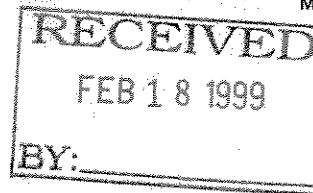


# State of Wisconsin Investment Board

MAILING ADDRESS  
PO BOX 7842  
MADISON, WI 53707-7842

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



January 30, 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 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 6, 1999 the Board approved modifications to the Investment Policy Guidelines that create a new Real Estate Mortgage portfolio for the Wisconsin Retirement System's (WRS) Fixed Trust Fund. The additional guidelines are attached.

## Real Estate Mortgage Program

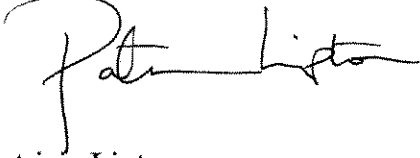
To take advantage of prevailing market conditions in the early 1990's, SWIB made the decision to emphasize equity investments in real estate, as opposed to debt. Since then, SWIB's involvement in the real estate market has been through equity investments in real estate properties. Due to the attractiveness of real estate debt opportunities in the present marketplace, the Board's recent action reestablishes a Real Estate Mortgage Participation program with Northwestern Mutual Life (NML) as SWIB's partner and origination agent. The program will initially be funded with an allocation of \$500 million.

Under this fixed income program, SWIB will participate in various real estate loans underwritten and originated by NML. NML's extensive and experienced staff will identify potential loans as well as perform primary due-diligence on projects for the portfolio. Each loan will be individually reviewed by SWIB real estate staff from a fundamental investment perspective and then reviewed by SWIB private placements staff for issues relating to pricing.

This program provides an attractive way to partner with a large and recognized Wisconsin firm (NML) and to participate in transactions that would otherwise be too small for origination and servicing with the resources we have available.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia Lipton". The signature is fluid and cursive, with the first name "Patricia" written in a larger, more prominent script than the last name "Lipton".

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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## REAL ESTATE MORTGAGE PROGRAM

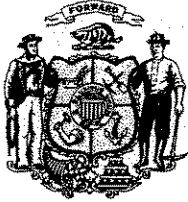
**Description:** This portfolio will consist of investments in real estate mortgage whole loans on a participation basis only. Each individual investment will involve at least one other party who will serve three distinct functions; loan originator, lead underwriter and joint investor with SWIB. This portfolio will be a collaborative effort between the Real Estate Division and the Private Placements Division. Real Estate will be primarily responsible for reviewing the underwriting of the collateral done by the lead investor. Private Placements will be responsible for reviewing the anticipated investment return.

**Portfolio Purpose and Objectives:** The portfolio will consist of investments that represent participation in privately originated real estate mortgages. These investments will typically have terms that provide for a fixed rate, some amortization, and call protection. The purpose of the portfolio is to invest in private real estate mortgages, which are not available to any other portfolio of the SWIB directly managed portfolios. The objective of the portfolio is to capture fixed income mortgage yields which are in excess of other options available to the Fixed Income Group on a comparable risk adjusted basis, at any given time.

### CRITERIA APPROVED FOR INVESTMENTS

Investments in the Real Estate Mortgage Program will be managed within the following guidelines:

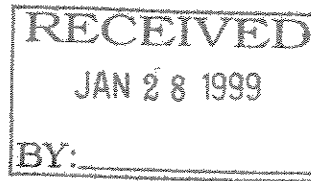
1. SWIB may only invest in participations of whole mortgage loans sponsored by, and jointly invested in, a firm(s) previously approved by the Real Estate Committee.
2. The Real Estate Division shall be responsible for review of the mortgage loan underwriting done by the lead investor. This underwriting includes the secured property, the borrower, and transaction terms. The Real Estate Division shall have complete staff discretion to concur with this underwriting.
3. The Private Placement Division shall be responsible for reviewing the risk adjusted return anticipated by the loan originator, relying on the risk assessment provided by the underwriter and reviewed by the Real Estate Division. The Private Placement Division shall have complete staff discretion to make the decision. Real Estate and Private Placements will jointly collaborate on any loan modifications requested by the lead investor, as each individual case may warrant.
4. The Real Estate Division and Private Placement Division jointly will make quarterly reports to the Board summarizing new activity in this portfolio.



