

State of Wisconsin Investment Board

MAILING ADDRESS
PO BOX 7842
MADISON, WI 53707-7842

121 EAST WILSON ST
MADISON, WI 53702
(608) 266-2381
FAX: (608) 266-2436

8/11
Lang is deciding
what we need to
do with this

B

August 5, 1999

Senator Brian Burke, Co-Chair
Joint Committee on Finance
PO Box 7882
Madison, WI 53707-7882

Representative John Gard, Co-Chair
Joint Committee on Finance
PO Box 8952
Madison, WI 53708-8952

Dear Senator Burke and Representative Gard:

I am writing to let you know about a policy change that SWIB plans to make in awarding performance bonuses to investment staff this year.

The Joint Committee on Finance approved our current bonus policies in 1996. Our reading of the statutes indicates that action by the Committee is not required to implement the change we are planning. However, because of the Committee's interest and involvement in our compensation issues, I felt that it was important to let you know about our plan and the reasons for it.

The amount of bonuses we award is affected by our total investment return for the Fixed Retirement Fund. Based on our total return for the five-years ending June 30, 1999, our policies allow for the release of up to 50% of this year's bonus appropriation. We apportion these funds to each portfolio based on its share of total salaries. Our policy has been not to reallocate to another portfolio, bonus funds originally allocated to any portfolio that failed to beat its performance benchmark.

Our plan this year is to reallocate \$124,300 from portfolios that did not beat their benchmarks to those that did. This will result in the distribution of 50% of the amount appropriated. We will make awards only to investment staff who beat their benchmarks. No individual award will exceed the statutory limit of 25% of salary and the awards will be paid in installments over three years as required by law. We will not award \$293,000 of the \$587,900 appropriated.

This change in policy will enable us to recognize strong investment performance at the portfolio level and make individual awards similar in amount to those received in recent years. In a previous audit, the Legislative Audit Bureau recommended that SWIB consider reallocating funds to enable us to make larger awards. Our Internal Auditor has recently made a similar recommendation.

The compensation package approved by the Joint Committee on Finance and both houses of the Legislature in the biennial budget will help us address critical staff recruitment and retention

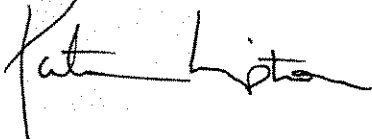
Senator Brian Burke and Representative John Gard
Page 2

issues. Because it will not take effect until July 1, 2000, the plan I have outlined is a way for us to bridge some of the gap.

I believe that this step is reasonable and prudent given the competition we face for investment staff and the value these staff have added to the Retirement Funds because of their performance. The cost of bonuses awarded under this plan is a small fraction of the added investment return generated by the staff who earned them.

I would be happy to respond to any questions you may have. Again, we are very appreciative of the attention and support that you gave to our resource issues in the 1999-01 biennial budget.

Sincerely,



Patricia Lipton
Executive Director

cc: Members, Joint Committee on Finance
Members, Joint Committee on Audit
Bob Lang, Legislative Fiscal Bureau
Jan Mueller, Legislative Audit Bureau
Mark Bugher, Department of Administration



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15 August 1999

Senator Brian Burke, Co-Chair
Joint Committee on Finance
P.O. Box 7882
Madison, WI 53707-7882

Representative John Gard, Co-Chair
Joint Committee on Finance
P.O. Box 8952
Madison, WI 53708-8952

Mr. Mark Bugher, Secretary
Department of Administration
101 East Wilson Street
P.O. Box 7864
Madison, WI 53707-7864

Dear Committee Co-Chairs and Secretary Bugher:

Attached is our quarterly report of charges to funds managed by the Investment Board for expenses incurred under ss. 25.18 (1)(a) and (m). This report includes payments made during the quarter ending June 30, 1999.

Under ss. 25.18 (1)(a), the Board may employ special legal or investment counsel in any matter arising out of the scope of our investment authority. Under ss. 25.18 (1)(m), the Board may employ professionals, contractors or agents to evaluate or operate any property in which the Board has an interest. Expenses for these services are charged to the current income of the fund for which the services were furnished.

Because the report represents actual payments made during the quarter, significant fluctuations in amounts reported for each vendor will occur from quarter to quarter.

Section 25.17 (13m) of the Statutes provides for this report on a quarterly basis. Please contact me if you have any questions or comments about this report.

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia Lipton".

Patricia Lipton
Executive Director

cc: Members, Joint Committee on Finance
Bob Lang, Legislative Fiscal Bureau

STATE OF WISCONSIN INVESTMENT BOARD
Quarterly Direct Charges Under ss. 25.18 (1) (a) or (m)
April 1, 1999 - June 30, 1999

Custodial and Banking Fees

Bank of New York	\$ 106,283	
Bankers Bank	2,500	
Boston Co. Institutional Investor	789,648	
Firststar	1,655	
Total Custodial and Banking Fees	900,086	\$ 900,086

Legal Fees, Services and Expenses

Axley Brynelson	14,520	
Baker & Botts	5,320	
Department of Justice	2,482	
Girard & Green LLP	11,437	
Grant & Eisenhofer PA	140	
Howard, Smith & Levin LLP	41,483	
Mallon & Johnson P.C.	1,290	
Michael Best & Friedrich	23,557	
Reinhart Boerner Van Dueren	82	
Solheim, Billing & Grimker SC	285	
Stafford Rosenbaum Attorneys	3,608	
Taft, Stettinius	456	
Total Legal Fees, Services and Expenses	104,660	104,660

Index Fund Fees

Barclays Global Investors (a.k.a. Wells Fargo)	1,016,634	
Total Index Fund Fees	1,016,634	1,016,634

Investment Counsel

AG Risk Management	9,250	
American Stock Exchange	1,087	
Asset Strategy Consulting	17,500	
Bloomberg, LP	148,066	
Bridge Information Services	7,150	
CP Risk Management	1,859	
Doeler, Jacqueline	9,410	
Dow Jones	1,965	
Ernst & Young LLP	5,250	
First Call Corp.	28,400	
Garland Associates, Inc.	22,357	
IDC Portfolio Mgmt, Inc.	6,250	
Instinet Corp.	980	
Investor Responsibility Research Center	1,500	
Kenneth Purdy Consulting	1,267	
KPMG Consulting Co.	3,519	
Maria Fiorini Ramirez	975	
MOBEO	650	
New York Stock Exchange	1,715	
Options Price Reporting Authority	528	
Reuters	60,936	
Silverman Korenthal & Co.	4,420	
Stone & McCarthy Research	900	
Telerate	23,968	
Thomson Trading	3,200	
Toronto Stock Exchange	270	
Wilshire	41,250	
Total Investment Counsel	404,621	404,621

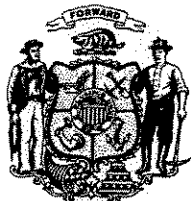
STATE OF WISCONSIN INVESTMENT BOARD
Quarterly Direct Charges Under ss. 25.18 (1) (a) or (m)
April 1, 1999 - June 30, 1999

Real Estate Advisory Fees

Bristol Group, Inc.	147,504	
Equitable Real Estate	135,623	
Goldman Sachs & Co.	99,162	
Heitman Capital Management Corp.	134,400	
Invesco Realty Advisors, Inc.	42,590	
Jones, Lang, Wootton Realty Advisors	28,054	
Kensington Realty Advisors	203,228	
Lend Lease Real Estate Investment	476,739	
MIG Realty Advisors, Inc.	86,993	
Oak Brook Corp.	77,855	
PM Realty Advisors, Inc.	78,268	
Sentinel Realty Advisors Corp.	23,875	
Westbrook Real Estate	483,048	
Wispark Corporation	31,265	
Total Real Estate Advisory Fees	2,048,604	

Total

\$ 4,474,605



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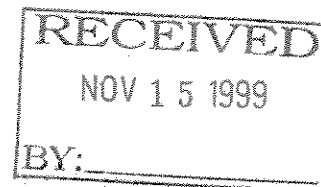
121 EAST WILSON ST
MADISON, WI 53702
(608) 266-2381

15 November 1999

Senator Brian Burke, Co-Chair
Joint Committee on Finance
P.O. Box 7882
Madison, WI 53707-7882

Representative John Gard, Co-Chair
Joint Committee on Finance
P.O. Box 8952
Madison, WI 53708-8952

Mr. George Lightbourn, Secretary
Department of Administration
101 East Wilson Street
P.O. Box 7864
Madison, WI 53707-7864



Dear Committee Co-Chairs and Secretary Lightbourn:

Attached is our quarterly report of charges to funds managed by the Investment Board for expenses incurred under ss. 25.18 (1)(a) and (m). This report includes payments made during the quarter ending September 30, 1999.

Under ss. 25.18 (1)(a), the Board may employ special legal or investment counsel in any matter arising out of the scope of our investment authority. Under ss. 25.18 (1)(m), the Board may employ professionals, contractors or agents to evaluate or operate any property in which the Board has an interest. Expenses for these services are charged to the current income of the fund for which the services were furnished.

Because the report represents actual payments made during the quarter, significant fluctuations in amounts reported for each vendor will occur from quarter to quarter.

Section 25.17 (13m) of the Statutes provides for this report on a quarterly basis. Please contact me if you have any questions or comments about this report.

Sincerely,

Patricia Lipton
Executive Director

cc: Members, Joint Committee on Finance
Bob Lang, Legislative Fiscal Bureau

STATE OF WISCONSIN INVESTMENT BOARD
Quarterly Direct Charges Under ss. 25.18 (1) (a) or (m)
July 1, 1999 - September 30, 1999

Custodial and Banking Fees

Firststar	\$ 1,648	
Bank of New York	74,715	
Bankers Bank	2,500	
Boston Co. Institutional Investor	492,429	
Total Custodial and Banking Fees	571,292	\$ 571,292

Legal Fees, Services and Expenses

Baker & Botts	573	
Department of Justice	623	
Foley & Lardner	13,610	
Howard, Smith & Levin	2,772	
Jones, Day, Reavis & Pogue	38,168	
McDermott Will & Emery	3,758	
Michael Best & Friedrich	14,345	
Taft, Stettinius	95	
Total Legal Fees, Services and Expenses	73,943	73,943

Investment Counsel

ADP Investor Communications Services	552	
Analytic Investors, Inc.	2,745	
Asset Strategy Consulting	11,667	
Audit Force, Inc.	4,253	
Bloomberg, LP	3,995	
Bridge Information Services	2,526	
Bridgewater Associates	3,750	
Conference Board, The	10,600	
CP Risk Management	6,578	
Doeler, Jacqueline	17,250	
Factset Research Systems, Inc.	24,302	
First Call Corp.	21,800	
Garland Associates, Inc.	2,821	
General DataComm Industries, Inc.	600	
IDC Portfolio Mgmt, Inc.	6,250	
Instinet Corp.	780	
Kenneth Purdy Consulting	12,327	
Maria Fiorini Ramirez	1,950	
Morgan Stanley Capital International	17,500	
Multex Company	22,500	
Reuters	72,185	
Stone & McCarthy Research	900	
Strategic Economic Decisions	12,500	
Telerate	17,976	
Toronto Stock Exchange	594	
Wilshire	21,875	
Total Investment Counsel	300,776	300,776

STATE OF WISCONSIN INVESTMENT BOARD
Quarterly Direct Charges Under ss. 25.18 (1) (a) or (m)
July 1, 1999 - September 30, 1999

Real Estate Advisory Fees

Bristol Group, Inc.	145,056	
Goldman Sachs & Co.	3,332	
Heitman Capital Management Corp.	133,838	
Invesco Realty Advisors, Inc.	42,599	
Jones, Lang, Wootton Realty Advisors	60,700	
Lend Lease Real Estate Investment	112,499	
MIG Realty Advisors, Inc.	30,073	
PM Realty Advisors, Inc.	39,162	
Sentinel Realty Advisors Corp.	24,675	
Westbrook Real Estate	486,833	
Total Real Estate Advisory Fees		1,078,768

Total

\$ 2,024,779



State of Wisconsin Investment Board

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MADISON, WI 53707-7842

121 EAST WILSON ST
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December 6, 1999

Representative John Gard, Co-Chair
Joint Committee on Finance
PO Box 8952
Madison, WI 53708-8952

Senator Brian Burke, Co-Chair
Joint Committee on Finance
PO Box 7882
Madison, WI 53707-7882

Representative Carol Kelso, Co-Chair
Joint Committee on Audit
PO Box 8952
Madison, WI 53708-8952

Senator Gary George, Co-Chair
Joint Committee on Audit
PO Box 7882
Madison, WI 53707-7882

Mr. Donald Schneider, Senate Chief Clerk
Mr. Charles Sanders, Assembly Chief Clerk

Members of the Legislature:

Annually under s. 25.17(14g) of the Statutes, the Investment Board submits a report to the Legislature on investment goals and long-term strategies. I am writing to let you know of our plan to submit this year's report in January. Although this will be after the December 31 due date, it will enable us to provide a more complete and informative report to you.

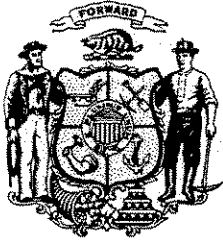
Additional review of the investment strategy for the Wisconsin Retirement System trust funds will take place at the meeting of our Board of Trustees in mid-January. We believe that it will be helpful to reflect the outcome of that discussion in our report to you. We will also revisit strategy matters covered in the recent report by the Legislative Audit Bureau.

Please feel free to contact me if you have any questions or concerns.

Sincerely,

Patricia Lipton
Executive Director

cc: Janice Mueller, Legislative Audit Bureau
Robert Lang, Legislative Fiscal Bureau



State of Wisconsin Investment Board

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PO BOX 7842
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121 EAST WILSON ST
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28 January 2000

Representative John Gard, Co-Chair
Joint Committee on Finance
PO Box 8952
Madison, WI 53708-8952

Senator Brian Burke, Co-Chair
Joint Committee on Finance
PO Box 7882
Madison, WI 53708-7882

Representative Carol Kelso, Co-Chair
Joint Committee on Audit
PO Box 8952
Madison, WI 53708-8952

Senator Gary George, Co-Chair
Joint Committee on Audit
PO Box 7882
Madison, WI 53708-7882

Mr. Donald Schneider
Mr. Charles Sanders

Members of the Legislature:

Section 25.17(14r) of the Statutes requires that the State of Wisconsin Investment Board (SWIB) submit a report to the Joint Committee on Audit, Joint Committee on Finance and the Chief Clerks of each House summarizing any change in the Board's investment policies, upon adoption of the change.

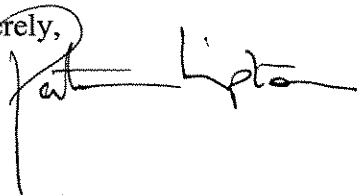
On January 13, 2000 the Board approved modifications to the Investment Policy Guidelines relating to the Patients Compensation Fund. Attached are the modified guidelines. Additions to the previous guidelines are shaded and deletions are the stricken material.

The purpose of the Patients Compensation Fund (PCF) is to provide a medical malpractice insurance fund for Wisconsin's health care providers. The Patients Compensation Fund's Board of Governors oversees the administration of the PCF. SWIB is responsible for carrying out the investment management activities for this fund.

