\$	1,001,129	\$ 1	1,317,265	\$	21,120,728	\$	6,326,831		
	0		13,147		734		34,406		
	2,173		333,046		35,651		42,335		
	0		0		537		0		
	0		0		0		0		
	0		0		0		0		
	0		97,905		12		3		
	0		92		19,183		12,433		
	10		6,112	_	809		29,317		
\$	1,003,312	\$ 1	1,767,567	\$	21,177,654	\$	6,445,325		
	0		2,174		7,617		2,690		
	0	]	1,517,184		43,395		52,894		
	0		0		0		0		
	0		0		0		0		
	0		1,017,550		1,498,762		1,096,696		
\$	0		2,536,908	\$	1,549,774	\$	1,152,280		
\$	1,003,312	\$ 9	9,230,659	\$	19,627,880	\$	5,293,045		

## STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF CHANGES IN NET ASSETS

## **JUNE 30, 1998**

## AMOUNTS IN (000)'S

	REAL ESTATE ACCOUNT		RESOURCE ACCOUNT	
FROM INVESTMENT ACTIVITY:				
Net Investment Income	\$	44,819	\$	17,609
Realized Gains (Losses)		0		38,131
Unrealized Gains (Losses)		172,584	(	4,716)
TOTAL INCOME	\$	217,403	\$	51,024
Less Distribution To				
Participant Accounts	(	44,819)	(	55,740)
<b>Undistributed Dedicated Income</b>		0		0
Net Change In Undistributed Income	\$	172,584	(\$	4,716)
FROM PARTICIPANT TRANSACTIONS:				
<b>Additional To Participant Accounts</b>				
Participant Contributions		22,011		20,822
Income Distribution		44,819		55,740
Income To Be Distributed		0		0
Total Additions	\$	66,830	\$	76,562
<b>Deductions From Participant Accounts</b>				
Withdrawals		73,513		64,319
<b>Total Deductions</b>	\$	73,513	\$	64,319
Net Change In Participation	(\$	6,683)	\$	12,243
TOTAL CHANGE IN ASSETS	\$	165,901	\$	7,527
NET ASSETS:				
Beginning Of Period		557,054		151,935
End Of Period	\$	722,955	\$	159,462

VENTURE CAPITAL ACCOUNT(4)			OOMESTIC BOND ACCOUNT		DOMESTIC EQUITY ACCOUNTS	INTERNATIONAL EQUITY ACCOUNT		
\$	14,075	\$	601,218	\$	262,464	\$	161,163	
	175,068		172,868		2,024,004		66,169	
	155,786		91,958		2,529,773	(	160,142)	
\$	344,929	\$	866,044	\$	4,816,241	\$	67,190	
(	189,142)	(	773,454)	(	2,287,455)	(	230,706)	
(	1)	(	632)		987		3,374	
\$	155,786	\$	91,958	\$	2,529,773	(\$	160,142)	
	44,125		605,984		25,921		709,883	
	189,142		773,454		2,287,455		230,706	
	1		632	_(	987)	(	3,374)	
\$	233,268	\$	1,380,070	\$	2,312,389	\$	937,215	
	165,254		830		1,422,846		389,071	
\$	165,254	\$	830	\$	1,422,846	\$	389,071	
\$	68,014	_\$	1,379,240	\$	889,543	\$	548,144	
\$	223,800	\$	1,471,198	\$	3,419,316	\$	388,002	
	779,512		7,759,461		16,208,564		4,905,043	
\$	1,003,312	\$	9,230,659	\$	19,627,880	\$	5,293,045	

# STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF OPERATIONS YEAR ENDED JUNE 30, 1998 AMOUNTS IN (000)'S

	REAL ESTATE ACCOUNT		RESOURCE ACCOUNT	
Interest	\$ 0	\$	0	
Dividends	44,686		17,450	
Short Term Gains	133		159	
Security Lending Gross Earnings(4c)	0		0	
Less: Borrower Rebates	0		0	
Less: Fees Paid to Agents	0		0	
Security Lending Net Earnings	0		0	
Income Before Expenses	\$ 44,819	\$	17,609	
Management Fees	0		0	
NET INCOME	\$ 44,819	\$	17,609	
GAIN (LOSS) ON INVESTMENTS Realized:				
Proceeds From Sales	\$ 58,270	\$	70,054	
Cost Of Securities Sold	58,270		31,923	
Net Realized Gain (Loss)	\$ 0	\$	38,131	
Unrealized:				
Beginning Of Period	12,721		33,939	
End Of Period	 185,305		29,223	
Increase (Decrease)				
In Unrealized Appreciation	\$ 172,584	(\$	4,716)	
NEW DELL TOER AND VINDE AT THE				
NET REALIZED AND UNREALIZED		-		

VENTURE CAPITAL ACCOUNT(4)			OMESTIC BOND ACCOUNT	DOMESTIC EQUITY ACCOUNTS			ERNATIONAL EQUITY ACCOUNT
\$	0	\$	536,497	\$	129	(\$	12)
	13,712		16,921		276,443		164,090
	434		52,874		8,930		4,240
	0		88,385		82,708		62,042
	0	(	83,792)	(	75,277)	(	55,084)
	0	(	1,361)	(	2,203)	(	2,406)
	0		3,232		5,228		4,552
\$	14,146	\$	609,524	\$	290,730	\$	172,870
	71		8,306		28,266		11,707
\$	14,075	\$	601,218	\$	262,464	\$	161,163
\$	338,907 163,839		29,659,074 29,486,206	\$	8,900,117 6,876,113	\$	1,261,963 1,195,794
\$	175,068	\$	172,868	\$	2,024,004	\$	66,169
	186,117		55,133		4,970,626		1,039,440
_	341,903		147,091		7,500,399		879,298
\$	155,786	\$	91,958	\$	2,529,773	(\$	160,142)

# STATE BOARD OF INVESTMENT MINNESOTA POOLED INVESTMENT ACCOUNTS SCHEDULE OF PARTICIPATION JUNE 30, 1998 AMOUNTS IN (000)'S

	REAL ESTATE ACCOUNT		RESOURCE ACCOUNT	
Teachers Retirement Fund	\$	308,537	\$	68,072
Public Employees Retirement Fund		155,154		34,227
State Employees Retirement Fund		148,446		32,747
Public Employees Police & Fire Fund		73,293		16,163
Highway Patrolmen's Retirement Fund		10,221		2,253
Judges Retirement Fund		742		164
Police & Fire Consolidation Fund		18,350		4,026
Correctional Employees Retire. Fund		8,211		1,811
TOTAL BASIC RETIREMENT FUNDS	\$	722,954	\$	159,463
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
Supplemental International Equity Account		0		0
TOTAL PARTICIPATION	\$	722,954	\$	159,463

VENTURE CAPITAL ACCOUNT(4)		DOMESTIC BOND ACCOUNT	DOMESTIC EQUITY ACCOUNTS		INTERNATIONA EQUITY ACCOUNT	
\$	428,227	\$ 1,750,336	\$	4,121,245	\$	1,146,445
	215,345	919,223		2,141,530		601,436
	206,035	880,629		2,050,968		576,166
	101,728	433,905		1,011,060		283,904
	14,187	60,636		141,215		39,672
	1,030	4,401		10,250		2,880
	25,363	106,552		249,189		69,742
	11,397	48,711		113,448		31,870
\$	1,003,312	\$ 4,204,393	\$	9,838,905	\$	2,752,115
	0	4,991,293		8,943,314		2,516,426
	0	0		355,179		0
	0	0		278,004		0
	0	0		212,478		0
	0	34,973		0		0
	0	0		0		24,504
\$	1,003,312	\$ 9,230,659	\$	19,627,880	\$	5,293,045