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January 30, 1999

Senator Brian Burke, Co-Chair  
Joint Committee on Finance  
119 MLK Blvd., Room 202,  
Madison, WI 53702

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 1998.

### **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" soft dollar 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 SEC provide the framework for applying Section 28(e). SEC determinations have covered diverse topics, such as the standards used to judge reasonableness of

Senator Brian Burke  
Representative John Gard  
January 30, 1999  
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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 who 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 1998**

#### ***Stocks***

Table I, attached, lists the 111 domestic equities brokerage firms with which SWIB transacted business during calendar year 1998. Commissions for SWIB's actively managed domestic equity and non-traditional portfolios are included. Together, these portfolios held assets of \$10.2 billion on December 31, 1998. Commissions totalled \$23.0 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 totalling \$6.6 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, \$5.4 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 totalled \$7.4 million in 1998. 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 1998, standing arrangements existed with five equity brokers for a broad range of research products. A total of \$1.2 million in credits was earned on stock transactions in this manner.

### ***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 1998 from SWIB's purchase of new bond issues. In total, brokers received \$1,011,504 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 \$448,352. Third-party research credits, which are available independent of the cost of the transaction, totalled \$70,748.

### ***Soft Dollar Expenditures – Calendar Year 1998***

Expenditures from third-party soft dollar credits in 1998 totalled \$1.0 million. These expenditures fell into the following categories:

Research Service	Amount	Percent
Electronic Data Services/Equipment	\$686,834	69%
Investment Publications	215,546	22%
Research Conference Registrations	66,198	7%
Institutional Memberships	18,331	2%
Books and Miscellaneous Items	14,783	2%
Professional Services	405	--
Total	\$1,002,097	100%

Electronic data services comprised 69% 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, totalling 22%, 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.

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

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 1998, soft dollar commissions equaled this target, constituting 12% 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, 1998 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 is diminishing 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 \$1.1 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 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



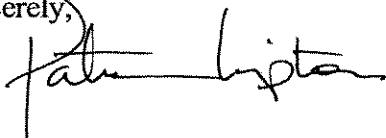
Senator Brian Burke  
Representative John Gard  
January 30, 1999  
Page 6

strong possibility that brokers will offer fewer soft dollar trading arrangements in the future, making this an unpredictable funding source for investment research services.

Anticipating these events, SWIB began paying for some critical investment research services through a direct charge to the trust funds in September 1998. This is an allowable method of payment as provided under s. 25.18 (1) (a) and has no net fiscal impact on the trust funds or the state because expenses are paid from trust fund investment earnings under either arrangement. In July 1998, SWIB notified the Joint Committee on Finance and the Department of Administration of our intent to take this approach. SWIB reports all direct charges under 25.18 (1) (a) in detail to the Joint Committee on Finance and the Department of Administration on a quarterly basis.

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

**TABLE I**  
**STATE OF WISCONSIN INVESTMENT BOARD**  
**1998 Commissions and Research Credits for Domestic Equities Non-Traditional Portfolios**