The PCF Board of Governors reviewed their investment guidelines and determined that the fund should invest up to 20% of its assets in common stocks. This decision stems from the fact that the fund is now in a surplus position. Fixed income assets, comprising 80% of the fund are sufficient to meet actuarial liabilities. SWIB will continue to manage the fixed income portion of the fund, as before. Due to staffing constraints at the Investment Board, it was determined that the fund will use a passive index fund to achieve the desired common stock exposure.

Please contact me if you have any questions about this report.

Sincerely,

A handwritten signature in black ink that reads "Pat Lipton". The signature is written in a cursive style with a large initial "P" and "L".

Patricia Lipton
Executive Director

cc: Members, Joint Committee on Audit
Members, Joint Committee on Finance
Legislative Audit Bureau
Legislative Fiscal Bureau

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PATIENTS COMPENSATION FUND

The Patients' Compensation Fund (PCF) is invested separately from the State Investment Fund by statute in order to provide a more stable rate of return as compared to that experienced in the short-term market. The Board of Governors for the Fund projects future cash flow needs of the Fund periodically. The Investment Board's management strategy currently is to use horizon matching to achieve fund objectives ~~for the assets actively managed~~. Sufficient cash balances are maintained in the State Investment Fund to meet short-term liability payments as projected by the PCF. ~~Surplus funds, as determined by the Board of Governors, may be invested in equities through a passive vehicle.~~ ~~An element of active management is used to stay within approved investment parameters through periodic rebalancing.~~

INVESTMENT OBJECTIVES

The primary objective of the PCF assets is to satisfy its obligations to Fund participants and claimants as set forth in Chapter 655, Wisconsin Statutes, through prudent investment management.

A secondary objective is to provide a balance between capital appreciation, preservation of capital, and current income. An emphasis is placed on preservation of capital and current income. Risk is viewed principally as the long-term erosion of aggregate capital. To minimize the probability of substantial loss of principal over the investment horizon, an emphasis is placed on minimizing portfolio volatility before seeking substantial capital growth.

The PCF Board of Governors has determined that, over a complete market cycle, it is the goal of the aggregate Patients Compensation Fund assets to equal or exceed

1. An annual return of 8% per annum.

2. An absolute rate of return equivalent to the current PCF actuarial requirement.

CRITERIA APPROVED FOR INVESTMENT

The person designated by the Executive Director to manage the Fund may:

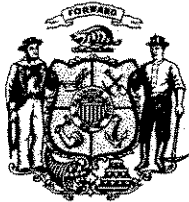
■ Purchase and sell publicly traded fixed income securities, subject to concurrence of the Executive Director or Assistant Executive Director, within the following guidelines:

1. Quality: Investment grade, with 80% of the issues rated A or better.
2. Sector: Corporate--No more than twice the sector's percentage of ML All Corporate Master Index (COAO).
U.S. Treasury & Government Agencies--No limit.
AAA rated Mortgage-Backed Securities--maximum 20%.

3. Issuer: 5% maximum per corporate issuer.

B. Invest surplus Funds, as determined by the Board of Governors, in publicly-traded domestic equity securities through purchase and sale of interests in a Russell 3000 and/or S&P 500 index Fund

4. Make any other legal investment that is specifically approved by the Board.



State of Wisconsin Investment Board

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January 31, 2000

Senator Brian Burke, Co-Chair
Joint Committee on Finance
P.O. Box 7882
Madison, WI 53707-7882

Representative John Gard, Co-Chair
Joint Committee on Finance
P.O. Box 8952
Madison, WI 53708-8952

Dear Senator Burke and Representative Gard:

In accordance with s. 25.17(17) of the Statutes, I am submitting to the Joint Committee on Finance, the State of Wisconsin Investment Board's (SWIB) annual report on credits, or "soft dollars," generated with security brokerage firms and the use of those credits to acquire investment research services. This report covers commissions, research credits, and expenditures for calendar year 1999.

Background

Whenever shares of stocks are bought or sold, a commission is paid to the brokerage firm handling the transaction. A portion of the commission represents the cost of the trading function, such as trade execution, clearing, settling and custody. The second part of the commission serves to compensate the firm for investment research products and services it provides. Occasionally, a brokerage firm will not have its own research staff. In such instances, the firm may offer to pay independent research vendors for services they provide to the investment manager. Credits made available to clients in this manner are termed "third-party" or "non-exclusive" soft dollar research credits. Research provided by the brokerage firm through its own staff or through exclusive arrangements between the broker and researcher are termed "directed research."

Soft dollar research services and practices evolved prior to 1975 when commission rates were fixed by rule. Since many stock trading functions are fairly generic, brokers had to compete for trading business with the research services and credits they offered. In this manner, research grew to be a major service provided by brokers. At the same time, since commission rates were fixed, investment managers relying on soft dollar research did not encounter any fiduciary conflicts with the practice.

Legal Basis for "Soft Dollar" Transactions. The Securities Acts Amendments of 1975 to the Securities Exchange Act replaced fixed commission rates with negotiated rates, effective May 1, 1975. The Amendments also created the Section 28(e) safe harbor provisions regarding the use of "soft dollars" by investment managers. In effect, Section 28(e) defines allowable uses of soft dollars. If a person with "investment discretion" is in compliance with these provisions, he or she is protected against claims that receiving research services through the payment of brokerage commissions violates fiduciary responsibility. The person must determine that the "bundled" price of the services received is reasonable in relation to the value of the trading and research services received.

Rulings and interpretations by the Securities and Exchange Commission (SEC) provide the framework for applying Section 28(e). SEC determinations have covered diverse topics, such as the standards

Senator Brian Burke
Representative John Gard
January 31, 2000
Page 2

used to judge reasonableness of price, the relations between brokers and third-party vendors, and the definition of allowable research equipment and supplies.

Over the past years, several industry groups and regulatory agencies have issued reports which attempt to more closely define appropriate use, management and disclosure of soft dollar activity. SWIB has followed these discussions with interest and, in some cases, has helped to form broad industry guidelines. We believe that SWIB's existing soft dollar procedures continue to meet or exceed the recommended policies.

Alternative Brokerage Arrangements. In lieu of soft dollar arrangements, some brokerage firms offer "commission recapture" programs. Under such programs, a commission is paid to a broker when a trade is executed and the broker later refunds some portion of the commission back to the investor.

Our understanding is that the use of commission recapture programs by internally managed state pension funds is limited and may be more common among funds which rely heavily on outside advisors to manage their investments. In such situations, oversight of trading activities by the pension fund is not as direct and the benefits from commissions may tend to flow more to the outside advisor than to the fund itself. For pension funds which depend upon outside management, recapture programs provide one way to access some of the benefits of trading activity that the pension fund would not otherwise receive.

SWIB believes that good value is being received for the commissions we pay and that there is little additional value to be "recaptured." Our concern would be that reduced commissions could potentially lead to a reduction in quality or quantity of trading services. For that reason, we have proceeded cautiously in our consideration of commission recapture arrangements and do not presently participate in such programs.

Investment Considerations of Soft Dollar Transactions. In making all investment decisions, including choice of broker to execute a trade, SWIB's fiduciary responsibility to the trust funds it manages is the first consideration. Because of this, the role of research considerations in executing trades differs substantially across the various investment categories. Transactions involving stocks of large companies listed on major exchanges can generally be executed through many brokers, due to the high liquidity of shares and the "generic" nature of such trades. The quality and quantity of research available through any given broker can therefore have a significant impact on the choice of brokers to execute certain transactions.

Because small company stocks are not listed on major exchanges and the number of shares available is fewer, trading of this type of stock is not as "generic" as larger company stocks. The ability and efficiency of a broker to trade these stocks can have a significant impact on its price. Therefore, choice of a broker is more dependent on the ability of the broker to execute the trade.

A roughly comparable "soft dollar research" practice exists in trading public bonds. Large institutional investors receive research services directly from brokers or may, in certain situations involving new bond issues, be able to direct a portion of the "selling concession" to brokerage firms that can provide desired third-party research services. A key difference between stock soft dollar credits and bond soft

dollar credits involves the type of transaction which generates the credit. Whereas an investment manager cannot receive a soft dollar research credit from the purchase of new issues of stock, a soft dollar research credit for a bond transaction is usually received on the new issue of a bond.

A significant difference also exists in the way that the research credit is generated. A "commission" is an amount paid on top of the selling price of a share of stock and represents a payment by the investor for both the transaction and research services. The "selling concession" received by a bond broker is taken from the proceeds of the bond issue. It is, therefore, paid by the seller rather than the bond purchaser. The price paid by the bond buyer (SWIB) is the same, regardless of the soft dollar research arrangements offered by the broker.

State of Wisconsin Investment Board Commissions and Research Credits for 1999

Stocks

Table I, attached, lists the 96 domestic equities brokerage firms with which SWIB transacted business during calendar year 1999. Commissions for SWIB's actively managed domestic equity and non-traditional portfolios are included. Together, these portfolios held assets of \$12.9 billion on December 31, 1999. Commissions totaled \$24.3 million. The level of commissions fluctuates each year based on trading activity, which in turn is driven by broader investment decisions.

The reported commissions exclude fees totaling \$9.7 million paid by SWIB to purchase newly issued shares of stock since these represent a service distinct from secondary market trading and cannot generate research credits. In addition to the amounts shown in Table I, \$12.3 million in commissions was paid for staff-managed international equity portfolios. No soft dollar research arrangements existed for these commissions.

Directed Research Credits. Table I also shows that the value of "directed" research services provided for the domestic equity portfolios totaled \$11.1 million in 1999. This amount is an estimate of the value of the research provided relative to the value of trading services received. Since these services are bundled into a single commission, actual prices do not exist for the separate services. Rather, an assessment has been made of the value of the research services provided versus the value of executing a trade. The percentage of commissions credited for research ranged from 0% to 100%, depending on the firm. Those with no research credits provide trading services only.

As used in this report, "directed research" also includes research services provided to SWIB under contractual relationships between the broker and the research provider. In general, these research services are "exclusive" or "directed" in that they are only available through one or, at most, a handful of brokers. In other words, SWIB's traders must trade directly with a specific broker or brokers in order to obtain these research products. Typically, information on the financial arrangement between the broker and the vendor is not available to SWIB.

"Third Party" Research Credits. "Third party" or "non-exclusive" soft dollar research credits are provided by brokers who agree to designate a negotiated percentage of their commission to provide eligible independent research products to SWIB. The defining characteristic of this category is that the

service is not a product of the brokerage firm and that no exclusive contractual relationship exists between the broker and research vendor. In 1999, standing arrangements existed with five equity brokers for a broad range of research products. A total of approximately \$781,800 million in credits was earned on stock transactions in this manner. This amount represents a decrease of 36% from the prior year, reflecting our plan to reduce reliance on this revenue source.

Public Bonds

As previously noted, the public bond area has research credit arrangements somewhat comparable to that found in the stock market. Table II presents the list of brokerage firms which received bond concessions in 1999 from SWIB's purchase of new bond issues. In total, brokers received \$310,000 in selling concessions. As with stock commissions, the value of directed research received from these concessions is not available independent of the cost of the transaction. Therefore, SWIB investment staff have made an assessment of the value of the research received versus the value of that broker's participation in the issue of new bonds. Based on these assessments, SWIB received directed research with an estimated value of approximately \$179,900. Third-party research credits, which are available independent of the cost of the transaction, totaled \$22,500.

Soft Dollar Expenditures – Calendar Year 1999

Expenditures from third-party soft dollar credits in 1999 totaled \$1.0 million. These expenditures fell into the following categories:

Research Service	Amount	Percent
Electronic Data Services/Equipment	\$681,644	66%
Investment Publications	177,204	17%
Professional Services	67,420	7%
Research Conference Registrations	65,713	6%
Institutional Memberships	22,653	2%
Books and Miscellaneous Items	12,231	1%
Total	<u>\$1,026,866</u>	<u>100%</u>

Electronic data services comprised 66% of the total. Included in this category are on-line services which provide current market data and prices to the securities analysts and traders, on-line performance monitoring services and electronic information and news retrieval. Also included in this figure are computer software and hardware purchases for equipment needed to receive and distribute research and information services to investment staff within the agency.

Investment publications, totaling 17%, include printed investment materials and periodicals ranging from daily newspapers to highly specialized financial analyses and reports. The bulk of the services received in this category can be attributed to specialty trade publications which provide economic forecasting, company research, and credit analysis for fixed income investing.

Professional services included research services for social responsibility issues as well as organizational design and cost measurement studies which specialized in public pension fund analysis.

The category of institutional memberships includes payments for SWIB's participation in organizations such as the Association for Investment Management and Research and the Security Traders Association.

SEC rules allow use of third-party soft dollar credits for registration fees at professional conferences. Travel and other expenses are not allowed. Conferences funded in this manner provide training opportunities in industry and company analysis, investment analysis tools and techniques and portfolio and asset allocation strategies.

The category of books includes a wide range of financial and legal reference materials and textbooks.

Investment Board Procedures Governing the Use of Soft Dollar Credits

The primary policy concern about the generation and use of soft dollar research credits is that dependence upon these credits to pay for services will lead to choosing brokers offering the credits rather than choosing the broker who can provide the best execution of the trade. SWIB's trading philosophy requires that each trade is to be performed with the broker that provides "best execution." If this requirement can be met with any number of brokerage firms, the trade may be executed with a broker that provides beneficial research services to SWIB, such as a soft dollar firm.

As an additional form of oversight of soft dollar credit arrangements, the Investment Board has adopted procedures to limit and monitor their use. These procedures take into account what is considered sustainable soft dollar business in years with normal trading activity. In particular, the Board has determined that commissions which generate "exclusive" and "non-exclusive" or third-party soft dollar credits, on an agency-wide basis, should not exceed 12% of total budgeted commissions. In 1999, soft dollar commissions were below this target, constituting approximately 7% of total commissions.

SWIB's internal policy also requires that a reserve equal to at least six months of budgeted expenditures for third-party services be maintained. The agency's balances with soft dollar brokers as of December 31, 1999 exceeds the six month requirement. This reserve is expected to decrease in the ensuing years as part of SWIB's plan to reduce reliance on soft dollars.

The agency's ability to generate soft dollars has diminished in three ways:

1. Since June 1994, SWIB has reduced the size of our actively managed large company stock portfolios from \$7.0 billion to \$2.3 billion. This additional emphasis on passive management will limit, to a greater degree, the Board's future ability to generate soft dollars, as overall trading activity in the most liquid stocks is anticipated to decrease correspondingly.
2. The fixed income industry has been moving away from providing soft dollar credits. In addition, SWIB has been less active in the types of bond transactions which typically

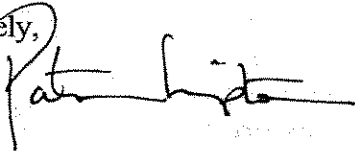
Senator Brian Burke
Representative John Gard
January 31, 2000
Page 6

generate soft dollar credits. SWIB, therefore, cannot rely on this area for producing soft dollars with any regularity or significant volume in the future.

3. As mentioned previously in this report, a number of professional groups and regulatory agencies have been reviewing soft dollar practices in the investment industry. There is a strong possibility that brokers will offer fewer soft dollar trading arrangements in the future, making this an unpredictable funding source for investment research services.