## NOTES TO THE SUPPLEMENTAL FINANCIAL STATEMENTS JUNE 30, 1998

#### 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, 1998 the cost of investments for the Minnesota Pooled Investment Accounts and the individual accounts of the Minnesota Supplemental Investment Fund, exluding security lending collateral, was:

## MINNESOTA POOLED INVESTMENT ACCOUNTS

**Equity Account** 

DOMESTIC ACCOUNTS	
Equity Account	\$ 12,121,567,442
Bond Account	\$ 10,152,623,138
Real Estate Account	\$ 535,008,136
Resource Account	\$ 128,524,208
Venture Capital Account	\$ 659,225,786
INTERNATIONAL ACCOUNTS	

#### SUPPLEMENTAL INVESTMENT FUND

NYESTMENT FUND	
Income Share Account	\$ 432,800,562
Growth Share Account	\$ 233,976,702
International Share Account	\$ 23,141,944
Money Market Account	\$ 47,144,037
Stock Index Account	\$ 143,026,879
Bond Market Account	\$ 34,539,735
Fixed Interest Account	\$ 73.365.639

#### 3. LOANED SECURITIES:

The market value of loaned securities outstanding at June 30, 1998 for the Minnesota Pooled Investment Accounts included in the total investments figure was:

4,350,837,699

Equity Account (Domestic)	\$ 823,558,836
Equity Index Account (Domestic)	\$ 559,962,181
Bond Account (Domestic)	\$ 1,283,602,719
International Equity Account	\$ 1,176,027,721

The market value for non-pooled investment accounts includes:

Money Market Account	\$ 110,668,367
Income share Account Fixed Income	\$ 52,100,132

## EXTERNAL STOCK AND BOND MANAGERS FEES

## Total Payments for Fiscal Year 1998

## Active Domestic Stock Managers (1)

Alliance Capital	\$ 3,466,575
Brinson Partners	1,582,392
Forstmann Leff Associates	1,743,554
Franklin Portfolio Associates	2,189,951
GeoCapital Corp.	1,602,628
American Express	829,793
Independence Investment Associates *	1,046,451
Investment Advisors Inc.	849,855
Lincoln Capital	1,622,533
Oppenheimer Capital	1,868,251
Weiss Peck & Greer	1,533,545
CIC Asset Management	312,117
Cohen, Davis & Marks	529,450
Compass Capital Management	306,607
New Amsterdam Partners	268,710
Valenzuela Capital	346,795
Wilke Thompson Capital	260,668
Winslow Capital	443,385
Zevenbergen Capital	481,220
Passive Domestic Stock Managers (2)	
BZW Barclays	824,805
Semi-Passive Domestic Equity Managers (2)	
Franklin Portfolio	1,864,988
J P Morgan	2,111,348
BZW Barclays	2,180,931
Active Domestic Bond Managers (2)	
BEA Associates	904,490
American Express	502,622
Investment Advisors	808,174
Miller Anderson	1,353,048
Standish Ayer Woods	1,026,608
Western Asset Mgmt.	1,287,730

## EXTERNAL STOCK AND BOND MANAGERS FEES

Total Payments for Fiscal Year 1998

## Semi-Passive Domestic Bond Managers (3)

Blackrock Financial	\$ 866,264
Goldman Sachs	1,052,562
Lincoln Capital Management	504,124

### International Stock Managers (2)

Brinson Partners International	763,702
Genesis	1,737,333
Marathon	1,255,074
Montgomery	1,510,186
Record Treasury Ltd.	1,277,014
Rowe Price - Fleming	2,258,816
Scudder Stevens	1,111,355
State Street Global Advisors	604,233
City of London	1,172,515

## Assigned Risk Plan

G E Investment Management	422,541
Voyageur Asset Management	483,588

- \* Manager Terminated in Fiscal '98
- (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.

## ALLIANCE CAPITAL MANAGEMENT CORPORATION

## BRINSON PARTNERS, INC.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$0.00	0.00 %	BASIC INDUSTRIES	\$57,222,331.00	8.59 %
CAPITAL GOODS	33,397,000.00	2.51	CAPITAL GOODS	13,989,256.25	2.10
CONSUMER BASICS	335,965,250.00	25.22	CONSUMER BASICS	132,669,540.62	19.91
CONSUMER DURABLES	0.00	0.00	CONSUMER DURABLE GOODS	21,398,315.50	3.21
CONSUMER NON-DURABLES	132,186,537.50	9.92	CONSUMER NON-DURABLES	27,616,981.25	4.15
CONSUMER SERVICES	71,002,268.75	5.33	CONSUMER SERVICES	1,726,875.00	0.26
ENERGY	12,391,887.50	0.93	ENERGY	22,059,723.12	3.31
FINANCE	296,796,491.00	22.28	FINANCE	88,918,724.84	13.35
GENERAL BUSINESS	104,841,732.37	7.87	GENERAL BUSINESS	52,172,405.24	7.83
MISCELLANEOUS	57,192,300.00	4.29	MISCELLANEOUS	70,663,034.74	10.61
SHELTER	0.00	0.00	SHELTER	21,032,913.75	3.16
TECHNOLOGY	247,974,168.75	18.61	TECHNOLOGY	79,313,154.48	11.91
TRANSPORTATION	0.00	0.00	TRANSPORTATION	33,108,800.00	4.97
UTILITIES	39,503,750.00	2.97	UTILITIES	37,806,897.75	5.68
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
BONDS	0.00	0.00	BONDS	156,937.50	0.02
Total Equities	\$1,331,251,385.87	99.93	Total Equities	\$659,855,891.04	99.05
Cash Equivalents	\$966,063.67	0.07	Cash Equivalents	\$6,325,659.98	0.95
Grand Total	\$1,332,217,449.54	100.00 %	Grand Total	\$666,181,551.02	100.00 %

## AMERICAN EXPRESS ASSET MANAGEMENT GROUP INC.

## CIC ASSET MANAGEMENT, INC.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$40,472,625.00	7.44 %	BASIC INDUSTRIES	\$6,346,240.62	8.51 %
CAPITAL GOODS	0.00	0.00	CAPITAL GOODS	6,046,995.30	8.11
CONSUMER BASICS	137,553,162.50	25.30	CONSUMER BASICS	11,541,669.37	15.47
CONSUMER DURABLE GOODS	20,782,750.00	3.82	CONSUMER DURABLE GOODS	0.00	0.00
CONSUMER NON-DURABLES	44,564,062.50	8.20	CONSUMER NON-DURABLES	5,171,539.68	6.93
CONSUMER SERVICES	16,650,000.00	3.06	CONSUMER SERVICES	4,275,475.00	5.73
ENERGY	6,675,000.00	1.23	ENERGY	6,485,146.87	8.69
FINANCE	59,679,125.00	10.98	FINANCE	6,548,753.12	8.78
GENERAL BUSINESS	21,126,875.00	3.89	GENERAL BUSINESS	3,584,175.00	4.80
MISCELLANEOUS	38,612,225.00	7.10	MISCELLANEOUS	10,894,092.50	14.60
SHELTER	0.00	0.00	SHELTER	0.00	0.00
TECHNOLOGY	94,363,637.50	17.36	TECHNOLOGY	5,450,081.25	7.31
TRANSPORTATION	0.00	0.00	TRANSPORTATION	0.00	0.00
UTILITIES	24,278,312.50	4.47	UTILITIES	7,914,735.00	10.61
ALL NON U.S.	\$0.00	0.00	ALL NON U.S.	\$0.00	0.00
Total Equities	\$504,757,775.00	92.84	Total Equities	\$74,258,903.71	99.54
Cash Equivalents	\$38,936,418.74	7.16	Cash Equivalents	\$341,285.52	0.46
Grand Total	\$543,694,193.74	100.00 %	Grand Total	\$74,600,189.23	100.00 %