<b>Broker</b>	<b>Total Commissions*</b>	<b>Research Credits Earned</b>	
		<b>Directed Research**</b>	<b>Third Party</b>
A & M Securities	\$ 23,500	\$ 23,500	\$ -
A G Edwards, Inc.	26,225	18,882	-
ABN Amro	319,737	159,869	-
Adams Harkness & Hill	58,850	28,837	-
Alfred Berg, Inc.	4,500	2,250	-
Allied Research Services	15,000	9,450	-
Baird, R. W.	388,515	62,416	-
Bankers Trust - Alex Brown	415,896	54,066	-
Bear Stearns Securities Corp.	565,838	111,508	-
Bernstein (Sanford C.) & Co.	223,694	133,916	-
Bioscience Securities	70,465	70,465	-
Blaylock & Partners	43,860	43,860	-
Boe Securities	29,500	29,500	-
Boston Company	17,403	8,702	-
Bradford (J.C.) & Co.	253,028	83,713	-
Bridge Trading Co.	468,545	291,351	-
Brooks Securities, Inc. (SBK)	11,100	11,100	-
Brown Brothers Harriman & Co.	5,220	-	-
Brunswick	32,500	16,250	-
Buckingham Research	73,314	26,393	-
Cantor Fitzgerald & Co. Inc.	555,353	-	88,659
Chapman Co. (The)	69,930	69,930	-
Citation Group/Merrill Lynch	262,785	-	155,627
Cleary, Gull, Reiland, McDevitt & Co.	74,046	16,290	-
Cowen & Co.	233,650	135,517	-
Credit Suisse First Boston, Corp.	127,240	63,620	-
Dain Rauscher Wessels	360,476	93,724	-
Davenport & Co. of Virginia	10,000	5,000	-
Deutsche Morgan Grenfell (CJ Lawrence)	575,468	165,021	-
Donaldson Lufkin & Jenrette Securities	862,491	431,246	-
Everen Secs, Inc.	23,563	23,563	-
Fahnestock & Co.	11,615	11,615	-
First Albany Corp.	13,758	13,758	-
First Boston Corp.	453,017	109,721	-
First Honolulu Securities	82,592	82,592	-
Fleming Robert, Inc.	70,400	35,200	-
Fox-Pitt Kelton, Inc.	85,076	34,288	-
Freemark Blair & Co., Inc.	60,990	27,495	-
Fundamental Research	3,029	3,029	-
Furman, Selz, Mager, Deitz & Birney, Inc.	215,357	18,882	-
George K. Baum, Inc.	38,250	10,328	-
Gerard Klauer Mattison	25,500	25,500	-
Goldman, Sachs & Co.	784,666	392,333	-
Gordon Haskett & Co./Indata	53,362	33,618	-
Grupo Financiero Havre	2,200	1,100	-
GS2 Secs Inc.	97,230	13,549	-

**TABLE I**  
**STATE OF WISCONSIN INVESTMENT BOARD**  
1998 Commissions and Research Credits for Domestic Equities Non-Traditional Portfolios

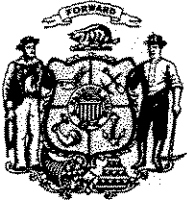
<b>Broker</b>	<b>Total Commissions*</b>	<b>Research Credits Earned</b>	
		<b>Directed Research**</b>	<b>Third Party</b>
Hambrecht & Quist, Inc.	333,630	60,053	-
HCM Investments Inc.	74,870	74,870	-
Herzog, Heine, Geduld & Co.	119,064	-	-
Howard Weil Labouiss	43,500	-	-
ING Baring	3,873	1,937	-
Instinet Corp.	804,633	6,479	-
Investment Technologies Group	498,535	26,039	-
ISI Group, Inc.	66,182	41,695	-
Jackson Partners	55,300	55,300	-
Jardine Fleming Securities	2,043	1,022	-
Jefferies & Co., Inc.	937,929	8,840	306,818
Jones & Associates, Inc.	791,290	3,675	-
Josephthal Lyon & Ross Co.	22,500	11,250	-
J.P. Morgan	491,622	191,703	-
Legg Mason Wood Walker, Inc.	259,221	148,640	-
Lehman Brothers, Inc.	852,169	298,023	160,077
Mamis	15,000	-	-
Mayer Schwab Schweitzer	9,375	-	-
McDonald & Company	18,750	-	-
Merrill Lynch	1,917,043	958,522	-
Midwest Research Maxus	67,498	37,615	-
Montgomery Securities (Nations Bank)	500,542	101,188	-
Morgan Stanley Dean Witter	1,540,049	770,025	-
Needham & Co., Inc.	93,013	21,393	-
Neuberger & Berman	100,579	39,334	-
O'Neil (William) & Co.	153,576	96,753	-
Omni Financial Group	44,022	44,022	-
Oppenheimer & Co., Inc.	498,051	96,742	-
Paine Webber, Inc.	389,519	194,760	-
Panky & Associates	47,286	-	-
Paragon Investment Group	16,000	16,000	-
Paulson Dowling Securities	12,000	-	-
Piper Jaffray & Hoppwood	272,406	35,413	-
POSIT	2,108	1,054	-
Prudential Securities, Inc.	230,123	62,694	-
Punk, Ziegel & Knoell	6,000	6,000	-
Raymond James & Associates	171,660	75,335	-
RJ Dickinson	6,000	3,000	-
Robert Brandt & Co.	99,154	150	-
Robert Fleming, Inc.	10,579	5,290	-
Robertson, Stephens & Co.	185,839	40,885	-
Robinson Humphrey Company, Inc.	67,606	49,352	-
S&P Securities, Inc.	7,875	4,961	-
SBC Warburg, Dillon, Read, Inc.	103,939	78,431	-
Salomon Smith Barney, Inc.	809,432	174,906	-
Schroder, Inc. (Wertheim)	265,168	74,247	-