I hope you will find this information responsive to the statutory reporting requirements. Please feel free to contact me with any questions you might have about this report or other Investment Board matters.

Sincerely,



Patricia Lipton
Executive Director

cc: Members, Joint Committee on Finance
Robert Lang, Legislative Fiscal Bureau

Attachments

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TABLE I
STATE OF WISCONSIN INVESTMENT BOARD
 1999 Commissions and Research Credits for Domestic Equities and Non-Traditional Portfolios

Broker	Research Credits Earned		
	Total Commissions*	Directed Research**	Third Party
A & M Securities	\$ 33,000	33,000	\$ -
A G Edwards, Inc.	12,552	12,552	-
ABN Amro	330,145	203,000	-
Adams Harkness & Hill	72,721	72,721	-
Allied Research Services	24,552	24,552	-
Baird, R.W.	467,078	200,000	-
Bankers Trust - Alex Brown	216,487	-	-
Bear Stearns Securities Corp.	503,248	400,000	-
Bernstein (Sanford C.) & Co.	203,564	208,400	-
Bioscience Securities	90,604	90,604	-
Blaylock & Partners	49,880	24,940	-
BOE Securities	56,372	56,372	-
Bradford (J.C.) & Co.	283,794	82,350	-
Bridge Trading Co.	416,586	411,149	-
Brunswick Securities	24,088	12,044	-
Buckingham Research	35,245	25,000	-
Cantor Fitzgerald & Co. Inc.	669,103	-	23,226
Chapman Co. (The)	103,040	51,520	-
CIBC World Markets	46,031	200,000	-
Citation Group/Merrill Lynch	90,016	90,016	90,016
Cleary, Gull, Reiland, McDevitt & Co.	231,018	25,000	-
Cowen & Co.	430,095	200,000	-
Credit Lyonnais Securities, Inc.	2,917	1,459	-
Credit Suisse First Boston Corp.	3,906	-	-
D.E. Shaw	6,075	-	-
Daeyu Securities Co LTD	17,079	-	-
Dain Raushcer Wessels	354,153	200,000	-
Deutsche Bank Securities	581,540	200,000	-
Donaldson Lufkin & Jenrette Securities	1,146,323	414,205	-
Eberstadt Flemming, Inc.	600	-	-
FAC Equities	20,280	-	-
Fahnestock & Co.	16,791	16,794	-
First Boston Corp.	611,237	400,000	-
First Honolulu Securities	116,440	116,440	-
First Union Securities, Inc.	153,488	-	-
Fox-Pitt Kelton, Inc.	12,900	-	-
Freimark Blair & Co., Inc.	76,432	76,432	-
Fundamental Research	10,000	-	-
Furman, Selz, Mager, Deitz & Birney, Inc.	235,391	75,000	-
George K. Baum, Inc.	18,794	18,794	-
Gerard Klauer Mattison	14,013	14,013	-
Goldman, Sachs & Co.	1,392,219	1,092,458	-
GS2 Secs Inc.	156,564	-	-
Hambrecht & Quist, Inc.	366,433	200,000	-
HCM Investments Inc.	114,931	57,466	-
Herzog, Heine, Geduld & Co.	214,335	-	-
Howard Weil Labouiss	12,000	6,000	-
Instinet Corp.	778,868	-	-
Investment Technologies Group	641,866	1,709	-
ISI Group, Inc.	43,356	43,356	-
J.P. Morgan	510,916	400,000	-
Jackson Partners	63,171	63,171	-
Jefferies & Co., Inc.	654,861	200,000	176,021

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State of WI Investment Bd

TABLE I
STATE OF WISCONSIN INVESTMENT BOARD
1999 Commissions and Research Credits for Domestic Equities and Non-Traditional Portfolios

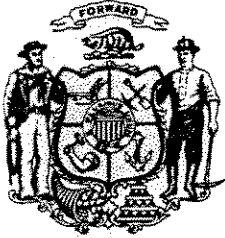
Broker	Total Commissions*	Directed Research**	Third Party
Jones & Associates, Inc.	890,028	-	-
Knight Tri-Mark Group	580,961	-	-
Legg Mason Wood Walker, Inc.	226,174	200,000	-
Lehman Brothers, Inc.	825,473	212,600	153,042
McDonald & Company	65,984	-	-
Merrill Lynch	1,337,250	1,025,569	-
Midwest Research Maxus	98,721	75,000	-
Morgan Keegan	7,188	-	-
Morgan Stanley Dean Witter	977,534	961,661	-
Nations Bank	651,473	200,000	-
Needham & Co., Inc.	48,250	25,000	-
Neuberger & Berman	13,764	-	-
Omni Financial Group	27,600	27,600	-
O'Neil (William) & Co.	153,589	153,589	-
Oppenheimer & Co., Inc.	466,767	-	-
Pacific American Securities	592,395	-	339,477
Pacific Crest	14,031	-	-
Paine Webber, Inc.	581,286	400,000	-
Panky & Associates	39,148	-	-
Piper Jaffray & Hoppwood	452,221	75,000	-
Prudential Securities, Inc.	224,524	200,000	-
Punk, Ziegel & Knoell	20,100	-	-
Raymond James & Associates	208,936	75,000	-
Robert Brandt & Co.	164,002	-	-
Robert Fleming, Inc.	21,142	10,571	-
Robertson, Stephens & Co.	278,119	75,000	-
Robinson Humphrey Company, Inc.	51,095	51,095	-
Salomon Smith Barney, Inc.	687,847	687,847	-
Schroder, Inc. (Wertheim)	165,169	165,169	-
Schwab Charles & Co.	107,562	-	-
Soundview Financial Group	164,937	75,000	-
Spear Leeds & Kellog	36,726	-	-
Thompson Bankwatch/Paine Webber	9,200	9,200	-
Tom Weisel	78,144	25,000	-
Utendahl Capital Partners	70,040	35,114	-
Vector Securities International, Inc.	88,768	-	-
Volpe Brown Whelan	11,088	-	-
Warburg Dillon Read	520,582	200,000	-
Weeden & Co.	346,170	27,413	-
Wessels Arnold and Henderson	3,738	-	-
Westminster Research Association	20,400	20,400	-
William Blair & Co.	200,209	75,000	-
Williams Capital Group	66,075	33,038	-
Total	\$ 24,331,505	\$11,141,380	\$ 781,782

* Excludes fees paid for syndicate trades (new stock offerings.)

** Credits earned represents SWIB investment staff's estimation of the value of the research received, when the actual values are not available.

TABLE II
STATE OF WISCONSIN INVESTMENT BOARD
1999 Selling Concessions and Research Credits for Public Fixed Income

Broker	Research Credits Earned		
	Total Selling Concession	Directed Research	Third- Party
ABN Amro	\$ 5,400	\$ 2,700	\$ -
Banc of America	7,628	3,814	-
Banc One Capital Markets	4,366	2,183	-
Bank of New York Capital Markets	2,813	1,407	-
Bear Stearns	22,500	11,250	-
Chase Securities, Inc.	2,025	1,013	-
Deutsche Banc Alex Brown	1,485	743	-
Goldman, Sachs & Co.	64,350	32,175	-
Josephthal (Micas)	5,000	5,000	-
Merrill Lynch	72,368	36,184	-
Morgan Stanley	62,400	31,200	-
Paine Webber, Inc.	11,000	11,000	-
Salomon Smith Barney, Inc.	7,223	3,612	-
Standard & Poors	33,750	33,750	22,500
Williams Capital Group	7,695	3,848	-
TOTAL	\$ 310,003	\$ 179,877	\$ 22,500



State of Wisconsin Investment Board

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February 11, 2000

Senator Brian Burke, Co-Chair
Joint Committee on Finance
PO Box 7882
Madison, WI 53708-7882

Representative John Gard, Co-Chair
Joint Committee on Finance
PO Box 8952
Madison, WI 53707-8952

Senator Gary George, Co-Chair
Joint Committee on Audit
PO Box 7882
Madison, WI 53708-7882

Representative Carol Kelso, Co-Chair
Joint Committee on Audit
PO Box 8952
Madison, WI 53707-8952

Mr. Donald Schneider, Senate Chief Clerk
Mr. Charles Sanders, Assembly Chief Clerk

Members of the Legislature:

Attached is the Investment Board's annual report to the Legislature regarding investment goals, long-term strategies and performance, as provided under ss. 25.17(14g) and (14m). This year we have combined two separate reports to make it easier to understand the relationship between our strategies and performance.

- The 1999 gain for the Fixed (balanced) Retirement Fund was 15.7% compared to 14.2% for the benchmark used to measure investment performance. The Fund is also ahead of its five-year and ten-year benchmarks. At year-end, accumulated gains in the transaction amortization account (TAA) reached \$17.4 billion, a record in terms of dollar amount and as a percentage of Fixed Fund assets.
- The Variable Retirement Fund had its best return since 1985, gaining 27.8% compared to 23.3% for its benchmark. The Variable Fund is also ahead of its five-year benchmark.
- The 4.9% return for State Investment Fund surpassed a 4.8% for its benchmark and placed the fund fifth out of 214 government funds in the IBC/Donoghue Government Index.

As part of an extensive annual review of our strategy, we gave particular attention to the Legislative Audit Bureau's October 1999 management review of SWIB. We also considered the potential effects of 1999 Wisconsin Act 11, which could make significant changes to pension benefits and financing, depending upon future action by the courts. Our review indicated that the trust funds are generally well positioned. However, we are implementing several strategy improvements that are discussed in the report.

Please contact me if you have any questions about this report or other matters.

Sincerely,

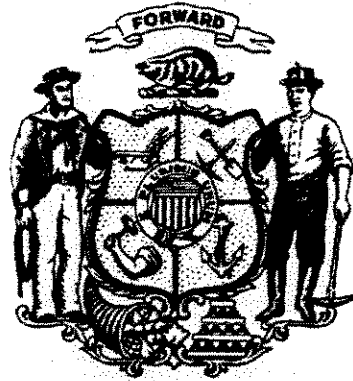
Patricia Lipton
Executive Director

cc: Members, Joint Committee on Audit
Members, Joint Committee on Finance

Janice Mueller, Legislative Audit Bureau
Robert Lang, Legislative Fiscal Bureau

State of Wisconsin Investment Board

Investment Goals, Strategies and Performance



January 2000

State of Wisconsin Investment Board
Investment Goals, Strategies and Performance

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Summary

Total assets managed by SWIB grew to \$69.2 billion in 1999, an increase of \$8.6 billion in 12 months.

Fixed Retirement Fund

- The 15.7% investment return for the Fixed Fund exceeded the 8.0% target needed to finance pension benefits and the 14.2% return for the investment benchmark. At year-end, accumulated gains in the transaction amortization account (TAA) reached \$17.4 billion, a record both in dollar amount and as a percentage of Fixed Fund assets. The Fixed Fund also outperformed its five-year and ten-year investment benchmarks.
- Preliminary data indicates that the 15.7% gain for the Fixed Fund trailed the 16.4% median return for 37 public funds with assets over \$1.0 billion in 1999. The median five-year return for this peer group was 17.7% compared to 17.0% for the Fixed Fund. These returns are not reported on a risk-adjusted basis. Some of our peers likely had a greater allocation to large company domestic stocks, the best performing but most volatile major asset of recent years.
- The Fixed Fund is a balanced fund with diversified investments in stocks, bonds, real estate and other assets. SWIB conducts an annual review of the Fund's asset allocation and investment strategies. With the assistance of a new consultant, we conducted extensive modeling and testing a variety of asset mixes under different economic conditions. We also had discussions with several other large public pension funds about their strategies.
- Our annual strategy review indicated that the Fixed Fund is generally well positioned for the long-term given its liabilities and its unique relationship to the Variable Fund. We are implementing several strategy changes that should enhance the long-term performance of the Fund within an appropriate level of risk:
 - ✓ We are: (1) increasing the allocation to index funds from 33% to approximately 38% of the Fund's assets; (2) increasing the allocation target for international stocks from 15% to 18% of the Fund assets; and (3) restructuring our domestic bond portfolios to more closely match the composition of the market.
 - ✓ We have carefully reviewed the role of small company stocks in our strategy. In recent years, small company stocks under-performed other sectors of the US stock market. However, in 1999 our actively managed small company stock portfolio returned 49.2%, compared to 21.3% for its benchmark and 21% for the S&P 500. We have shifted nearly 25% of the portfolio from active management to an index fund to diversify our small company exposure and reduce volatility.
 - ✓ Recent gains in small company stock valuations result in lower expectations for this asset class. We plan to reduce our small company allocation from 2.3 times market weight to about 1.5 times market weight. We are also reducing the size of our mid cap stock portfolio to a level near market weight.
 - ✓ If the courts uphold recently enacted changes to state pension law (Act 11), Fixed Fund investment gains and losses will be recognized more quickly. The reopening of the Variable Fund could affect Fixed Fund asset levels and strategy. We have considered

the potential effects of Act 11 and determined that they should not require changes in investment strategy in the near term.

- Our total cost to manage the Fixed Fund (14 cents per \$100 managed) equaled the median cost for a peer group of 11 other large public pension funds in 1998. Our costs were less than the typical costs for funds of similar size and asset mix (17.2 cents per \$100 managed).

Variable Retirement Fund

- The 27.8% return for Variable Fund was its best return since 1985 and surpassed a 23.3% return for its benchmark. The Fund is also ahead of its five-year benchmark. The Variable Fund is invested in domestic and international stocks.
- Approximately 42% of the assets of the Variable Fund are managed in index funds. We expect this share to grow to approximately 47% in 2000. We are currently considering whether it would be beneficial to further increase the use of passive strategies for the Variable Fund.

State Investment Fund

- The 4.9% gain for the State Investment Fund exceeded a 4.8% return for its benchmark. SIF's return ranked fifth out of 214 government funds in the IBC/Donoghue Government Index and 192nd out of 950 money market funds in the IBC/Donoghue All Taxable Money Market Index. The SIF is a cash management fund that serves the state, the Fixed and Variable Retirement Funds and local governments.
- In March 1995, SWIB neutralized 12 derivative investments in SIF. This action resulted in a \$95 million loss that is being paid with interest over a ten-year period. Beginning in April 2000, the loss drops significantly for the remaining five years. This will have a positive impact on the net rate of return.

Risk Management

- We use a number of different tools to measure and manage risk in our investment portfolios. Risk levels at year-end were appropriate for funds of this size and investment time horizon.

Wisconsin Investments

- As of June 30, 1999 investments in Wisconsin-headquartered companies totaled \$2.3 billion. An additional \$6.4 billion was invested in companies with 20+ Wisconsin employees. Our goal is to invest between \$2.2 billion and \$3.9 billion in-state over five years, consistent with our fiduciary responsibility.
- SWIB has earmarked \$50 million of venture capital funds for investment in biotechnology and other high technology start-ups in Wisconsin and the Midwest. An initial survey of potential venture capital funds has been completed. A request for proposals (RFP) has been distributed with responses due by the end of February.