## COHEN, KLINGENSTEIN, AND MARKS, INC.

## FORSTMANN-LEFF ASSOCIATES ASSET MANAGEMENT INC.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$3,810,975.00	2.40 %	BASIC INDUSTRIES	\$10,374,168.75	1.83 %
CAPITAL GOODS	0.00	0.00	CAPITAL GOODS	0.00	0.00
CONSUMER BASICS	35,123,562.50	22.09	CONSUMER BASICS	83,121,951.93	14.67
CONSUMER DURABLE GOODS	0.00	0.00	CONSUMER DURABLE GOODS	71,494,603.12	12.62
CONSUMER NON-DURABLES	22,296,095.87	14.02	CONSUMER NON-DURABLES	74,647,187.50	13.18
CONSUMER SERVICES	6,579,618.75	4.14	CONSUMER SERVICES	18,953,726.56	3.35
ENERGY	0.00	0.00	ENERGY	29,434,210.82	5.20
FINANCE	20,536,556.25	12.91	FINANCE	54,770,223.11	9.67
GENERAL BUSINESS	0.00	0.00	GENERAL BUSINESS	41,741,534.37	7.37
MISCELLANEOUS	5,585,700.00	3.51	MISCELLANEOUS	1,892,493.75	0.33
SHELTER	0.00	0.00	SHELTER	11,238,412.50	1.98
TECHNOLOGY	49,606,307.81	31.19	TECHNOLOGY	118,568,780.93	20.93
TRANSPORTATION	0.00	0.00	TRANSPORTATION	920,215.62	0.16
UTILITIES	10,646,100.00	6.69	UTILITIES	47,431,215.61	8.37
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$154,184,916.18	96.95	Total Equities	\$564,588,724.57	99.67
Cash Equivalents	\$4,847,994.70	3.05	Cash Equivalents	\$1,863,647.02	0.33
Grand Total	\$159,032,910.88	100.00 %	Grand Total	\$566,452,371.59	100.00 %

## COMPASS CAPITAL MANAGEMENT, INC.

## FRANKLIN PORTFOLIO ASSOCIATES

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	8,575,375.00	11.41 %	BASIC INDUSTRIES	\$37,582,200.00	6.78 %
CAPITAL GOODS	8,853,493.75	11.78	CAPITAL GOODS	63,131,165.62	11.39
CONSUMER BASICS	21,363,668.75	28.43	CONSUMER BASICS	103,596,481.25	18.68
CONSUMER DURABLE GOODS	8,815,978.12	11.73	CONSUMER DURABLE GOODS	25,906,900.00	4.67
CONSUMER NON-DURABLES	9,000,209.37	11.98	CONSUMER NON-DURABLES	58,910,687.50	10.63
ONSUMER SERVICES	0.00	0.00	CONSUMER SERVICES	15,264,281.25	2.75
NERGY	0.00	0.00	ENERGY	26,037,381.25	4.70
INANCE	5,709,983.75	7.60	FINANCE	86,558,467.50	15.61
ENERAL BUSINESS	0.00	0.00	GENERAL BUSINESS	23,704,350.00	4.28
MISCELLANEOUS	0.00	0.00	MISCELLANEOUS	0.00	0.00
HELTER	0.00	0.00	SHELTER	0.00	0.00
ECHNOLOGY	12,147,003.18	16.17	TECHNOLOGY	31,423,905,00	5.67
RANSPORTATION	0.00	0.00	TRANSPORTATION	11,962,500.00	2.16
TILITIES	0.00	0.00	UTILITIES	66,946,668.75	12.07
LL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
otal Equities	\$74,465,711.92	99.11	Total Equities	\$551,024,988.12	99.38
ash Equivalents	\$670,782.42	0.89	Cash Equivalents	\$3,424,547.06	0.62
rand Total	\$75,136,494.34	100.00 %	Grand Total	\$554,449,535.18	100.00 %
	CONTROL CONTROL OF THE CONTROL OF TH				

## GEOCAPITAL, L.L.C.

## LINCOLN CAPITAL MANAGEMENT COMPANY

Equities	Market Value	0/0	Equities	Market Value	0/0
BASIC INDUSTRIES	\$4,617,525.00	0.89 %	BASIC INDUSTRIES	\$42,086,775.00	5.63 %
CAPITAL GOODS	4,657,500.00	0.89	CAPITAL GOODS	42,915,600.00	5.75
CONSUMER BASICS	44,049,097.68	8.46	CONSUMER BASICS	334,761,462.50	44.82
CONSUMER DURABLE GOODS	4,176,000.00	0.80	CONSUMER DURABLE GOODS	0.00	0.00
CONSUMER NON-DURABLES	25,754,337.50	4.95	CONSUMER NON-DURABLES	34,025,375.00	4.56
CONSUMER SERVICES	28,827,611.50	5.54	CONSUMER SERVICES	29,789,331.25	3.99
ENERGY	10,147,218.75	1.95	ENERGY	0.00	0.00
FINANCE	35,139,154.50	6.75	FINANCE	73,723,075.00	9.87
GENERAL BUSINESS	164,142,967.99	31.54	GENERAL BUSINESS	18,641,425.00	2.50
MISCELLANEOUS	53,405,246.31	10.26	MISCELLANEOUS	0.00	0.00
SHELTER	0.00	0.00	SHELTER	0.00	0.00
TECHNOLOGY	125,828,684.99	24.18	TECHNOLOGY	152,369,675.00	20.40
TRANSPORTATION	10,847,400.00	2.08	TRANSPORTATION	0.00	0.00
UTILITIES	0.00	0.00	UTILITIES	0.00	0.00
BONDS	193,750.00	0.04	ALL NON U.S.	0.00	0.00
Total Equities	\$511,786,494.22	98.33	Total Equities	\$728,312,718.75	97.50
Cash Equivalents	\$8,703,888.44	1.67	Cash Equivalents	\$18,648,048.31	2.50
Grand Total	\$520,490,382.66	100.00 %	Grand Total	\$746,960,767.06	100.00 %

## INVESTMENT ADVISERS, INC.

## NEW AMSTERDAM PARTNERS L.L.C.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$15,848,225.00	7.36 %	BASIC INDUSTRIES	\$3,519,625.00	4.53 %
CAPITAL GOODS	19,303,693.75	8.97	CAPITAL GOODS	3,951,318.75	5.09
CONSUMER BASICS	40,339,403.75	18.74	CONSUMER BASICS	19,719,689.37	25.41
CONSUMER DURABLE GOODS	14,442,137.50	6.71	CONSUMER DURABLE GOODS	3,050,368.75	3.93
CONSUMER NON-DURABLES	20,027,706.25	9.31	CONSUMER NON-DURABLES	9,881,895.31	12.73
CONSUMER SERVICES	8,297,962.50	3.86	CONSUMER SERVICES	2,328,393.75	3.00
ENERGY	3,654,675.00	1.70	ENERGY	1,855,218.75	2.39
FINANCE	28,022,831.25	13.02	FINANCE	9,189,220.62	11.84
GENERAL BUSINESS	17,301,768.75	8.04	GENERAL BUSINESS	6,874,543.75	8.86
MISCELLANEOUS	15,746,206.25	7.32	MISCELLANEOUS	1,372,000.00	1.77
SHELTER	2,795,537.50	1.30	SHELTER	0.00	0.00
TECHNOLOGY	24,490,312.50	11.38	TECHNOLOGY	9,606,431.25	12.38
TRANSPORTATION	0.00	0.00	TRANSPORTATION	0.00	0.00
UTILITIES	4,577,250.00	2.13	UTILITIES	3,994,931.25	5.15
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$214,847,710.00	99.82	Total Equities	\$75,343,636.55	97.07
Cash Equivalents	\$387,528.45	0.18	Cash Equivalents	\$2,271,498.85	2.93
Grand Total	\$215,235,238.45	100.00 %	Grand Total	\$77,615,135.40	100.00 %

#### OPPENHEIMER CAPITAL

### WEISS PECK & GREER, L.L.C.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$81,194,062.50	10.74 %	BASIC INDUSTRIES	\$15,078,312.50	4.05 %
CAPITAL GOODS	58,455,000.00	7.74	CAPITAL GOODS	27,116,987.50	7.28
CONSUMER BASICS	51,496,875.00	6.81	CONSUMER BASICS	31,459,693.75	8.44
CONSUMER DURABLE GOODS	0.00	0.00	CONSUMER DURABLE GOODS	3,514,475.00	0.94
CONSUMER NON-DURABLES	53,125,000.00	7.03	CONSUMER NON-DURABLES	5,682,300.00	1.52
CONSUMER SERVICES	55,882,500.00	7.39	CONSUMER SERVICES	13,972,812.50	3.75
ENERGY	0.00	0.00	ENERGY	26,614,862.50	7.14
FINANCE	322,197,500.00	42.64	FINANCE	51,430,314.37	13.80
GENERAL BUSINESS	32,821,875.00	4.34	GENERAL BUSINESS	56,860,187.49	15.26
MISCELLANEOUS	0.00	0.00	MISCELLANEOUS	36,038,887.50	9.67
SHELTER	0.00	0.00	SHELTER	7,252,125.00	1.95
TECHNOLOGY	56,510,312.50	7.48	TECHNOLOGY	51,829,912.50	13.91
TRANSPORTATION	0.00	0.00	TRANSPORTATION	4,610,525.00	1.24
UTILITIES	22,560,000.00	2.99	UTILITIES	0.00	0.00
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
Total Equities	\$734,243,125.00	97.16	Total Equities	\$331,461,395.61	88.94
Cash Equivalents	\$21,448,539.50	2.84	Cash Equivalents	\$41,231,263.66	11.06
Grand Total	\$755,691,664.50	100.00 %	Grand Total	\$372,692,659.27	100.00 %

## VALENZUELA CAPITAL PARTNERS, INC.

## WILKE THOMPSON CAPITAL MANAGEMENT, INC.

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$3,409,762.50	4.44 %	BASIC INDUSTRIES	\$463,718.75	0.90 %
CAPITAL GOODS	0.00	0.00	CAPITAL GOODS	585,800.00	1.14
CONSUMER BASICS	12,338,675.00	16.08	CONSUMER BASICS	8,941,253.12	17.34
CONSUMER DURABLE GOODS	5,323,375.00	6.94	CONSUMER DURABLE GOODS	773,075.00	1.50
CONSUMER NON-DURABLES	21,954,808.25	28.62	CONSUMER NON-DURABLES	3,982,725.00	7.73
CONSUMER SERVICES	0.00	0.00	CONSUMER SERVICES	1,635,459.37	3.17
ENERGY	2,890,275.00	3.77	ENERGY	0.00	0.00
FINANCE	17,465,697.87	22.76	FINANCE	0.00	0.00
GENERAL BUSINESS	6,100,825.00	7.95	GENERAL BUSINESS	13,719,285.15	26.61
MISCELLANEOUS	1,328,100.00	1.73	MISCELLANEOUS	4,273,425.00	8.29
SHELTER	0.00	0.00	SHELTER	1,156,293.75	2.24
TECHNOLOGY	2,000,300.00	2.61	TECHNOLOGY	11,883,908.37	23.05
TRANSPORTATION	786,450.00	1.03	TRANSPORTATION	0.00	0.00
UTILITIES	0.00	0.00	UTILITIES	0.00	0.00
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
			BONDS	1,340,325.00	2.60
Total Equities	\$73,598,268.62	95.93			
			Total Equities	\$48,755,268.51	94.57
Cash Equivalents	\$3,126,063.02	4.07			
•			Cash Equivalents	\$2,798,369.25	5.43
Grand Total	\$76,724,331.64	100.00 %	a from the same and the same an		
			Grand Total	\$51,553,637.76	100.00 %

## WINSLOW CAPITAL MANAGEMENT, INC.

#### FRANKLIN PORTFOLIO ASSOCIATES

(Semi - Passive)

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$1,949,700.00	2.65 %	BASIC INDUSTRIES	\$91,126,900.90	4.48 %
CAPITAL GOODS	5,112,031.25	6.95	CAPITAL GOODS	\$135,755,078.12	6.68
CONSUMER BASICS	11,708,881.25	15.93	CONSUMER BASICS	\$393,157,248.43	19.33
CONSUMER DURABLE GOODS	0.00	0.00	CONSUMER DURABLE GOODS	\$64,577,431.25	3.18
CONSUMER NON-DURABLES	9,487,232.68	12.90	CONSUMER NON-DURABLES	\$58,332,640.62	2.87
CONSUMER SERVICES	2,397,787.50	3.26	CONSUMER SERVICES	\$44,470,110.25	2.19
ENERGY	2,518,681.25	3.43	ENERGY	\$180,582,963.75	8.88
FINANCE	8,694,402.25	11.83	FINANCE	\$430,266,948.05	21.16
GENERAL BUSINESS	5,303,509.37	7.21	GENERAL BUSINESS	\$102,377,375.00	5.03
MISCELLANEOUS	3,098,850.00	4.21	MISCELLANEOUS	\$55,799,769.49	2.74
SHELTER	1,724,250.00	2.35	SHELTER	\$17,672,503.90	0.87
TECHNOLOGY	19,110,664.06	25.99	TECHNOLOGY	\$187,573,260.00	9.22
TRANSPORTATION	0.00	0.00	TRANSPORTATION	\$5,661,250.00	0.28
UTILITIES	1,593,593.75	2.17	UTILITIES	\$258,293,419.62	12.70
ALL NON U.S.	0.00	0.00	ALL NON U.S.	\$0.00	0.00
TEST TOTAL			BONDS	\$0.00	0.00
Total Equities	\$72,699,583.36	98.88			
1 oran Equition			Total Equities	\$2,025,646,899.38	99.60
Cash Equivalents	\$825,568.66	1.12	· · · · · · · · · · · · · · · · · · ·		
			Cash Equivalents	\$8,110,146.86	0.40
Grand Total	\$73,525,152.02	100.00 %	Grand Total	\$2,033,757,046.24	100.00 %

### ZEVENBERGEN CAPITAL, INC.

## BARCLAY'S GLOBAL INVESTORS (Semi-Passive)

Production	Market Value	%	Equities	Market Value	%
Equities	0.00	0.00 %	BASIC INDUSTRIES	\$95,883,949.75	4.67 %
BASIC INDUSTRIES					6.92
CAPITAL GOODS	0.00	0.00	CAPITAL GOODS	142,064,335.31	
CONSUMER BASICS	16,185,765.62	20.52	CONSUMER BASICS	370,547,415.82	18.05
CONSUMER DURABLE GOODS	0.00	0.00	CONSUMER DURABLE GOODS	68,804,823.25	3.35
CONSUMER NON-DURABLES	5,955,650.00	7.55	CONSUMER NON-DURABLES	77,380,994.37	3.77
CONSUMER SERVICES	1,712,518.75	2.17	CONSUMER SERVICES	26,439,565.37	1.29
ENERGY	0.00	0.00	ENERGY	195,359,194.25	9.52
FINANCE	7,238,862.50	9.18	FINANCE	394,671,827.55	19.22
GENERAL BUSINESS	13,667,275.00	17.33	GENERAL BUSINESS	109,464,770.65	5.33
MISCELLANEOUS	13,018,431.25	16.50	MISCELLANEOUS	84,946,914.86	4.14
SHELTER	0.00	0.00	SHELTER	15,098,175.00	0.74
TECHNOLOGY	15,169,037.50	19.23	TECHNOLOGY	201,507,276.24	9.81
TRANSPORTATION	0.00	0.00	TRANSPORTATION	11,763,646.12	0.57
UTILITIES	5,203,037.50	6.60	UTILITIES	247,285,820.80	12.04
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
BOND	638,762.50	0.81	BONDS	681,471.02	0.00
Total Equities	\$78,789,340.62	99.88	Total Equities	\$2,041,900,180.36	99.45
Cash Equivalents	\$94,485.51	0.12	Cash Equivalents	\$11,231,068.94	0.55
Grand Total	\$78,883,826.13	100.00 %	Grand Total	\$2,053,131,249.30	100.00 %