State of Wisconsin Investment Board Investment Goals, Strategies and Performance

Section 25.17 (14g) of the Statutes provides that the State of Wisconsin Investment Board (SWIB) submit an annual report to the Legislature regarding the Board's investment goals and long-term strategies, noting any changes from the previous year. Section 25.17(14m) of the Statutes provides that SWIB submit an annual report on the Board's investment performance (Appendix A). This year we have combined the two reports to make it easier to understand the relationship between our strategies and performance.

In October 1999, the Legislative Audit Bureau issued a management audit that reviewed SWIB's investment strategies and performance. We have taken a number of additional steps to review our strategies, including work with outside consultants and discussions with several other large public pension funds. We have also considered the potential impact of 1999 Wisconsin Act 11, which includes significant changes to the financing and benefit structure of the Wisconsin Retirement System.

Background

The Board is responsible for managing the assets of the Wisconsin Retirement System (WRS), the State Investment Fund (SIF) and several smaller trust funds. As of December 31, 1999, assets under management totaled \$69.2 billion. Total assets increased by \$8.6 billion over the last 12 months (Appendix B).

Funds Managed by SWIB December 31, 1999		
Fund	\$ in Millions	% of Total
Wisconsin Retirement System (WRS)	\$64,238	93%
<i>Fixed Trust Fund</i>	55,901	81%
<i>Variable Trust Fund</i>	8,337	12%
State Investment Fund (SIF)*	4,360	6%
Other Funds	632	1%
State Life Insurance Fund	65	
Local Property Insurance Fund	26	
Historical Society Endowment Fund	13	
Patients Compensation Fund	523	
Tuition Trust Fund (EdVest)	5	
TOTAL	\$69,230	100%
*Excludes WRS Trust Funds cash balances		

Our mission is to ensure that funds held in trust by the State are prudently managed. This is accomplished by providing optimal investment returns consistent with the purpose and risk profile of each trust.

Fixed Retirement Trust Fund

With assets of nearly \$56 billion, the Fixed (or balanced) Fund is the largest trust under SWIB's management. Over 456,000 current or former employees of state or local government have at least half of their pension account invested in this Fund. The Fixed Fund invests in a broadly diversified mix of assets, including stocks, bonds, business loans, real estate and other holdings. Within each asset class, investments are further diversified by portfolio.

Successful investment returns reduce the amount of contribution employers (taxpayers) or employees must pay into the WRS and/or allow for improved benefit payments. Investment returns ultimately provide for about 80% of the cost of benefits WRS members receive.

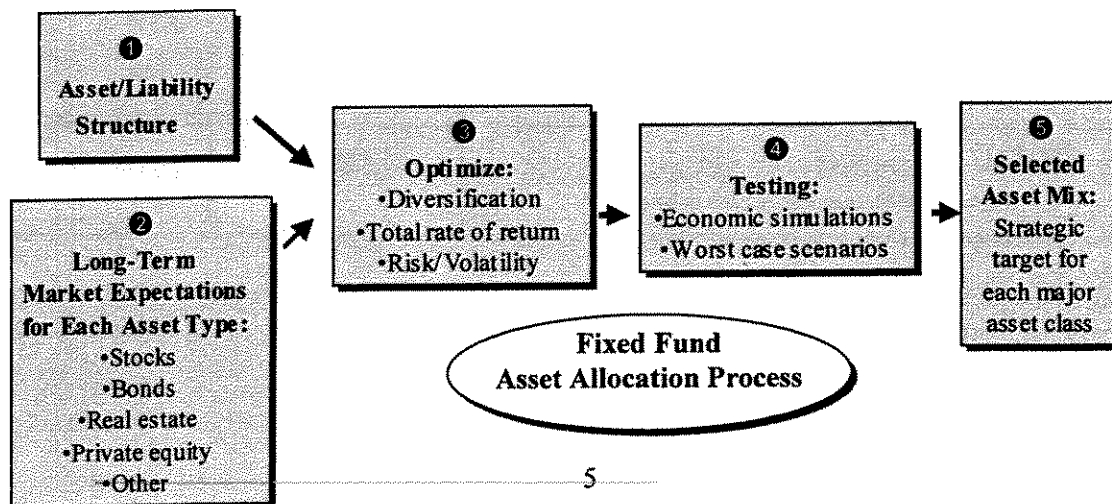
Investment Goals

The basic investment objective for the Fixed Fund is to achieve an 8.0% annual average rate of return over the long-term. An 8.0% return is the minimum investment requirement set by the WRS actuary to accumulate the funds needed to pay projected benefits over time. An 8.0% return is projected to be 3.2% in excess of the annual wage growth. It is an estimate of what is needed to ensure that a person who retires will receive a benefit that will stay constant in real terms.

A second goal is to exceed an investment rate of return ("benchmark") established by the Board of Trustees. The benchmark for the Fixed Fund is a weighted blend of indices that measure the performance of the broader markets for stocks, bonds and other assets. Comparisons are also made to the performance achieved by privately managed funds with characteristics similar to SWIB's portfolios. Most SWIB portfolios have a benchmark that reflects a particular market focus.

Investment Strategy

The investment strategy for the Fixed Fund has a long-term focus, in keeping with the extended time horizon of the Fund's obligations. SWIB conducts a formal strategy and asset allocation exercise annually, leading to policy and funding recommendations at the beginning of each calendar year. This year a new consultant (Strategic Investment Solutions) assisted SWIB in projecting returns for each asset class and selecting the mix of assets that should provide the best balance of risk and return over the long-term. Asset allocation decisions are based on a formal process illustrated in the following diagram:



① **Asset/Liability Structure.** Actuarial assumptions adopted by the Employee Trust Funds Board are factored into the asset allocation model. Cash flow projections show that benefit payments presently exceed contributions to the WRS.

② **Market Expectations.** SWIB's investment staff and asset allocation consultant develop long-term market return expectations for each asset class (stocks, bonds, real estate and others). We consider past experience, forecasts by key investment strategists and the judgement of our professional staff.

③ **Optimize.** Expected returns for each asset class are modeled together to create "optimal portfolios". In addition to optimizing total rate of return, we evaluate the volatility of the expected return (risk) and the impact on the funded status of the WRS benefit plan.

④ **Testing.** Optimal portfolios are "stress-tested" under a variety of potential economic scenarios, including the possibility that all markets decrease sharply at the same time ("worst case scenario"). This helps to identify an asset mix that is the best long-term performer under different economic conditions.

⑤ **Selected Asset Mix.** The Board of Trustees approves: (1) *asset classes* in which the Fixed Fund invests; (2) *policy ranges* that set the minimum and maximum share of the Fund that may be allocated to each asset class; and (3) *strategic targets* that set a specific allocation target within the policy range. The Board annually reviews asset allocation targets based on the work done in steps ① to ④.

Targets are achieved, in part, through the allocation of net cash flow available after considering investment earnings and contributions/withdrawals to the WRS. Net cash flow is expected to decline from the current \$1.0 billion annually to \$800 million over the next several years.

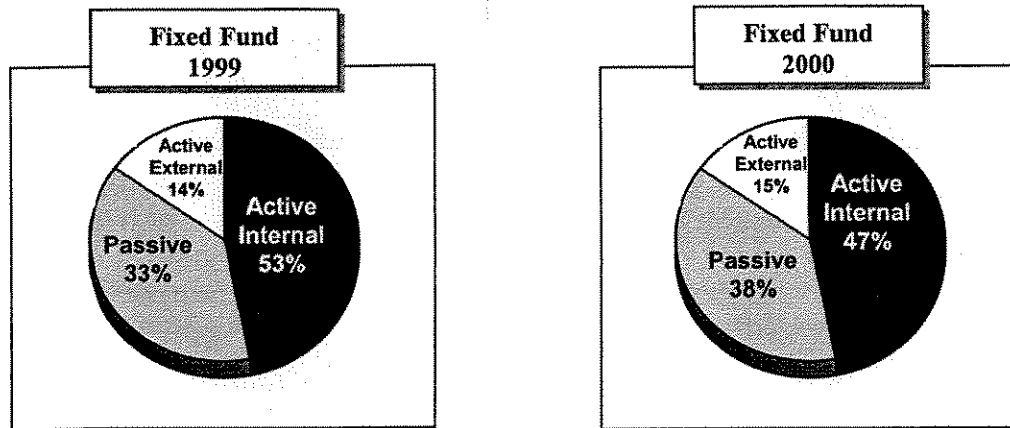
To adhere to strategic targets established in this process, a rebalancing discipline is used. When market activities cause any given asset class to move outside an acceptable range around the targets, assets are sold and the cash reinvested in another asset class to bring the fund back to its policy targets.

Fixed Trust Fund Asset Allocation					
Asset Class	Policy Range	1998	1999		2000
		Actual 12/31/98	Strategic Target	Actual 12/31/99	Strategic Target
Stocks	40-65%	<u>53%</u>	<u>55%</u>	<u>60%</u>	<u>57%</u>
Domestic		40%	40%	43%	39%
International		13%	15%	17%	18%
Fixed Income	30-50%	<u>36%</u>	<u>35%</u>	<u>32%</u>	<u>34%</u>
Domestic		31%	30%	25%	27%
International		5%	5%	6%	7%
Real Estate	0-10%	3%	5%	3%	4%
Alternative	0-10%	5%	5%	4%	5%
Cash	0-20%	3%	0%	1%	0%
TOTAL		100%	100%	100%	100%

The following table provides a breakdown of the current categories of investments, by portfolio, within each asset class. Appendix C provides a description of each category.

Fixed Trust Fund Holdings By Portfolio				
	12/31/98		12/31/99	
	\$ in Millions	% of Total	\$ in Millions	% of Total
<u>Equities</u>				
Domestic				
<i>Active Portfolios</i>	\$7,556	15%	\$8,927	16%
<i>Quantitative Portfolios</i>	837	2%	1,042	2%
<i>Passive Index Funds</i>	10,185	20%	13,791	25%
International				
<i>Active Portfolios</i>	5,595	12%	8,079	14%
<i>Passive Index Funds</i>	712	2%	626	1%
Leveraged Buy-Outs	959	2%	1,148	2%
Emerging Markets	394	1%	642	1%
Venture Capital	100	—	186	—
<i>Total Equities</i>	<u>\$26,338</u>	<u>54%</u>	<u>\$34,442</u>	<u>62%</u>
<u>Fixed Income</u>				
Public Bonds				
<i>Active Portfolios</i>	7,271	15%	6,591	12%
<i>Passive Index Fund</i>	3,870	8%	3,838	7%
Private Placements	3,105	6%	3,172	6%
Global Bonds				
<i>Active Portfolios</i>	3,371	7%	3,205	6%
<i>Passive Index Funds</i>	—	—	222	0%
Real Estate Mortgages	—	—	352	1%
Emerging Markets	109	—	140	—
<i>Total Fixed Income</i>	<u>\$17,726</u>	<u>36%</u>	<u>\$17,519</u>	<u>32%</u>
Real Estate	\$1,869	4%	\$1,907	3%
Non Traditional	\$746	2%	\$1,304	2%
Cash (managed in SIF)	\$2,081	4%	\$729	1%
TOTAL	\$48,761	100%	\$55,901	100%

SWIB uses both active and passive strategies in managing the assets of the Fixed Fund. At year-end, our staff actively managed 53% of the assets, 13% was actively managed by outside advisors and 33% was passively managed in funds that earned the rate of return for that market. The mix of active and passive management varies by asset class, depending upon market efficiency and the availability of passive options. We expect the passive share to increase to about 38% of Fixed Fund assets.



Asset Allocation and Strategy Review

- Over the last several months, we conducted an extensive review of the Fixed Fund's asset allocation and strategies. With the help of outside experts, we examined and modeled a variety of asset mixes, including options that would either increase or decrease the allocation to domestic stocks and other equities, the largest Fixed Fund asset class. This work indicated that that Fixed Fund returns would benefit from a small increase in equity exposure.
- This work also suggested that valuations of international markets make them more attractive than the US market. For that reason, we are increasing the target for international equities from 15% to 18%. We have reduced the targets for domestic stocks, real estate and fixed income by 1% each.
- If the courts uphold recently enacted changes to state pension law (Act 11), Fixed Fund investment gains and losses will be recognized more quickly in the future. This could include an immediate recognition of \$4 billion in accumulated gains. Over the next five years, the transaction amortization account could be phased out and a market recognition account implemented. In addition, the reopening of the Variable Fund could have an impact on Fixed Fund asset levels and strategy.
- It is likely to be some time before legal issues are resolved. However, we have considered the potential effects of Act 11 on cash flow and determined that they should not require changes in asset allocation or strategy in the near term. We are working with the Department of Employee Trust Funds to monitor future developments.
- Asset allocation targets have been modified to create an "alternative investments" category. This will make it easier to identify the portion of the Fund where added return is sought through added risk. This category includes venture capital and leverage buyout investments formerly shown under "domestic equities" as well as "non traditional" investments previously shown as a separate category. The target for these two areas sums to the 5% target for alternative investments.
- Within each asset class, we are implementing a number of strategy changes at the portfolio level. These changes are discussed under "Portfolio Highlights".

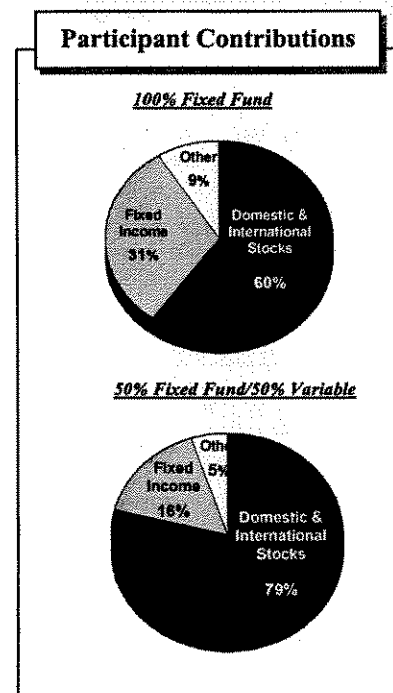
Comparison to Other Large Public Pension Funds

As part of a management review of SWIB, the Legislative Audit Bureau surveyed 11 other large public pension funds in 1999. This survey found that, on average, other public funds allocated a larger percentage of their assets to domestic stocks than is the case for the Fixed Fund and that they had achieved higher rates of return as of June 30, 1998.

Our response to the audit discussed our process and the reasons for our approach. As a follow-up, we had discussions with four of the funds surveyed by the LAB: the California Public Employees Retirement System, New Jersey Division of Investments, Florida Board of Administration and New York State Teachers Fund. We discussed the asset and liability structure of each fund, investment objectives, and legal or other factors that constrain their strategies.