## JP MORGAN INVESTMENT MANAGEMENT INC.

### BARCLAY'S GLOBAL INVESTORS

(Semi-Passive)

(Passive)

Equities	Market Value	%	Equities	Market Value	%
BASIC INDUSTRIES	\$96,271,842.52	4.68 %	BASIC INDUSTRIES	\$293,159,752.85	4.48 %
CAPITAL GOODS	112,618,953.12	5.47	CAPITAL GOODS	330,338,597.21	5.05
CONSUMER BASICS	394,087,534.37	19.16	CONSUMER BASICS	1,236,396,439.84	18.91
CONSUMER DURABLE GOODS	51,456,615.08	2.50	CONSUMER DURABLE GOODS	158,932,111.26	2.43
CONSUMER NON-DURABLES	76,103,061.96	3.70	CONSUMER NON-DURABLES	406,312,515.98	6.22
CONSUMER SERVICES	17,959,198.37	0.87	CONSUMER SERVICES	177,232,736.37	2.71
ENERGY	193,398,650.00	9.40	ENERGY	370,421,354.25	5.67
FINANCE	424,213,075.21	20.62	FINANCE	1,195,772,921.81	18.29
GENERAL BUSINESS	106,017,115.62	5.15	GENERAL BUSINESS	361,160,024.41	5.52
MISCELLANEOUS	67,510,438.68	3.28	MISCELLANEOUS	333,707,666.09	5.11
SHELTER	11,852,025.00	0.58	SHELTER	49,231,333.35	0.75
TECHNOLOGY	230,777,167.75	11.22	TECHNOLOGY	979,961,037.39	14.99
TRANSPORTATION	20,716,587.50	1.01	TRANSPORTATION	53,140,352.55	0.81
UTILITIES	248,905,051.17	12.10	UTILITIES	550,500,242.62	8.42
ALL NON U.S.	0.00	0.00	ALL NON U.S.	0.00	0.00
BONDS	301,961.00	0.01	BONDS	11,425,428.09	0.17
Total Equities	\$2,052,189,277.35	99.76	Total Equities	\$6,507,692,514.07	99.55
Cash Equivalents	\$4,913,715.38	0.24	Cash Equivalents	\$29,142,207.69	0.45
Grand Total	\$2,057,102,992.73	100.00 %	Grand Total	\$6,536,834,721.76	100.00 %

### AGGREGATE DOMESTIC STOCK POOL \*

### ALTERNATIVE ASSETS

Equities	Market Value	%	
BASIC INDUSTRIES	\$716,160,899.14	3.95 %	Ass
CAPITAL GOODS	922,135,018.43	5.08	pag
CONSUMER BASICS	3,721,888,225.55	20.52	
CONSUMER DURABLE GOODS	513,838,033.83	2.83	
CONSUMER NON-DURABLES	1,097,654,710.84	6.05	
CONSUMER SERVICES	473,907,460.92	2.61	
ENERGY	1,061,021,305.56	5.85	
FINANCE	3,226,791,928.83	17.79	
GENERAL BUSINESS	1,152,121,847.52	6.35	
MISCELLANEOUS	813,445,368.92	4.49	
SHELTER	130,645,151.00	0.72	
TECHNOLOGY	2,585,240,585.58	14.25	
TRANSPORTATION	148,120,751.79	0.82	
UTILITIES	1,554,881,026.32	8.57	
ALL NON U.S.	0.00	0.00	
BONDS	\$13,398,310.11	0.07	
Total Equities	\$18,131,250,624.34	99.97	
Cash Equivalents	\$4,913,715.38	0.03	
Grand Total	\$18,136,164,339.72	100.00 %	

<sup>\*</sup> Aggregate of all managers in the Domestic Equity Account in the Financial Statements. Includes Active, Semi-Passive, and Passive managers.

Asset listing for the Alternative Asset Pools can be found on pages 86-88 of this report.

#### BRINSON PARTNERS, INC.

#### ROWE PRICE-FLEMING INTERNATIONAL, INC.

Exposure by Country	Market Value	%	
AUSTRALIA	\$25,797,153.60	4.88 %	
BELGIUM	24,741,027.78	4.68	
FINLAND	15,460,624.60	2.92	
FRANCE	49,631,304.83	9.38	
GERMANY	57,888,690.46	10.94	
HONG KONG	2,776,952.55	0.52	
ITALY	25,879,457.32	4.89	
JAPAN	62,786,106.53	11.87	
MALAYSIA	1,854,925.29	0.35	
NETHERLANDS	27,677,445.73	5.23	
NEW ZEALAND	15,371,376.01	2.91	
SINGAPORE	5,981,032.30	1.13	
SWEDEN	14,359,773.88	2.71	
SWITZERLAND	36,457,339.14	6.89	
UNITED KINGDOM	133,342,162.08	25.21	
UNITED STATES	26,103,549.93	4.93	
FOREIGN CURRENCY CASH	5,650,559.07	1.07	
FORWARD CURRENCY CONTR.	(2,776,193.10)	-0.52	
Grand Total	\$528,983,288.00	100.00 %	

Exposure by Country	Market Value	%
ARGENTINA	\$726,149.82	0.13 %
AUSTRALIA	12,998,736.17	2.27
BELGIUM	12,364,185.80	2.16
BRAZIL	5,496,103.27	0.96
CANADA	1,721,787.95	0.30
CZECH REPUBLIC	171,554.53	0.03
DENMARK	2,099,550.46	0.37
FINLAND	2,676,720.34	0.47
FRANCE	59,771,712.41	10.44
GERMANY	42,170,475.92	7.37
HONG KONG	6,205,184.51	1.08
ITALY	28,608,388.21	5.00
JAPAN	86,351,176.42	15.08
MEXICO	3,179,319.41	0.56
NETHERLANDS	60,846,983.18	10.63
NEW ZEALAND	1,073,304.67	0.19
NORWAY	9,677,607.67	1.69
PORTUGAL	2,578,849.45	0.45
SINGAPORE	702,441.10	0.12
SPAIN	16,004,872.20	2.80
SWEDEN	21,473,177.26	3.75
SWITZERLAND	38,132,953.19	6.66
THAILAND	356,648.68	0.06
UNITED KINGDOM	108,893,050.75	19.02
UNITED STATES	46,856,404.69	8.18
FOREIGN CURRENCY CASH	1,424,232.55	0.25
FORWARD CURRENCY CONTR.	(441.18)	0.00
Grand Total	\$572,561,129.43	100.00 %