- None of the returns for the other surveyed states were reported on a risk-adjusted basis. Therefore, it is difficult to compare the risk that funds with the highest rates of return took to obtain those gains.
- Like the Fixed Fund, asset allocations for pension funds in other states reflect legal restrictions and other constraints that are specific to each state. For example, one fund is not permitted to invest in real estate and another has a limit on international assets. Three funds have no limit on their use of outside management, while one state is precluded from using outside management. (SWIB's Fixed Fund is limited to 15%.) Three state funds set their own budget and one is approved by the Legislature. (SWIB's budget is now set as a percentage of assets under management.)
- Some states have wider latitude in their asset allocation targets than does the Fixed Fund, or they have chosen to exceed their own targets by significant amounts. For example, the fund with the largest investment return in the LAB survey targets 55% of its assets to domestic stocks, but its actual allocation has risen to 65%. SWIB has followed a discipline of staying closer to its targets. We sell assets that have run above targets and buy assets that lag. We believe that this helps to contain the overall fund risk within pre-established bounds and enforces a "buy low-sell high" discipline. We examined our rebalancing procedures last fall and confirmed that the Fixed Fund has incurred less risk over time than had we not followed this practice.
- The Fixed Fund is one of very few state pension funds with an automatic dividend process directly linked to investment performance. None of the surveyed state funds have this feature. For the last 15 years, Fixed Fund dividends have increased benefits to retirees at more than double the rate of inflation. This tends to create a "dividend expectation" that we have considered in our strategy.
- We anticipate that the Fixed Fund's allocation to domestic stocks will continue to be lower than for a number of the funds surveyed by LAB. However, we have concluded that the Fixed Fund allocation is appropriate given the nature of fund liabilities and market expectations. Our focus is risk-adjusted returns.

Our decision is also affected by the fact that Wisconsin is the only state among those surveyed that offers Fixed and Variable Fund options. About 10% of WRS participants have 50% of their contributions invested in the Variable Trust Fund. Although the Variable Fund has been closed to new entrants since 1981, Act 11 would reopen the Fund effective January 1, 2001. Currently, participants in the Variable Fund have approximately 79% of their total Fixed and Variable contributions invested in stocks. This is higher than the average 63% for the 11 funds in the LAB survey.



Fixed Fund Performance

The investment strategy for the Fixed Fund has a long-term focus. Therefore, the success of its strategies is also evaluated on a long-term basis. The following table compares the performance of the Fixed Fund to its benchmarks as of December 31, 1999.

Fixed Retirement Trust Fund Performance			
<i>Annualized Returns For Periods Ending December 31, 1999</i>			
	<u>One Year</u>	<u>Five Years</u>	<u>Ten Years</u>
Fixed Fund Return	15.7%	17.0%	12.5%
Investment Benchmark	14.2	16.8	12.0
Actuarial Benchmark	8.0	8.0	8.0

- The Fixed Fund outperformed the actuarial benchmark and its investment benchmark for all three time periods on a total return basis.
- Since 1990, the returns for the Fixed Fund have exceeded the five-year investment benchmark in 15 of 20 reporting periods at the end of the fiscal year and calendar year. The ten-year investment benchmark has been exceeded in 16 of 20 reporting periods.
- On a risk-adjusted basis, the Fixed Fund return matched the five-year benchmark and exceeded the ten-year benchmark. Risk is measured by the amount of fluctuation in returns (volatility). Less volatility helps to stabilize employer contributions to the Retirement System and benefits paid to retirees.
- Preliminary data indicates that the 15.7% gain for the Fixed Fund trailed the 16.4% median return for 37 public funds with assets over \$1.0 billion. The five-year return for this peer group was 17.7% compared to 17.0% for the Fixed Fund. The difference likely reflects a greater allocation to domestic stocks by some of our peers, the best performing but most volatile major asset class in recent years.¹ More complete comparative data should be available over the next several months.
- SWIB's total cost of 14 basis points to manage the Fixed Fund (14 cents per \$100 managed) equaled the median cost for a peer group of 11 public funds in 1998. Our costs were less than the typical costs for funds of similar size and asset mix (17.2 basis points).²

¹ Trust Universe Comparison Service (TUCS) data

² Cost Effectiveness Measurement, Inc. data

Portfolio Highlights

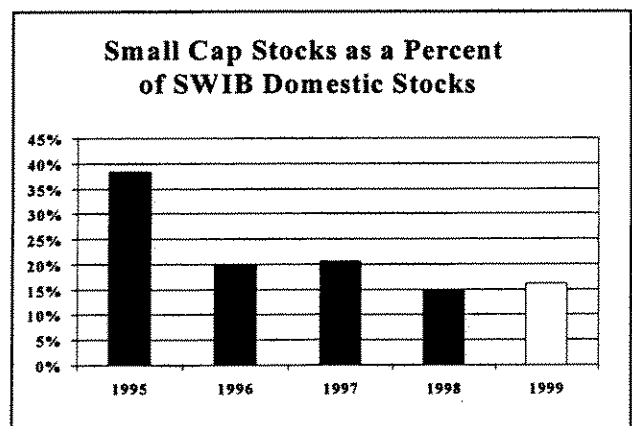
Equities

The following table compares our domestic stock portfolio allocations at year-end in 1998 and 1999.

Domestic Stock Portfolio Allocations <i>Fixed Trust Fund</i>				
	December 31, 1998		December 31, 1999	
	\$ in billions	Percent	\$ in billions	Percent
Large Cap Portfolios	\$11.7	63%	\$14.9	63%
Active	1.1		1.7	
Quantitative	0.8		1.0	
Passive: S&P 500 Index	9.8		12.2	
Mid Cap Portfolios	\$4.2	23%	\$5.1	21%
Active	3.8		4.4	
Passive: Mid Cap Index	.4		0.7	
Small Cap Portfolios	\$2.7	14%	\$3.8	16%
Active	2.7		2.9	
Passive: Small Cap Index	-0-		.9	
TOTAL	\$18.6	100%	\$23.8	100%

- SWIB's domestic stocks returned an aggregate 26.1% in 1999. This performance exceeded a 20.9% return for the Russell 3000, a broad indicator for the US stock market.
- Our internally managed *small company* ("small cap") portfolio returned 49.2% compared to a 21.3% return for the Russell 2000 in 1999. Stock selection and the technology emphasis of SWIB's portfolio were the major factors in the exceptional return. This portfolio is now also ahead of its benchmark for the five-year and ten-year periods ending December 31, 1999. We have carefully reviewed the role of small company stocks in our strategy. Work done by our consultant suggests that this sector should outperform large cap stocks, but with greater volatility. In 1999, nearly 25% of the portfolio was shifted from active management to an index fund to further diversify our small company exposure and reduce volatility.

Recent gains in small company stock valuations result in lower expectations for this asset class. Over the next year, we plan to reduce our small company exposure from 2.3 times market weight to about 1.5 times market weight. This will result in the shift of approximately \$1.0 billion from the active small cap portfolio to the large cap (S&P 500) index fund. Depending upon market developments, small company stocks will decrease from 16% of our US stock holdings to less than 12%.



- Our actively managed *large company* ("large cap") *stock portfolio* returned 27.4%, surpassing a 21.0% gain for the S&P 500, the leading market indicator for this sector. Returns from the large cap market continued to be narrow, with just 10 stocks accounting for 65% of the total return for the index in 1999.
- Our two externally managed *quantitative portfolios* returned 19.0% and 19.6%, respectively. Both trailed the 21.0% return for the S&P 500. Unlike the "fundamental analysis" process we emphasize for our internally managed portfolios, quantitative management uses proprietary computer models for evaluating particular stocks. Under the direction of the chief investment officer for public equities, we plan to establish the capacity to manage quantitative portfolios internally.
- Our *mid cap portfolio* gained 24.1% compared to 19.5% for its benchmark. Our mid cap portfolio is nearly double market weight in size and we are reducing the size of our actively managed portfolio by \$3.0 billion. Assets will be transferred to the S&P 500 and mid cap index funds. In late 1999, we closed the *target portfolio* due to the departure of the portfolio manager. That portfolio had a small to mid cap emphasis and was ahead of its one-year benchmark as of September 30, 1999.

Our international stock portfolios gained 34.1%, outperforming a 28.5% return for the benchmark as well as a 20.9% return for the broad US stock market. The timing of increased exposure in Japan and favorable stock selection helped SWIB's performance. International stocks are expected to be more volatile but to generate higher returns than US stocks, based on the relative valuations of the two markets. Accordingly, we are increasing our international stock allocation to 18% of Fixed Fund assets. This will be accomplished primarily by an increased allocation to an international stock index fund.

Investments in two externally managed emerging markets equity funds returned 62.8% in 1999, the best one-year return of all Fixed Fund portfolios. General improvement in emerging markets following the Asian economic crisis of 1998 as well as increased fund flows, declining interest rates helped returns.

The leveraged buy-out (LBO) investments returned 25.8% for the year, beating the 15.0% return for the benchmark. LBO investments are also ahead of five-year and ten-year benchmarks. Venture capital investments gained 34.8% for the year, more than doubling the 15.0% return for its benchmark. Venture capital lags the ten-year benchmark but is ahead of its benchmark over five years. An additional position authorized in the 1999-01 biennial budget is being allocated to our venture capital/LBO portfolios to strengthen support.

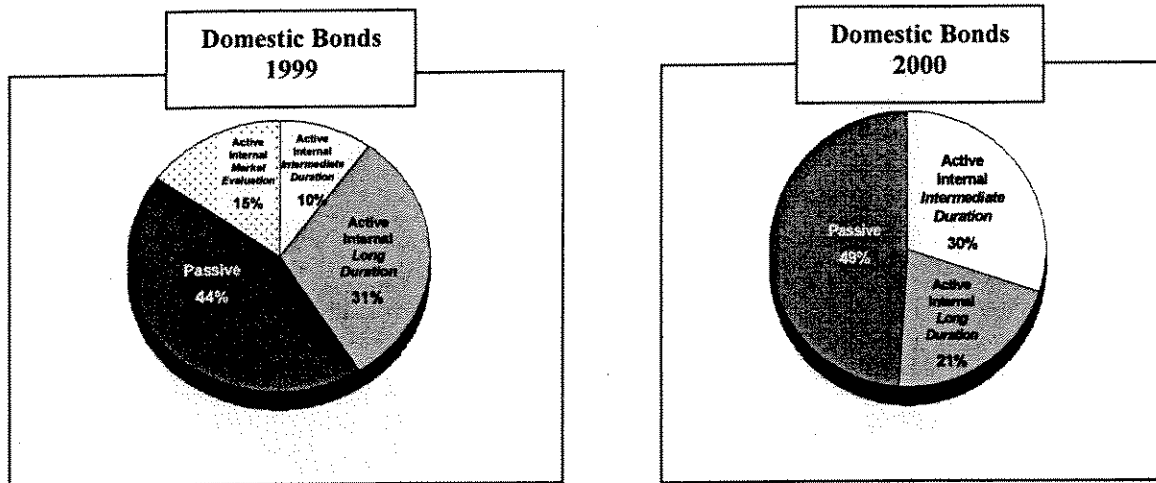
SWIB has earmarked \$50 million of venture capital funds for investment in biotechnology and other high technology start-ups in Wisconsin and the Midwest. An initial survey of potential venture capital funds has been completed. A request for proposals (RFP) has been distributed with responses due by the end of February.

Fixed Income

Bond market returns were among the worst on record, reflecting investor concerns about the outlook for inflation. The -1.6% return for SWIB's fixed income holdings lagged the -0.9% return for the aggregated fixed income benchmark. Because of the longer duration of our portfolio, SWIB typically trails market returns when interest rates are rising. As of December 31, 1999, SWIB's domestic bond portfolios had a combined five-year return of 8.6% compared to 8.2% for the benchmark, and a ten-year return of 8.6% compared to 8.1% for the benchmark.

We are restructuring our domestic bond portfolios by reducing the long duration *core portfolio* from 31% to 21% of domestic bond assets and by combining the *intermediate duration portfolio* and *market*

evaluation portfolio. This will increase the share of assets in intermediate duration bonds. The portion managed in index funds will increase from 44% to 49% of domestic bond holdings. These steps are being taken to bring our holdings more in alignment with the broader bond market.



The private placements portfolio surpassed its benchmarks for all three periods and had the best one-year performance among the domestic fixed income portfolios.

Global fixed income portfolios gained 2.0%, but trailed the benchmark return of 4.0%. Our internal global portfolio has only one staff. An additional position authorized in the 1999-01 biennial budget will provide an assistant portfolio manager to enhance performance. Our emerging markets portfolios gained 28.1% for the year, the best return among fixed income assets. This surpassed a 26.0% return for the benchmark. The portfolios are also ahead of their five-year and ten-year benchmarks.

In 1999, SWIB initiated a commercial real estate mortgage portfolio partnership. Under this program, Northwestern Mutual Life originates loans of \$50 million or greater and SWIB is offered the opportunity to participate, with review by our staff. This provides a cost-effective way to extend our resources. Although we do not yet have a full year of experience, returns on initial investments place the portfolio ahead of its benchmark. An initial commitment of \$500 million has been made to this program. We plan to expand the amount by up to an additional \$500 million beginning this year.

Real Estate

Real estate investments gained 8.3% compared to 11.9% for the benchmark. SWIB returns were affected by investments that will take time to mature and by a small allocation to real estate investment trusts (REITS) that lagged the broader real estate market. About 11% of SWIB's portfolio is in international markets that are not reflected in the benchmark. Our portfolio matched the 10.8% five-year return for the benchmark and its 7.1% return for the ten-year period was well ahead of the 4.4% benchmark return.

Non Traditional

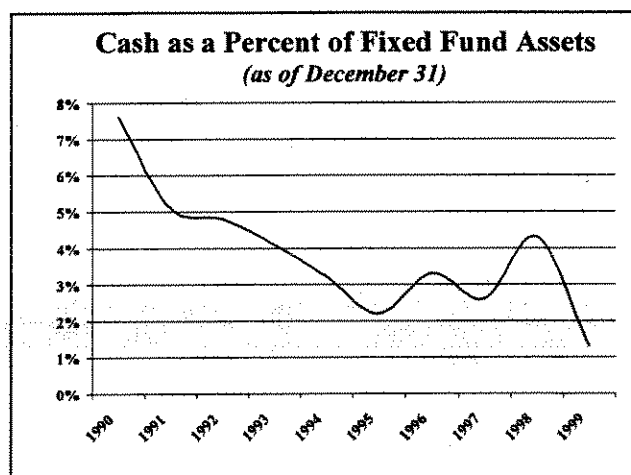
The *non traditional* portfolio may invest across asset classes in domestic or international markets. The portfolio returned 5.3% in 1999 compared to 27.3% for its benchmark. This reflected an unusually large cash position until late in the year due to the loss of both portfolio staff in 1998. Both positions have been filled and we are recruiting for a third position authorized in the 1999-01 biennial budget. The majority of the cash awaiting long-term investment is now in index funds that should generate greater rates of return.

The focus of this portfolio is being gradually turned to international private equity markets. Capital market projections continue to show a long-term premium for investment in these assets.

Non Traditional Portfolio Fixed Trust Fund				
Category	December 31, 1998		December 31, 1999	
	Market Value (in millions)	Percent Of Total	Market Value (in millions)	Percent of Total
US Stocks	\$90.3	7%	\$370.7	27%
Emerging Markets	135.8	10%	412.8	30%
Foreign Stocks	62.3	5%	316.3	23%
Fixed Income	354.8	27%	154.0	11%
Cash	588.0	43%	73.6	5%
Options	102.2	8%	50.7	4%
TOTAL	\$1,333.4	100%	\$1,378.1	100%

Cash

These investments returned 4.9% compared to 4.8% for the benchmark. Cash is managed in the State Investment Fund. At the end of 1998, 4.3% of Fixed Fund assets were in cash. This unusually large cash position was reduced to 1.3% by the end of 1999. That reflected changes in cash management for the non traditional portfolio and securitization of cash for private equity portfolios that is awaiting investment.