#### MARATHON ASSET MANAGEMENT

Exposure by Country	Market Value	%
AUSTRALIA	\$13,320,828.80	3.55 %
DENMARK	2,846,438.46	0.76
FINLAND	14,494,307.37	3.86
FRANCE	24,286,139.80	6.47
GERMANY	17,860,690.71	4.76
HONG KONG	8,668,605.68	2.31
INDONESIA	445,419.71	0.12
ITALY	9,588,238.12	2.55
JAPAN	92,310,548.88	24.59
MALAYSIA	4,565,738.21	1.22
MEXICO	1,025,924.34	0.27
NETHERLANDS	10,985,519.48	2.93
NEW ZEALAND	153,649.62	0.04
NORWAY	4,744,616.53	1.26
PHILIPPINES	949,638.24	0.25
SINGAPORE	2,594,819.01	0.69
SOUTH AFRICA	4,702,753.04	1.25
SPAIN	11,770,375.29	3.14
SWEDEN	23,554,978.65	6.27
SWITZERLAND	12,113,221.68	3.23
THAILAND	1,457,942.23	0.39
UNITED KINGDOM	87,083,645.46	23.20
UNITED STATES	21,574,987.66	5.75
FOREIGN CURRENCY CASH	4,308,529.95	1.15
FORWARD CURRENCY CONTR.	516.22	0.00
Grand Total	\$375,408,073.14	100.00 %

#### RECORD TREASURY MANAGEMENT

Exposure by Country	Market Value	%
FORWARD CURRENCY CONTR.		
FRANCE	(\$1,462,589.41)	(4.62) %
GERMANY	(2,408,728.93)	(7.61)
JAPAN	41,986,747.19	132.72
NETHERLANDS	(167,000.48)	(0.53)
SWITZERLAND	1,951,578.22	6.17
UNITED KINGDOM	(8,263,952.50)	(26.12)
FOREIGN CURRENCY CASH	608.56	0.00
Grand Total	\$31,636,662.65	100.00 %

#### SCUDDER/KEMPER INVESTMENTS, INC.

### GENESIS ASSET MANAGERS INTERNATIONAL LTD. (Emerging Markets)

Exposure by Country	Market Value	9/0
AUSTRALIA	\$3,522,847.53	0.98 %
AUSTRIA	1,962,329.98	0.55
BRAZIL	2,676,093.16	0.75
CANADA	3,155,754.24	0.88
FRANCE	53,519,265.14	14.93
GERMANY	51,195,749.41	14.29
HONG KONG	10,836,353.11	3.02
ITALY	15,143,500.52	4.23
JAPAN	37,789,317.26	10.54
NETHERLANDS	31,738,411.73	8.86
PHILIPPINES	1,954,587.92	0.55
SINGAPORE	360,962.71	0.10
SPAIN	4,004,853.17	1.12
SWEDEN	19,739,062.87	5.51
SWITZERLAND	35,519,342.21	9.91
UNITED KINGDOM	48,495,812.57	13.53
UNITED STATES	34,936,291.41	9.75
FOREIGN CURRENCY CASH	1,691,971.87	0.47
FORWARD CURRENCY CONTR.	137,355.52	0.04
Grand Total	\$358,379,862.33	100.00 %

Exposure by Country	Market Value	%
ARGENTINA	\$8,892,696.60	4.13 %
AUSTRALIA	6,397,818.98	2.97
BRAZIL	28,052,390.25	13.03
CANADA	707,647.25	0.33
CZECH REPUBLIC	1,615,241.22	0.75
GREECE	5,011,389.20	2.33
HONG KONG	4,623,728.97	2.15
INDONESIA	145,536.87	0.07
JORDAN	767,934.65	0.36
MALAYSIA	1,183,947.53	0.55
MEXICO	7,906,368.46	3.67
MOROCCO	839,029.05	0.39
PAKISTAN	555,688.06	0.26
PERU	583,817.91	0.27
PHILIPPINES	15,732.34	0.01
POLAND	813,874.52	0.38
SOUTH AFRICA	5,963,285.22	2.77
SOUTH KOREA	2,313,384.37	1.07
THAILAND	3,270,210.44	1.52
TURKEY	7,840,985.57	3.64
UNITED KINGDOM	4,704,517.13	2.19
UNITED STATES	119,520,270.78	55.51
ZIMBABWE	1,620,973.25	0.75
FOREIGN CURRENCY CASH	1,954,316.59	0.91
FORWARD CURRENCY CONTR.	(503.44)	0.00
Grand Total	\$215,300,281.77	100.00 %

#### STATE STREET GLOBAL ADVISORS

Exposure by Country	Market Value	%
AUSTRALIA	\$68,626,908.87	2.35 %
AUSTRIA	12,954,696.94	0.44
BELGIUM	45,670,342.29	1.56
DENMARK	28,456,863.94	0.97
FINLAND	30,083,178.20	1.03
FRANCE	279,699,287.54	9.57
GERMANY	330,837,092.65	11.32
HONG KONG	50,626,927.13	1.73
IRELAND	14,366,329.38	0.49
ITALY	135,088,993.43	4.62
JAPAN	600,496,830.71	20.54
MALAYSIA	14,207,128.03	0.49
NETHERLANDS	171,556,822.40	5.87
NEW ZEALAND	5,855,226.03	0.20
NORWAY	15,531,203.44	0.53
PORTUGAL	18,795,430.42	0.64
SINGAPORE	15,858,662.74	0.54
SPAIN	98,333,765.22	3.36
SWEDEN	94,271,085.68	3.23
SWITZERLAND	233,113,846.20	7.97
THAILAND	41.78	0.00
UNITED KINGDOM	642,483,937.71	21.98
UNITED STATES	266,139.49	0.01
FOREIGN CURRENCY CASH	15,896,472.05	0.54
FORWARD CURRENCY CONTR.	0.00	0.00
Grand Total	\$2,923,077,212.27	100.00 %

### MONTGOMERY ASSET MANAGEMENT (Emerging Markets)

Exposure by Country	Market Value	%
ARGENTINA	\$2,812,544.65	1.39 %
BRAZIL	21,468,453.92	10.64
CZECH REPUBLIC	1,898,783.91	0.94
EGYPT	5,187,766.69	2.57
GREECE	6,727,252.27	3.33
HONG KONG	4,689,633.85	2.32
HUNGARY	3,312,194.26	1.64
ISRAEL	5,065,128.28	2.51
JORDAN	603,377.22	0.30
MALAYSIA	1,964,809.87	0.97
MEXICO	5,148,835.37	2.55
PAKISTAN	1,190,138.71	0.59
PERU	940,364.39	0.47
PHILIPPINES	1,581,900.29	0.78
PORTUGAL	4,188,824.16	2.08
SOUTH AFRICA	28,855,067.35	14.30
SOUTH KOREA	4,293,247.23	2.13
TAIWAN PROVINCE OF CHINA	9,948,483.59	4.93
THAILAND	4,995,875.89	2.48
TURKEY	14,377,883.70	7.12
UNITED STATES	69,134,106.19	34.26
VENEZUELA	111,947.95	0.06
FOREIGN CURRENCY CASH	3,317,162.83	1.64
FORWARD CURRENCY CONTR.	(3,628.21)	0.00
Grand Total	\$201,810,154.36	100.00 %

## CITY OF LONDON INVESTMENT MGMT. CO. LTD. (Emerging Markets)

Exposure by Country	Market Value	%
EMERGING MKT COUNTRY FD.	\$86,216,310.23	100.00 %
Grand Total	\$86,216,310.23	100.00 %

#### AGGREGATE INTERNATIONAL STOCK POOL\*

Exposure by Country	Market Value	%	
ARGENTINA	\$12,431,391.07	0.23	%
AUSTRALIA	130,664,293.95	2.47	
AUSTRIA	14,917,026.92	0.28	
BELGIUM	82,775,555.87	1.56	
BRAZIL	57,693,040.60	1.09	
CANADA	5,585,189.44	0.11	
CZECH REPUBLIC	3,685,579.66	0.07	
DENMARK	33,402,852.86	0.63	
GERMANY	499,952,699.15	9.44	
EGYPT	5,187,766.69	0.10	
EMERGING MKT COUTRY FD.	86,216,310.23	1.63	
FINLAND	62,714,830.51	1.18	
FRANCE	466,907,709.72	8.82	
GREECE	11,738,641.47	0.22	
HONG KONG	88,427,385.80	1.67	
HUNGARY	3,312,194.26	0.06	
INDONESIA	590,956.58	0.01	
IRELAND	14,366,329.38	0.27	
ISRAEL	5,065,128.28	0.10	
ITALY	214,308,577.60	4.05	
JAPAN	879,733,979.80	16.62	
JORDAN	1,371,311.87	0.03	
MALAYSIA	23,776,548.93	0.45	
MEXICO	17,260,447.58	0.33	
MOROCCO	839,029.05	0.02	
NETHERLANDS	302,805,182.52	5.72	
TAIWAN PROVINCE OF CHINA	9,948,483.59	0.19	
NEW ZEALAND	22,453,556.33	0.42	
NORWAY	29,953,427.64	0.57	
PAKISTAN	1,745,826.77	0.03	
PERU	1,524,182.30	0.03	
PHILIPPINES	4,501,858.79	0.09	
POLAND	813,874.52	0.02	
PORTUGAL	25,563,104.03	0.48	
UNITED KINGDOM	1,025,003,125.70	19.36	
SINGAPORE	25,497,917.86	0.48	
SOUTH AFRICA	39,521,105.61	0.75	
SOUTH KOREA	6,606,631.60	0.12	
SPAIN	130,113,865.88	2.46	
SWEDEN	173,398,078.34	3.28	
SWITZERLAND	355,336,702.42	6.71	
THAILAND	10,080,719.02	0.19	
TURKEY	22,218,869.27	0.42	
UNITED STATES	318,391,750.15	6.01	
VENEZUELA	111,947.95	0.00	
ZIMBABWE	1,620,973.25	0.03	
FOREIGN CURRENCY CASH	34,243,853.47	0.65	
FORWARD CURRENCY CONTR.	28,993,159.90	0.55	
Grand Total	\$5,293,372,974.18	100.00	%

<sup>\*</sup>Aggregate of all managers in the International Equity Account in the Financial Statements. Includes Active, Passive, Emerging Markets, and Currency Overlay managers.

## AMERICAN EXPRESS ASSET MANAGEMENT GROUP INC.

### INVESTMENT ADVISERS, INC.

Fixed Income	Market Value	%	Fixed Income	Market Value	%
U.S. CORPORATES	\$187,307,617.32	33.12 %	U.S. CORPORATES	\$153,757,618.62	24.75 %
U.S. FINANCE	0.00	0.00	U.S. FINANCE	0.00	0.00
U.S. GOV'T /SPONSORED	49,476,450.00	8.75	U.S. GOV'T /SPONSORED	21,063,024.50	3.39
U.S. MTG REL	108,066,277.93	19.11	U.S. MTG REL	280,420,287.85	45.13
U.S. TREASURY	181,875,178.62	32.16	U.S. TREASURY	134,076,816.35	21.58
U.S. MUNICIPALS	0.00	0.00	U.S. MUNICIPALS	0.00	0.00
MISCELLANEOUS	1,206,000.00	0.21	MISCELLANEOUS	15,831,993.00	2.55
ALL NON U.S.	\$5,664,344.00	1.00	ALL NON U.S.	\$1,665,732.60	0.27
Total Fixed Income	\$533,595,867.87	94.34	Total Fixed Income	\$606,815,472.92	97.66
Cash Equivalents			Cash Equivalents		
U.S.	\$31,984,810.79	5.66	U.S.	\$14,522,439.54	2.34
All Non U.S.	\$0.00	0.00	All Non U.S.	\$0.00	0.00
Grand Total	\$565,580,678.66	100.00 %	Grand Total	\$621,337,912.46	100.00 %

#### BEA ASSOCIATES

### MILLER ANDERSON & SHERRERD, L.L.P.

Fixed Income	Market Value	%	Fixed Income	Market Value	%
U.S. CORPORATES	\$164,620,675.42	21.24 %	U.S. CORPORATES	\$208,975,682.75	18.13 %
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	0.00	0.00
U.S. MTG REL	242,931,259.33	31.35	U.S. MTG REL	673,957,919.27	58.47
U.S. TREASURY	118,268,821.33	15.26	U.S. TREASURY	65,105,918.06	5.65
U.S. MUNICIPALS	31,129,802.50	4.02	U.S. MUNICIPALS	0.00	0.00
MISCELLANEOUS	2,987,129.25	0.39	MISCELLANEOUS	37,901,109.34	3.29
ALL NON U.S.	50,668,757.09	6.54	ALL NON U.S.	16,013,297.88	1.39
					0.00
Total Fixed Income	610,606,444.92	78.80	<b>Total Fixed Income</b>	1,001,953,927.30	86.92
Cash Equivalents			Cash Equivalents		
U.S.	164,287,353.52	21.20	U.S.	150,794,964.59	13.08
All Non U.S.	0.48	0.00	All Non U.S.	\$61.42	0.00
Grand Total	\$774,893,798.92	100.00 %	Grand Total	\$1,152,748,953.31	100.00 %

#### STANDISH AYER & WOOD, INC.

## WESTERN ASSET MANAGEMENT COMPANY

Fixed Income	Market Value	%	Fixed Income	Market Value	%
U.S. CORPORATES	\$222,872,460.09	30.67 %	U.S. CORPORATES	\$242,057,972.10	15.30 %
U.S. FINANCE	0.00	0.00	U.S. FINANCE	0.00	0.00
U.S. GOV'T /SPONSORED	475,776.68	0.07	U.S. GOV'T /SPONSORED	7,823,619.00	0.49
U.S. MTG REL	287,847,037.55	39.61	U.S. MTG REL	794,561,488.51	50.22
U.S. TREASURY	96,262,522.61	13.25	U.S. TREASURY	272,185,911.84	17.20
U.S. MUNICIPALS	0.00	0.00	U.S. MUNICIPALS	7,032,454.48	0.44
MISCELLANEOUS	4,568,400.00	0.63	MISCELLANEOUS	76,038,474.73	4.81
ALL NON U.S.	\$58,515,201.68	8.05	ALL NON U.S.	79,775,430.45	5.04
Total Fixed Income	\$670,541,398.61	92.27	Total Fixed Income	\$1,479,475,351.11	93.51
Cash Equivalents			Cash Equivalents		
U.S.	52,976,847.86	7.29	U.S.	102,731,960.31	6.49
All Non U.S.	3,221,336.88	0.44	All Non U.S.	0.00	0.00
Grand Total	\$726,739,583.35	100.00 %	Grand Total	\$1,582,207,311.42	100.00 %

### BLACKROCK FINANCIAL MANAGEMENT

(Semi - Passive)

#### Market Value % **Fixed Income** Market Value **Fixed Income** 26.16 % U.S. CORPORATES \$533,267,290.46 32.06 % \$415,417,117.52 U.S. CORPORATES 0.00 U.S. FINANCE 0.00 0.00 U.S. FINANCE 0.00 19,269,892.00 U.S. GOV'T /SPONSORED 0.00 0.00 U.S. GOV'T /SPONSORED 1.16 628,359,630.44 37.78 468,013,670.93 29.47 U.S. MTG REL U.S. MTG REL 35.20 U.S. TREASURY 275,593,982.57 16.57 559,127,185.80 U.S. TREASURY 6,330,550.20 0.40 U.S. MUNICIPALS 0.00 0.00 U.S. MUNICIPALS 23,773,102.00 1.43 MISCELLANEOUS 0.00 0.00 MISCELLANEOUS ALL NON U.S. \$34,552,421.02 2.08 \$9,915,446.00 0.62 ALL NON U.S. 91.07 \$1,458,803,970.45 91.85 **Total Fixed Income** \$1,514,816,318.49 **Total Fixed Income** Cash Equivalents Cash Equivalents 8.15 U.S. 148,579,554.88 8.93 129,453,185,79 U.S. All Non U.S. 0.00 All Non U.S. 0.00 0.00 **Grand Total** \$1,663,395,873.37 100.00 % \$1,588,257,156.24 100.00 % **Grand Total**