Risk Management

A central focus of Fixed Fund performance analysis is the review of the level of risk incurred in earning returns. We believe that our risk assessment activities are in the forefront of public pension funds. Industry standards and practices continue to evolve. Our measurement of investment risk for the Fixed Fund currently focuses on the following areas. There has been some increase in the levels of risk associated with exposure to international currency areas since our last report to the Legislature a year ago.

1. **Funding Retirement System Liabilities.** The most basic measure of risk for the Fixed Fund concerns the likelihood that the Fund will be able to meet future obligations to WRS beneficiaries. On an annual basis, SWIB reviews and models the allocation of assets of the Fixed Fund under different economic assumptions. In 1998, the WRS actuary updated a 50-year projection previously done in 1993 and 1994. This work considered the effect of long-term demographic changes on WRS payments and cash flow. The projection again showed that the WRS is well positioned to

meet its current and future obligations. This conclusion was reaffirmed in the recent work done by our asset allocation consultant. They concluded that the conservative method used to measure Fixed Fund assets versus liabilities contributes to the well-funded status of the WRS.

2. **Volatility.** Minimizing year-to-year fluctuation in Fixed Fund returns helps to stabilize required contributions into the WRS. For the five-year period ending December 31, 1999 the volatility of the Fixed Fund matched the benchmark over five years and was less than that of the benchmark over ten years. Our recently completed asset allocation review considered potential volatility associated with expected returns for the different asset mixes that were evaluated.
3. **Risk Elements.** On a quarterly basis, we review the level of exposure of the Fixed Fund to the following particular types of risk:
 - *Interest rates:* In the Fixed Fund, most of the sensitivity to interest rates comes from longer duration bonds and exposure to utility and financial stocks. Our domestic equities portfolios are under-weighted in these sectors. This tends to dampen the overall interest rate sensitivity of the total Fund.
 - *Currency:* Foreign currency exposure occurs primarily in our international equity holdings and, to a lesser extent, from domestic stocks and international fixed income investments. Approximately 21% of the Fixed Fund is exposed to foreign currency risk resulting from these holdings. This compares to 15% at the end of 1998. During 1999, global bond portfolio mandates were adjusted to allow unhedged foreign currency exposures as the neutral operating position. International and global portfolio managers make all currency hedging decisions. International currency risk is further managed through diversification across international regions, economies, sectors and individual investments.
 - *Emerging markets:* Investments in developing countries represent approximately 3% of Fixed Fund assets. SWIB's investments in emerging markets are primarily managed by four separate external managers to be well diversified from a risk management perspective.
 - *Liquidity:* Approximately 72% of Fixed Fund assets could be liquidated in an orderly fashion within one month. This substantial level of liquidity should enable the WRS to meet its funding needs for the foreseeable future.
 - *Derivatives:* Derivatives are financial instruments whose value depend on, or are derived from, the value of another asset, index or rate. The total unrealized gain on derivative investments was \$9.0 million as of December 31, 1999 as compared to \$17.2 million on December 31, 1998. Appendix E describes the derivatives exposure in the Fixed Fund.
 - *Tracking Error:* "Tracking error" measures volatility of excess return to that of the benchmark. This helps to measure the extent to which the performance of any one portfolio could affect the performance of the entire Fixed Fund. The 1.52% five-year tracking error as of December 31, 1999 was nearly identical to the 1.50% level as of December 31, 1998.

Variable Trust Fund

About 12% of WRS assets are managed in the Variable Fund. Prior to 1980, new employees could choose to place half of their pension fund contributions in this Fund where the assets are primarily invested in the stock markets. Participants who chose the Variable Fund option accepted a greater degree of risk for the potential of greater long-term returns. Assets of the Fund were valued at \$8.3 billion as of December 31, 1999.

State law has barred further participants from entering the Variable Fund since April of 1980. Recently enacted legislation (Act 11) would allow employees to again elect to direct 50% of their WRS contributions into the Variable Fund, beginning January 1, 2001. The legislation is currently under review by the courts.

Investment Goals

The investment objective for the Variable Fund is to achieve returns, which equal or exceed that of similar equity-oriented portfolios. The Standard and Poor's Index of 500 stocks and a benchmark containing a broader mix of equity markets are used to measure Fund performance.

Investment Strategy

Section 25.17(5) of the Statutes directs that "Assets of the Variable Fund shall be invested primarily in equity securities, which shall include common stocks, real estate or other recognized forms of equities...".

Variable Trust Fund Asset Allocation					
Asset Class	Policy Range	1998	1999		2000
		Actual 12/31/98	Strategic Target	Actual 12/31/99	Strategic Target
Stocks	90-100%	<u>97%</u>	<u>100%</u>	<u>98%</u>	<u>100%</u>
Domestic		71%	73%	71%	75%
International		25%	27%	27%	25%
Cash	0-10%	3%	0%	2%	0%
TOTAL		100%	100%	100%	100%

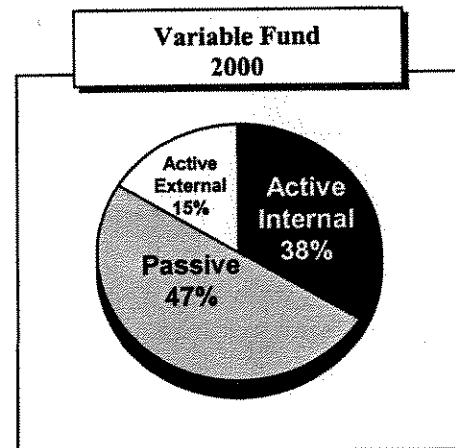
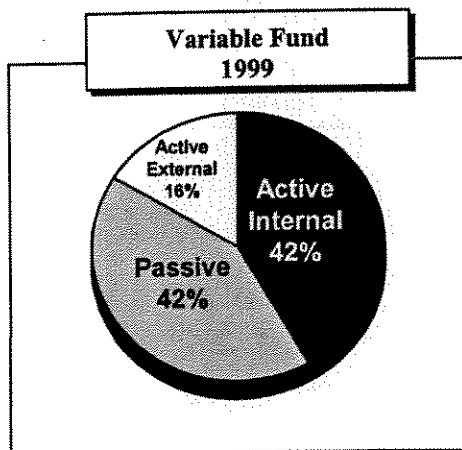
- Investment strategy for the Variable Fund presently incorporates the equity strategy for the Fixed Fund. SWIB's equity portfolios are shared by each fund on a roughly 80/20 percent pro-rata basis.
- Previous comments regarding domestic equities portfolio performance also apply to the Variable Fund, due to the common holdings of the Fixed and Variable funds. Because domestic stocks represent a larger percentage of the internally managed assets in the Variable Fund (71%) than in the Fixed Fund (43%) the impact of strategy changes tend to have a greater effect on Variable Fund performance.

- New management information systems now enable us to consider a separate investment strategy for the Variable Fund. Our recent asset allocation review determined that a small shift in the targets for domestic and international stocks would provide a better balance between expected returns and risk for the Variable Fund. Accordingly, the new targets result in a 75% domestic/25% international split.

Variable Trust Fund Holdings By Portfolio				
	12/31/98		12/31/99	
	\$ in Millions	% of Total	\$ in Millions	% of Total
Equities				
Domestic				
Active Portfolios	\$1,886	28%	\$2,228	27%
Quantitative Portfolios	209	3%	261	3%
Passive Index Funds	2,768	41%	3,421	41%
International				
Active Portfolios	1,393	21%	2,011	24%
Passive Index Funds	269	4%	62	1%
Emerging Markets	98	1%	60	2%
Total Equities	\$6,623	97%	\$8,143	98%
Cash	\$ 181	3%	194	2%
TOTAL	\$6,804	100%	\$8,337	100%

The Variable Fund is invested almost entirely in stocks. Because we use passive strategies in those portfolios to a greater extent than in other asset classes, the overall share of assets managed passively is greater for the Variable Fund (42%) than for the Fixed Fund (33%).

The previously described changes in domestic stock strategies should result in the Variable Fund moving to approximately 47% passive. We are currently considering whether it would be beneficial to increase the use of passive strategies for the Variable Fund by an even greater amount. We are discussing that approach with the Department of Employee Trust Funds and with WRS participant groups. We expect to make a determination in the next several months.



Variable Retirement Trust Fund Performance
Annualized Returns For Periods Ending December 31, 1999

	<u>One Year</u>	<u>Five Years</u>	<u>Ten Years</u>
Variable Fund Return	27.8%	22.4%	14.9%
S&P 500	21.0	28.6	18.2
Investment Benchmark*	23.3	22.2	15.2

*The investment benchmark is the equity component of the Fixed Fund investment benchmark

- The Variable Fund outperformed the Fixed Fund on a one-year, five-year and ten-year basis.
- The 27.8% return was its best return since 1985. On a total return basis, the Fund exceeded the broad equity benchmark on a one-year and five-year basis. On a risk-adjusted basis, the Fund slightly lags the benchmark over the five-year and ten-year period, as measured by volatility of returns. The benchmark includes indices for each of the equity markets represented in the Fixed and Variable Funds and the performance of privately managed equity funds that invest in these same markets.
- Assets of the Variable Fund are diversified into a number of markets that are not represented in the S&P 500, including international and emerging markets, venture capital and smaller growth stocks. These categories now represent about 55% of the assets of the Fund. Investments have been made in these other markets to achieve the benefits of diversification and to gain potential returns that exceed the more narrowly defined domestic market.

Risk Management

The approach to risk management for the Variable Fund involves the same key elements that apply to the Fixed Fund. There have been no significant changes in the risk exposure in the following areas since our last report a year ago.

1. **Volatility.** Equity markets [domestic and foreign stocks] have outperformed other major asset classes [including government and corporate bonds, real estate and commodities] over the last five-year, 20-year and 50-year periods. However, the data also show that investors should be prepared for significant year-to-year fluctuations in returns and the possibility that unfavorable stock market performance could result in losses.
2. **Risk Elements.** On a quarterly basis, we review the level of exposure of the Variable Fund to the following particular types of risk:
 - *Interest rates:* The Variable Fund has less sensitivity to interest rate changes than the Fixed Fund because the Variable Fund does not have longer duration bonds.
 - *Currency exposure:* The relative amount of foreign currency exposure is greater in the Variable Fund than in the Fixed Fund because a larger percentage of Variable Fund assets are invested in international equities. Approximately 26% of the Variable Fund is exposed to foreign currency risk resulting from these holdings. Like the Fixed Fund, international portfolio managers make currency hedging decisions. International equity currency risk is further managed through diversification across international regions, economies, sectors and individual investments

- *Emerging markets:* Investments in developing countries represent approximately 3% of Variable Fund assets. SWIB's equity investments in emerging markets are primarily managed by two external managers and are, therefore, diversified from a risk management perspective.
- *Liquidity:* Approximately 83% of Variable Fund assets could be liquidated in an orderly fashion within one month. This substantial level of liquidity should enable the Variable Fund to meet funding needs for the foreseeable future.
- *Derivatives:* Unrealized gains from derivative investments in the Variable Fund were \$0.3 million as of December 31, 1999. Appendix E describes the derivatives exposure in this Fund.
- *Tracking Error:* "Tracking error" measures volatility of excess return to that of the benchmark. This helps to measure the extent to which the performance of any one portfolio could affect the performance of the entire Variable Fund. The 1.96% five-year tracking error as of December 31, 1999 was greater than for the Fixed Fund and slightly higher than the 1.81% level as of December 31, 1998.

State Investment Fund

The State Investment Fund (SIF) invests cash balances of state agencies, local governments and the Wisconsin Retirement System (WRS) on a commingled basis. Safety of principal and liquidity are emphasized in managing investments for SIF, reflecting its shorter-term, cash management objectives.

State agencies deposit tax revenues, fees, federal aid payments and other revenues from over 40 state funds in the SIF until needed for state operating expenditures. Cash assets of the WRS are invested in the SIF until longer-term investment opportunities with more favorable rates of return become available. Over 1,100 local units of government deposit until needed for local operating expenditures. These commingled local funds are referred to as the Local Government Investment Pool (LGIP).

Earnings for SIF are calculated and distributed monthly, based on the participant's average daily balance as a percent of the Fund. Participants may deposit and withdraw their funds on a daily basis. Assets of the State Investment Fund were valued at \$4.4 billion on December 31, 1999 (excluding WRS trust funds). The following table indicates the average month-end SIF balance and participation in 1999. The \$6.5 billion average balance in 1999 exceeded the \$6.1 billion average balance for 1998.

State Investment Fund Average Month-End Balances for Calendar Year 1999		
Source	Amount (in millions)	Percent Of Total
Local Government Investment Pool	\$2,879	45%
State Funds	2,332	36
WRS Trust Funds	1,239	19
TOTAL	\$6,450	100%

Investment Goals

The investment goals for SIF are first and foremost, safety of principal; second, liquidity; and finally, rate of return. The benchmark for measuring investment performance was changed in 1999 and consists of:

1. The 90-day US Treasury Bill rate (70%).
2. The 30-day Federal Reserve Certificate of Deposit Composite Index rate (30%).

Investment Strategy

Safety of principal and liquidity in SIF are achieved by adherence to rigorous quality standards, careful attention to maturity schedules and an emphasis on high marketability of securities in the portfolio. Enhanced return is sought through intensive portfolio management, which considers probable changes in the general structure of interest rates.

SIF invests in direct obligations of the US government and its agencies, commercial paper of financial and industrial corporations, bank certificates of deposit, banker's acceptances, asset-backed securities, mortgage-backed securities and repurchase agreements backed by securities of the US government or its agencies, and other instruments authorized by the Board of Trustees that are within the restrictions of state law. Investment guidelines for SIF include the following asset allocation limits. There have been no changes in SIF investment guidelines since our last report.

State Investment Fund Asset Allocation Limits	
Asset Type	Limit as a Percent of Portfolio Par Value
US Treasuries and Agencies	50-100%
Commercial Paper and Corporate Notes	0-30
Certificates of Deposit and Bank Acceptances	0-30
Asset-Backed Securities	0-30
Mortgage-Backed Securities	0-30
Canadian (fully hedged)	0-20
Yankee/Euro Dollar Issues (fully hedged)	0-10

The following table compares the actual allocation of SIF assets as of December 31, 1999 to holdings a year earlier. Appendix D provides a description of each category. By the end of 1999, we had reduced holdings in US government paper and increased holdings in commercial paper, as spreads from those issues widened over Treasury issues.