### GOLDMAN SACHS ASSET MANAGEMENT

(Semi - Passive)

# LINCOLN CAPITAL MANAGEMENT COMPANY

#### AGGREGATE BOND POOL \*

(Semi - Passive)

Fixed Income	Market Value	%	Fixed Income	Market Value	%
U.S. CORPORATES	\$320,569,528.67	19.69 %	U.S. CORPORATES	\$2,448,845,962.95	23.77 %
U.S. FINANCE	0.00	0.00	U.S. FINANCE	0.00	0.00
U.S. GOV'T /SPONSORED	37,243,723.30	2.29	U.S. GOV'T /SPONSORED	135,352,485.48	1.31
U.S. MTG REL	615,169,239.79	37.79	U.S. MTG REL	4,099,326,811.60	39.79
U.S. TREASURY	460,504,684.26	28.29	U.S. TREASURY	2,163,001,021.44	20.99
U.S. MUNICIPALS	193,936.80	0.01	U.S. MUNICIPALS	44,686,743.98	0.43
MISCELLANEOUS	0.00	0.00	MISCELLANEOUS	162,306,208.32	1.58
ALL NON U.S.	\$9,953,593.90	0.61	ALL NON U.S.	\$266,724,224.62	2.59
Total Fixed Income	\$1,443,634,706.72	88.69	Total Fixed Income	\$9,320,243,458.39	90.46
Cash Equivalents			Cash Equivalents		
U.S.	184,177,892.76	11.31	U.S.	979,509,010.04	9.51
All Non U.S.	0.00	0.00	All Non U.S.	3,221,398.78	0.03
Grand Total	\$1,627,812,599.48	100.00 %	Grand Total	\$10,302,973,867.21	100.00 %

<sup>\*</sup> Aggregate of all managers in the Bond Acount in the Financial Statements. Includes both Active and Semi-Passive managers.

#### INCOME SHARE ACCOUNT

#### BOND MARKET ACCOUNT

	Market Value	%	
EQUITIES	\$355,182,858.83	61.82	%
BONDS	188,651,469.45	32.84	
CASH EQUIVALENTS	30,702,284.40	5.34	
Grand Total	\$574,536,612.68	100.00	0/0

	Market Value	%	
STOCKS	\$34,981,081.75	100.00 %	)
CASH EQUIVALENTS	0.00	0.00	
Grand Total	\$34,981,081.75	100.00 %	0

#### GROWTH SHARE ACCOUNT

#### MONEY MARKET ACCOUNT

	Market Value	%
EQUITIES	\$278,135,021.53	100.00 %
CASH EQUIVALENTS	0.00	0.00
Grand Total	\$278,135,021.53	100.00 %

	Market value	70	
CASH EQUIVALENTS	\$47,144,037.51	100.00	%
Grand Total	\$47,144,037.51	100.00	%

#### COMMON STOCK INDEX ACCOUNT

#### FIXED INTEREST ACCOUNT

	Market Value	%	
EQUITIES	\$212,480,727.33	100.00	%
CASH EQUIVALENTS	0.00	0.00	
Grand Total	\$212,480,727.33	100.00	%

Market value	70	
\$72,861,448.84	97.57	%
1,810,883.62	2.43	
\$74,672,332.46	100.00	%
	\$72,861,448.84 1,810,883.62	\$72,861,448.84 97.57

### INTERNATIONAL EQUITY ACCOUNT

#### SUPPLEMENTAL INVESTMENT FUND

	Market Value	%		
EQUITIES	\$24,719,001.29	100.00	%	INCOME
CASH EQUIVALENTS	0.00	0.00		GROWTH
Grand Total	\$24,719,001.29	100.00	0/0	COMMO
				INTERNA
				BOND M
				MONEY

	Market Value	%
INCOME SHARE	\$574,536,612.68	46.09 %
GROWTH SHARE	278,135,021.53	22.31
COMMON STOCK INDEX	212,480,727.33	17.04
INTERNATIONAL SHARE	24,719,001.29	1.98
BOND MARKET	34,981,081.75	2.81
MONEY MARKET	47,144,037,51	3.78
FIXED INTEREST	74,672,332.46	5.99
Grand Total	\$1,246,668,814.55	100.00 %

### **Summary Asset Listing - Other Funds**

#### ASSIGNED RISK PLAN

	Market Value	%
Equities		
BASIC INDUSTRIES	\$6,535,633.65	0.95 %
CAPITAL GOODS	14,088,464.47	2.05
CONSUMER BASICS	36,076,178.41	5.25
CONSUMER DURABLE GOOD	1,331,495.11	0.19
CONSUMER NON-DURABLES	11,027,069.10	1.61
CONSUMER SERVICES	5,443,072.48	0.79
ENERGY	15,381,630.59	2.24
FINANCE	34,061,233.48	4.96
GENERAL BUSINESS	13,233,106.20	1.93
MISCELLANEOUS	5,841,504.00	0.85
SHELTER	2,163,237.74	0.31
TECHNOLOGY	18,208,552.84	2.65
TRANSPORTATION	1,597,460.74	0.23
UTILITIES	13,476,454.09	1.96
Total Equities	178,465,092.90	25.98
Fixed Income		
CORPORATE BONDS	272,627,117.76	39.69
GOVERNMENT SPONSORED	30,289,685.80	4.41
MORTGAGE RELATED	145,426,367.66	21.17
Total Fixed Income	483,884,507.74	70.44
Cash Equivalents	24,628,001.92	3.58
Grand Total	\$686,977,602.56	100.00 %

#### **EMERGENCY MEDICAL FUND**

	Market Value	%	
EQUITIES	\$2,782,490.66	60.77 9	%
FIXED INCOME	1,796,290.14	39.23	
Grand Total	\$4,578,780.80	100.00	%

#### **ENVIRONMENTAL TRUST FUND**

	Market Value	%
EQUITIES	\$125,229,455.13	53.12 %
FIXED INCOME	109,379,746.23	46.40
CASH EQUIVALENTS	1,117,639.39	0.47
Grand Total	\$235,726,840.75	100.00 %

#### IRON RANGE FUND

	Market Value	%
EQUITIES	\$17,422,448.73	53.21 %
FIXED INCOME	15,319,843.25	46.79
Grand Total	\$32,742,291.98	100.00 %

#### PERMANENT SCHOOL FUND

	Market Value	%
EQUITIES	\$263,201,121.72	52.84 %
FIXED INCOME	218,014,506.99	43.77
CASH EQUIVALENTS	16,910,606.77	3.39
Grand Total	\$498,126,235.48	100.00 %

#### WINONA STATE FUND

	Market Value	%
EQUITIES	\$2,108,240.41	54.31 %
FIXED INCOME	1,409,363.12	36.33
CASH EQUIVALENTS	362,784.26	9.36
Grand Total	\$3,880,387.79	100.00 %

#### Notes applicable to all Summarized Asset Listings:

The data source for the Summarized Asset Listings was State Street Bank & Trust, the SBI's custodian.

Market value figures in the Summarized Asset Listings may not reconcile to the amounts shown for vairous 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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