State Investment Fund Holdings				
Asset Type	12/31/98		12/31/99	
	Amount* (In Millions)	Percent of Total	Amount* (In Millions)	Percent of Total
Cash	\$-0-	0%	\$-0-	0%
US Government:				
Treasury Bills	-0-	-0-	-0-	-0-
Notes and Bonds	344	5	192	4
Agencies	4,831	74	2,543	47
Open Repurchase Agreements	485	8	705	13
Asset-Backed Securities	40	1	27	-0-
Mortgage-Backed Securities	5	-0-	4	-0-
Yankee/Euro Dollar Issues	-0-	-0-	-0-	-0-
Certificates of Deposit and Bankers Acceptances	227	4	431	8
Commercial Paper and Corporate Notes	551	11	1,549	28
TOTAL	\$6,483	100%	\$5,451	100%
*Total value exceeds participant holdings due to check float and timing of postings				

State Investment Fund Performance
Annualized For Periods Ending December 31, 1999

	<u>One Year</u>	<u>Five Years</u>	<u>Ten Years</u>
State Investment Fund Return	4.9%	5.3%	5.6%
Investment Benchmark	4.8	5.2	5.1

- The State Investment Fund outperformed its benchmark for all three time periods.
- For the year ending December 31, 1999, SIF's 4.9% return ranked fifth out of 214 government funds in the IBC/Donoghue Government Index and 192nd out of 950 money market funds in the IBC/Donoghue All Taxable Money Market Index.
- The US Treasury market registered its third worst performance in almost half a century, ending the year with significantly higher rates across the yield curve than where it began. In December 1998, the markets were very concerned about global recession and deflation. By spring of 1999, however, it was clear that the global economy had recovered and the US economy was showing no signs of weakness. Inflationary fears, rising foreign bond yields and concerns about an overpriced stock market emerged, causing the Federal Reserve Board to raise the Fed Funds target rate three times, by a total of .75%.
- Many investors anticipate the Federal Reserve to increase rates by as much as .75% to 1.0% in 2000. We are maintaining a defensive investment strategy until clearer signs of a "sustainable economic growth rate" emerge or until we feel that yields have increased enough to compensate for longer maturities.
- In March 1995, SWIB neutralized 12 derivative investments in SIF whose return was determined by the spread between U.S. and foreign currency and interest rates. This action resulted in a \$95 million loss that is being paid with interest over a ten-year period. Beginning in April 2000, the loss drops significantly for the next five years (to an average 0.091 percentage point). This will have a positive impact on the net rate of return. (See Appendix D).

Risk Management

Risk management for the State Investment Fund places particular emphasis on three factors: (1) safety of principal; (2) the need for adequate liquidity to meet withdrawals; and (3) sensitivity of the portfolio to changes in interest rates. These risks are measured in the following ways:

1. **Safety of Principal.** Approximately 63% of the Fund is invested in US government securities. The Fund does contain certain investments that are subject to market risks, including default by the issuer. Although the Fund has never experienced a credit default, in certain economic cycles the Fund could potentially incur losses in certain investments. The Fund has insurance coverage for credit losses incurred by LGIP participants.
2. **Liquidity.** The combination of funds from the state, local governments and the Retirement System provides a high degree of flexibility and liquidity. The average maturity for portfolio investments as of December 31, 1999 was 65 days. The ability to withdraw any amount of funds on a daily basis creates the risk that a significant number of local government participants could make simultaneous withdrawals from SIF. As of December 31, over 80% of the fund was invested in

securities maturing within 90 days to meet this contingency.

3. **Interest Rate Sensitivity.** Interest rates for 83% of portfolio assets reset within three months or less. This strategy is designed to ensure that the rate of return is sensitive to changes in the general level of interest rates.

Investments in Wisconsin

SWIB makes investments in Wisconsin within the context of its fiduciary responsibility to participants in the funds we manage. Some of our investments in Wisconsin occur as part of our everyday investment activity in the national and global markets, since Wisconsin businesses are participants in these markets. Other investments in Wisconsin are made because SWIB staff makes special efforts to explore opportunities that exist within the State.

Under Section 25.17 (70) of the statutes, SWIB reports biennially on its five-year plan for investments in the State. We update this information each year as of June 30, as part of our annual fiscal report. SWIB provided its most recent five-year plan to the Governor and Legislature on June 30, 1999. For the five-year period including fiscal years ending June 30, 1999 through 2004, SWIB plans to make new investments in the state of between \$2.2 and \$3.9 billion.

New investments made in Wisconsin companies for the year ending June 30, 1999 totaled \$1.1 billion and are presented in Appendix F. Investments include: \$140 million of new investments in stocks of 20 Wisconsin companies, \$590 million of new investments in high quality commercial paper issued by public utilities and Wisconsin companies and \$241 million in certificates of deposit from Wisconsin banks and thrifts. Private equity and loans in Wisconsin companies totaled \$75.6 million. The companies included are either headquartered in Wisconsin or easily identified as having a significant portion of their business activities in Wisconsin.

New and existing investments in companies headquartered in Wisconsin totaled \$2.3 billion. An additional \$6.4 billion was invested in companies with 20 or more Wisconsin employees, bringing the total investments in companies with economic ties to Wisconsin to \$8.7 billion. This year's total represents an increase of \$700 million (up 9%) from fiscal year 1998.

Summary of SWIB Investments in Wisconsin

June 30, 1999
(In Millions)

	<u>Headquartered in Wisconsin</u>	<u>Not Headquartered in Wisconsin But 20+ WI Employees</u>	<u>Total Investment in Wisconsin</u>
Public Bonds (1)	\$143,309,000	\$1,531,859,500	\$1,675,168,400
Liquid Assets (2)	842,101,500	668,692,000	1,510,793,500
Public Equities (1)	763,873,000	3,064,109,100	3,827,982,100
Real Estate (1)	14,811,500	99,100	14,910,600
Private Placements (1)(3)	<u>488,971,400</u>	<u>1,156,264,600</u>	<u>1,645,236,100</u>
Total	\$2,253,066,400	\$6,421,024,300	\$8,674,090,700

(1) Market value

(2) Commercial paper, certificates of deposit and bankers acceptances agreements valued at par. Reflects maximum outstanding value per issue during the fiscal year.

(3) Includes private equity and private loans.

In addition to these direct investments, SWIB seeks to direct 5% of commissions generated by trading activity to Wisconsin-based brokerage firms to comply with the directives of 1985 Wisconsin Act 53. This Act reflects the desire that assets managed by SWIB be invested to aid in Wisconsin economic growth, without diverting the agency from its primary purpose of managing funds to meet its fiduciary responsibilities to fund participants. In fiscal year 1999, \$1.1 million, or 5.1% of the \$22.5 million total listed and equivalent over-the-counter commission dollars, was paid to Wisconsin brokerage firms. In addition, approximately \$302,800 was paid to Wisconsin brokerage firms for initial public offerings.

Appendix A
Investment Goals, Strategies and Performance Reports

Investment Goals and Strategies

s. 25.17(14g). Annually, on or before January 1, the Investment Board shall submit to the joint legislative audit committee, to the joint committee on finance and to the chief clerk of each house, for distribution to the appropriate standing committees, a report of the board's annual investment goals and long-term investment strategies. The report shall specify any change in the annual investment goals and long-term investment strategies from those in the previous year.

Performance

s. 25.17(14m). Annually, on or before March 31, the Investment Board shall submit to the joint legislative audit committee, to the joint committee on finance and to the chief clerk of each house, for distribution to the appropriate standing committees a report including all of the following:

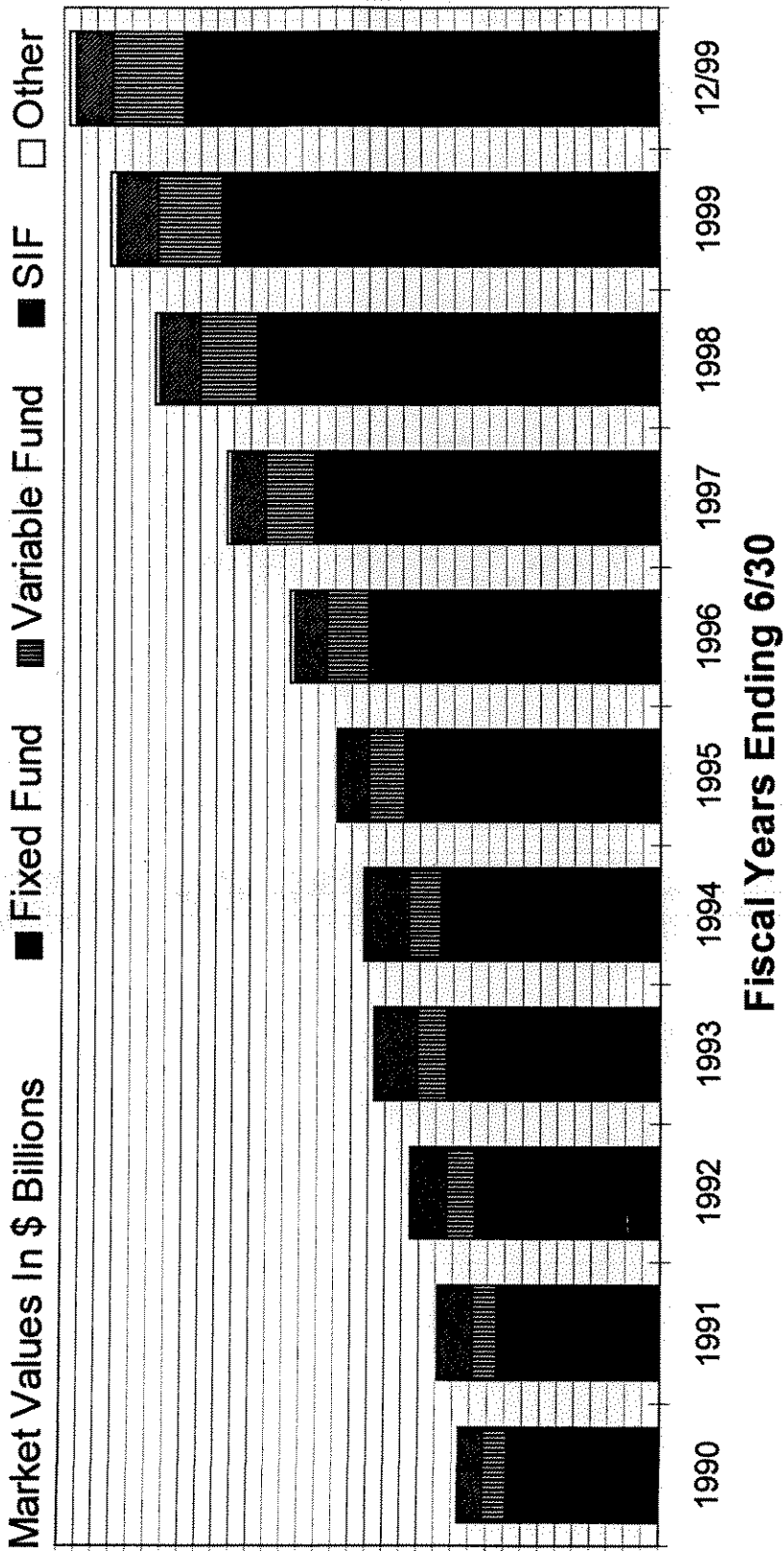
(a) An assessment of the board's progress in meeting its annual investment goals established in the report under sub. (14g).

(b) Information on the types of investments held by the board, including the market values of the investments and the degree of risk associated with the investments, the board's use of derivatives, as defined in s. 25.183 (1) (a), any ventures by the board into new markets, any use of new investment instruments by the board and a comparison of the investment performance of the board to that achieved by a peer group of public and private entities that invest similar-sized funds.

(c) A discussion of the amounts and categories of investments made within the state, including the amounts and categories of investments described, and progress in meeting the objectives of the plan submitted, under sub. (70).

State of Wisconsin Investment Board

Assets Under Management



Appendix C

Fixed and Variable Trust Fund Investment Portfolios

EQUITIES—[Fixed and Variable Funds]

Domestic Equities (Active). Actively managed domestic equity investments primarily consist of common stock held in US companies. These investments are managed in three internal portfolios.

- Small cap portfolio: companies with a market capitalization of up to \$1.0 billion;
- Mid cap portfolio: companies with market capitalization of \$1.0 to \$5.0 billion;
- Large cap issue selection portfolio: Undervalued companies with large capitalization.

Each portfolio manager has the flexibility to adopt a particular style within their capitalization sectors and the flexibility to weight various industry sectors as dictated by his/her market outlook. Up to 10% of each portfolio may be invested in US equity securities of foreign companies or Canadian equities.

In 1998, SWIB contracted with JP Morgan and Grantham, Mayo Van Oterloo to each manage up to \$500 million of large cap assets using quantitative investment strategies.

International Equities (Active). SWIB began an international investment program in 1989 to take advantage of expanding opportunities outside the United States. The objectives are to diversify investments, enhance returns, and provide a window on trends and events that might impact our domestic portfolios. SWIB limits investments to countries rated "free" or "partly free" by the Freedom House Index. Approximately half of these assets are managed internally. The remainder is managed by Capital Guardian Trust, Morgan Stanley and Baillie Gifford.

S&P 500 Index Fund. In 1991, SWIB began investing in a fund that represents the Standard & Poor's Index of 500 stocks. The investment objectives are to add diversity to equity portfolios, facilitate asset allocation and complement SWIB's active investment style.

Intermediate Cap Index Fund. In 1997, SWIB initiated investment in a fund that replicates a mid-cap index constructed by Barclays Global Investors. The index is focused on US companies with market capitalization in the middle region of the domestic stock universe. The investment objectives are to add diversity to equity portfolios, facilitate asset allocation and complement SWIB's active investment style.

Small Cap Index Fund. Since early 1999, SWIB has invested in a fund that replicates the Russell 2000 index of small company US stocks.

MSCI Index Fund. In 1996, SWIB began investment in a fund that represents the non-US developed markets index that SWIB adopted as its international equity index benchmark.

Leveraged Buy-Outs—[Fixed Fund only]. SWIB invests in leveraged buy-out (LBO) partnerships by investing in funds, which seek superior returns from a combination of closely-held ownership and high leverage. Size, geography, and strategy diversify the portfolio.

Venture Capital—[Fixed Fund only]. SWIB invests in selected venture capital start-up funds, which in turn invest in various stages of a new company's development. Investments are diversified across different stages of company development and geographic area.

Emerging Markets. SWIB's emerging markets investment program focuses on developing countries. These investments are managed in two externally managed funds: the Capital Guardian International Emerging Markets Growth Fund and the Genesis Emerging Markets Fund.

FIXED INCOME—[Fixed Fund]

Public Bonds. Public Bonds are managed in three portfolios: (1) The core portfolio is invested primarily in US government bonds and corporate bonds purchased in public markets. Bonds are broadly diversified by credit type, maturity, and sector. (2) The market evaluation portfolio (MEP) is weighted toward corporate securities and seeks temporary under-valuations through the use of swaps, sector and maturity shifts; and (3) The intermediate duration portfolio (IDP) invests in US Treasury and agency securities, primarily in the three- to seven year maturity range. In 2000, the MEP and IDP portfolios will be combined.

International/Global Bonds. The internally managed portfolio may invest in US government securities and in foreign bonds. SWIB may invest in fixed income securities of sovereign states or territories rated "free" or "partly free" in the Freedom House Index. Securities must meet minimum credit quality requirements. Four outside advisors manage approximately two-thirds of SWIB's international/global bonds: Alliance Capital Management, Brinson Partners, Morgan Grenfell Investment Services and Nomura Capital Management.

Lehman Aggregate Index Fund. In August 1996, SWIB began investing in this index fund which includes a broad representation of the public and corporate markets. The investment objectives are to add diversity to our bond portfolios, facilitate asset allocation, and complement SWIB's predominantly active investment style.

Private Placements. SWIB makes direct, long-term loans to companies located throughout the United States. In many cases, SWIB is a co-lender with other public or private investors. Occasionally, these investments include a component of company ownership. Loans are made at fixed rates of interest. Typically, a company must have a demonstrated record of good management, sales growth, profitability, and cash flow, along with reasonable levels of existing debt and equity.

Emerging Markets. SWIB's fixed income emerging markets investment program focuses on developing countries. Investments are managed in the Morgan Grenfell Emerging Markets Fund and the Salomon Brothers Emerging Markets Fund.

Real Estate Mortgages. Created in early 1999, this portfolio consists of private commercial mortgages invested in cooperation with Northwestern Mutual Life. SWIB's real estate and privates placements staff collaborate regarding SWIB's participation in each investment.

REAL ESTATE—[Fixed Fund]

SWIB invests in commercial real estate as a sole direct owner, or in joint ventures and partnerships. The investment objective is to add diversity, provide long-term stability, and act as a hedge against inflation. The portfolio is diversified by region of the United States and by property type.

NON TRADITIONAL—[Fixed Fund]

This portfolio may invest across asset classes in domestic or international markets. Investments are in public and private equities, fixed income instruments, partnerships and structured investments. The objectives are to improve overall performance of the Fixed Trust Fund through enhanced returns and reduced volatility.

CASH—[Fixed and Variable Funds]

Temporary cash balances awaiting permanent investment are invested in short-term and intermediate-term investments. They include obligations of the US government and its agencies, as well as high quality commercial bank and corporate debt obligations. (The investment vehicle is the State Investment Fund.)

Appendix D

State Investment Fund Investment Categories

US Treasury Bills. US Treasury short-term discount securities guaranteed by the full faith and credit of the US Government.

US Treasury Notes and Bonds. US Treasury coupon issues with original maturities of up to ten years guaranteed by the full faith and credit of the US Government.

US Agencies. An agency chartered by the US Government to serve the public purposes specified by the Congress. Payment of the principal and interest may or may not be guaranteed by the full faith and credit of the US Government itself.

Repurchase Agreements. The purchase of securities (collateral) from a bank or dealer with the simultaneous consent by the bank or dealer to repurchase the securities at the same price at a specified date and interest rate. By state law, the repurchase must occur no later than the next business day. Repurchase agreements must be US Treasury or Agency securities that meet other investment guidelines.

Asset-Backed Securities. Publicly traded notes backed by loans, leases or installment contracts on personal property. Cash flows generated from underlying assets are used to pay principal and interest to the shareholders.

Mortgage-Backed Securities. Ordinary bonds backed by an undivided interest in a pool of mortgages or trust deeds. Income from the underlying mortgages is used to pay off the securities.

Yankee/Euro Dollar Issues. Obligations of foreign issuers payable in US dollars and registered with the Securities and Exchange Commission.

Certificates of Deposit. Interest bearing, negotiable, time deposits of fixed maturity at commercial banks.

Commercial Paper and Corporate Notes. Unsecured promissory notes that meet maturity and credit quality standards specified in the investment guidelines.

Appendix E

Use of Derivative Financial Instruments

A derivative is a financial instrument whose value depends on, or is derived from, the value of another asset, index or rate. The Board's investment guidelines regarding the use of derivative investments were modified in May 1995. Under these guidelines:

- The Risk Committee comprised of senior SWIB staff must review all derivatives transactions. Derivative investment strategies are reviewed by this Committee to ensure that they are in compliance with investment guidelines.
- The Risk Committee monitors each derivative position. The performance of each derivative is reviewed against the original purpose of the investment.

A detailed accounting of derivative investments held in the Fixed and Variable Funds and the State Investment Fund is provided with the audited financial statements in our annual financial report. The following types of derivatives are being utilized by each Fund:

Fixed Retirement Trust Fund

1. **Foreign Currency Forwards and Options.** The primary types of derivatives used in the Fixed Fund are forward contracts and currency hedges. Generally, these derivatives are used to protect against the risk of currency exchange rate fluctuation in our international investments. As of July 1, 1999 the investment policies governing the amount of and conditions under which foreign currency forward contracts can be included within each international portfolio changed. These guidelines allow investment managers to take a long position on any currency in their benchmark even in the absence of underlying positions, and take a short position on any currency limited to the amount of the underlying position of securities in that currency. This allows managers to, in effect, "hedge" against any currency in their assigned benchmark, even though they may not have underlying positions in that currency.

Yield enhancing activities, for purposes of financial reporting, occur where the forward contracts cause a currency to be long (i.e., no underlying position and the foreign currency is bought). Hedging activities occur where underlying positions offset the short currency forward contract (i.e., underlying position held and the foreign currency is sold only to the amount of the underlying position).

Reflecting the new policies, there was a reduced use of hedging instruments as of December 31, 1999. At that time, the Fixed Fund held one foreign currency call option to enhance earnings in the event of foreign currency fluctuations. There is no market risk associated with owning this instrument beyond the initial cost of its purchase.

2. **Other Options.** SWIB holds equity and "basket" option contracts which give the purchaser the right to buy (call) or sell (put) the equity security or index underlying the contract at an agreed upon price at a specified time. SWIB purchases options to take market positions that might be difficult, inefficient or inaccessible in direct form. The Fixed Fund held three equity options as of December 31, 1999.
3. **Futures Contracts.** SWIB hired the firm of Grantham, Mayo, Van Otterloo & Company (GMO) on June 12, 1998 to manage a core US equity portfolio for both the Fixed and Variable Funds. GMO

trades S&P 500 futures and Russell 2000 index futures contracts to manage its exposure to the stock market. Futures contracts are an obligation to purchase or sell the underlying security at a specified date. Buying futures tends to increase the fund's exposure to the underlying instrument. Selling futures tends to decrease the fund's exposure to the underlying instrument or hedge other fund instruments.

Upon entering into a futures contract, the fund is required to deposit with its custodian, an amount of cash or U.S. government obligations in accordance with the initial margin requirements of the broker or exchange. Futures contracts are marked to market daily and an appropriate payable or receivable for the change in value is recorded by the fund (variation margin). The payable or receivable is subsequently settled and the gain or loss is realized. Futures contracts involve, to varying degrees, risk of loss in excess of the variation margin. Losses may arise from changes in the value of the underlying instrument, if there is an illiquid market for the contracts, or if counterparties do not perform under the contract terms. Futures contracts are valued at the settlement price established each day by the exchange on which they are traded.

The market value of the open contracts held in the Fixed Fund as of December 31, 1999 was approximately \$23.4 million. Net realized appreciation for these contracts was approximately \$0.97 million.

The following table compares the market value of derivative positions in the Fixed Fund on December 31, 1998 to the values as of December 31, 1999. This table indicates that the unrealized gains and losses from derivative investments decreased from gains of \$17.2 million in 1998 to \$9.0 million in 1999.

**Derivative Investment Activities
Fixed Retirement Trust Fund**

	12/31/98 Market Value (In Millions)	12/31/99 Market Value (In Millions)
Hedging Investments		
Foreign Currency Forward Contracts	\$ 27.6	\$ 0.9
Market Gains/Losses on Underlying Securities	<u>(27.6)</u>	<u>(0.9)</u>
Net	\$ -0-	\$ -0-
Yield Enhancing Activities		
Options		
Written Options Cost	(20.5)	0.8
Less Market Value of Written Options	<u>0.8</u>	<u>(2.3)</u>
Net	(19.7)	(1.5)
Purchased Options Cost		
Purchased Options Cost	(44.1)	(23.4)
Less Market Value of Purchased Options	<u>81.0</u>	<u>50.7</u>
Net	\$ 36.9	\$ 27.3
Foreign Currency Forward Contracts	\$ 0.0	\$ (16.8)
Net Unrealized Gains/(Losses)	<u>\$ 17.2</u>	<u>\$ 9.0</u>
Futures Contracts		
Market Value of Outstanding Contracts	48.5	23.4
Purchase price	<u>46.1</u>	<u>22.1</u>
Net Realized Appreciation on Open Contracts	<u>\$ 2.4</u>	<u>\$ 1.3</u>

Variable Retirement Trust Fund

Because the Variable Fund owns shares of the same domestic and international companies as the Fixed Fund, the same currency forward and options derivatives are being used for the Variable Fund.

The following table compares the market value of derivative positions in the Variable Fund on December 31, 1998 to the values on December 31, 1999. This table indicates that the unrealized losses on derivative investments increased from \$-0- to -\$4.3 million in 1999. The market value of open futures contracts held in the Variable Fund as of December 31, 1999 was approximately \$5.9 million. Net realized appreciation for these contracts was approximately \$242,000.

**Derivative Investment Activities
Variable Retirement Trust Fund**

	12/31/98 Market Value (In Millions)	12/31/99 Market Value (In Millions)
Hedging Investments		
Foreign Currency Forward Contracts	\$ 3.8	\$ (1.5)
Market Gains/Losses on Underlying Securities	<u>(3.8)</u>	<u>1.5</u>
Net	\$ -0-	\$ -0-
Yield Enhancing Activities		
Options		
Written Options Cost	\$ -0-	\$ 0.2
Less Market Value of Purchased Options	<u>-0-</u>	<u>(0.6)</u>
Net	\$ -0-	\$ (0.4)
Foreign Currency Forward Contracts	\$ -0-	\$ (3.9)
Net Unrealized Losses	\$ -0-	\$ (4.3)
Futures Contracts		
Market Value of Outstanding Contracts	\$ 12.4	\$ 5.9
Purchase price	<u>11.9</u>	<u>5.6</u>
Net Realized Appreciation on Open Contracts	\$ 0.5	\$ 0.3

State Investment Fund

In March 1995, SWIB neutralized 12 derivative investments in SIF whose return was determined by the spread between U.S. and foreign currency and interest rates. The Board concluded that these investments were inappropriate and outside policy guidelines. This action resulted in a \$95 million loss that is being paid with interest over a ten-year period. This is expected to result in an annual average reduction of 0.25% in earnings over the ten years. The loss in any one month or year is expected to vary significantly based on the schedule of amortization payments and fluctuations in the balance of the Fund. The expected loss is projected to be highest in the first five years (averaging 0.329 percentage point) and to drop significantly in the next five years (to an average 0.091 percentage point).

Payments made to amortize the derivatives loss resulted in a reduction of 0.26% in Fund earnings in 1999. This experience continues to closely match the effect projected in March 1995. As of December 31, 1999 the unamortized balance on the \$95 million was \$27.5 million.

The Board of Trustees adopted new investment guidelines for SIF on November 2, 1995. The guidelines suspended the use of non-risk reducing derivatives and established clearer limits on the use of other types of securities in this Fund. The use of derivatives in SIF is limited by law to risk-reducing transactions and the following types of investments:

1. Collateralized mortgage obligations, or other asset-backed securities.
2. Swaps with counterparties that meet credit-worthiness requirements if the transaction is used for risk reduction and SWIB's payment obligations are fully backed by SIF assets.
3. Forward contracts with maturities not exceeding 270 days.
4. Contracts and options traded on a designated contract market and subject to federal regulation.
5. Agreements for the sale of securities by SWIB, under which SWIB will repurchase those securities no later than the next business day ("reverse repurchase agreements").

Currently, SIF holds the following types of derivative instruments:

1. *Restructured investments.* In March 1995, SWIB entered into agreements with two counterparties that resulted in the counterparties' assumption of all future market risk associated with ten swap agreements and two structured bonds. One agreement requires SWIB to make periodic payments over a period of ten years while the other agreement requires periodic payments over a five-year period. This requires that SWIB make payments of \$95 million with interest over the ten-year period. As of December 31, 1999, the unamortized balance on these investments was \$27.5 million
2. *Interest rate swaps.* The fund no longer holds any interest rate swaps or bonds with interest rate swaps attached.

Appendix F
New Investments in Wisconsin Companies
Fiscal Year 1999

Liquid Asset Investments		
American Family	\$ 50,000,000	Madison
Interstate Power	20,000,000	Madison
Johnson Controls	25,000,000	Milwaukee
Madison Gas & Elec.	16,000,000	Madison
M&I	50,000,000	Milwaukee
Northern States Power	50,000,000	Various
Kimberly Clark Corp.	75,000,000	Neenah
Snap-On, Inc.	35,000,000	Kenosha
Wisconsin Certificate of Deposit Program	241,670,000	Various
Wisconsin Corporate Central Credit Union	50,000,000	Hales Corners
Wisconsin Electric Fuel Trust	35,852,000	Milwaukee
Wisconsin Electric Power Co.	61,200,000	Milwaukee
Wisconsin Energy Corp.	50,000,000	Milwaukee
Wisconsin Gas Co.	46,000,000	Milwaukee
Wisconsin Public Service	30,500,000	Green Bay
Total	\$ 836,222,000	
Loans and Private Equity		
Advanced Separation & Process	6,000,000	Windsor/Deforest
Aqua Finance, Inc	8,085,358	Wausau
Baird Capital Partners II*	2,232,332	Milwaukee
Bando McGlocklin Small Business Investment Corp.	5,331,813	Brookfield
Great Northern Corp.	9,500,000	Appleton
Hankscraft Motors, Inc.	1,209,941	Reedsburg
Horizon Capital Partners*	1,026,329	Milwaukee
Housing Horizons	6,353,000	Various
Lang Investments, Ltd.	14,000,000	Delafield
LS Power, Inc.	6,500,000	Whitewater
Mason Wells Fund I, LP*	5,861,995	Milwaukee
Security Health Plan of Wisconsin, Inc./Marshfield Clinic	9,450,000	Marshfield
Total	\$ 75,550,768	
Public Bonds		
Kimberly Clark Corp.	12,194,763	Neenah
Kohls Corp.	24,212,750	Menomonee Falls
Northern States Power	9,772,400	Various
Total	\$ 46,179,913	
Public Equities		
American Superconductor Corp.	746,875	Madison
Applied Power, Inc.	10,105,625	Butler
Bone Care International, Inc.	7,900,000	Madison
Briggs & Stratton Corp.	577,500	Wauwatosa
Firstar Corp.	1,419,600	Milwaukee
Jason, Inc.	548,000	Milwaukee
Kimberly Clark Corp.	3,499,800	Neenah
Kohls Corp.	26,906,250	Menomonee Falls
Lands End, Inc.	481,250	Dodgeville
Lunar Corp.	3,516,188	Madison
MGIC Investment Corp.	10,741,263	Milwaukee
Northland Cranberries, Inc.	9,344,531	Wisconsin Rapids
Regal Beloit Corp.	2,544,413	Beloit
ShopKo Stores	730,000	Green Bay
Telephone & Data Systems, Inc.	2,193,750	Madison
Terex Corp.	1,217,500	Milwaukee
United States Cellular	2,386,100	Various
Walgreen Co.	40,781,313	Various
Wisconsin Central Transportation Corp.	14,533,750	Various
Wisconsin Energy Corp.	67,669	Milwaukee
Total	140,241,375	
GRAND TOTAL	\$ 1,098,194,056	

9. Initial commitments were made to these funds in prior fiscal years