**TABLE I**  
**STATE OF WISCONSIN INVESTMENT BOARD**  
**1998 Commissions and Research Credits for Domestic Equities Non-Traditional Portfolios**

<b>Broker</b>	<b>Total Commissions*</b>	<b>Research Credits Earned</b>	
		<b>Directed Research**</b>	<b>Third Party</b>
Schwab Charles & Co.	230,488	-	-
SG Cowen Securities, Inc.	24,840	12,420	-
SK International Sec	797,401	-	503,048
Societe Generale	420	210	-
Soundview Financial Group	71,413	50,703	-
Stephens	6,000	-	-
Sturdivant & Co., Inc.	19,000	19,000	-
Thompson Bankwatch/Paine Webber	12,545	7,903	-
Tucker Anthony	22,313	21,644	-
Utendahl Capital Partners	52,100	52,100	-
Vector Securities International, Inc.	139,335	138,165	-
Volpe Brown Whelan	10,200	5,610	-
Weeden & Co.	244,799	3,175	-
Westminster Research Association	52,000	31,200	-
Wheat, First Securities, Inc.	43,255	20,330	-
William Blair & Co.	37,709	29,036	-
Williams Capital Group	45,675	45,675	-
<b>Total</b>	<b>\$ 23,024,780</b>	<b>\$ 7,357,710</b>	<b>\$ 1,214,228</b>

**TABLE II**  
**STATE OF WISCONSIN INVESTMENT BOARD**  
1998 Selling Concessions and Research Credits for Public Fixed Income

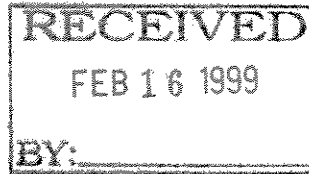
<b>Broker</b>	<b>Total Selling Concession</b>	<b>Research Credits Earned</b>	
		<b>Directed Research</b>	<b>Third-Party</b>
ABN Amro	\$ 10,314	\$ 5,157	\$ -
Artemis Capital Group, Inc.	216	108	-
Baird, R.W.	2,000	2,000	-
Bancamerica Robertson Stephens	10,314	5,157	-
Bear Stearns	1,728	864	-
BISI	28,500	-	17,922
Blaylock & Partners	864	432	-
BT Alex Brown	864	432	-
Chase	28,897	14,449	-
CIBC Oppenheimer	864	432	-
CIS	33,800	-	23,660
Citicorp	23,589	11,795	-
Commerzbank Capital Markets	864	432	-
CS First Boston	116,068	58,034	-
Deutsche Morgan Grenfell	10,314	5,157	-
Doley Securities	216	108	-
Donaldson	938	469	-
First Chicago	864	432	-
Goldman Sachs	56,367	28,184	-
JP Morgan	77,049	38,525	-
Lehman Brothers	32,197	16,099	-
Merrill Lynch	153,155	76,578	-
Morgan Stanley Dean Witter	183,962	91,981	-
Muriel Seibert & Co.	864	432	-
Nationsbanc	17,719	8,860	-
Paine Webber	4,000	4,000	-
Salomon Smith Barney	151,916	75,958	-
SBC Warburg Dillon Read	864	432	-
Scotia Capital Markets	864	432	-
Standard & Poors	25,625	-	17,083
UBS Securities	864	432	-
Utendahl Capital Partners	1,969	985	-
Wilshire	18,125	-	12,083
<b>TOTAL</b>	<b>\$ 1,011,504</b>	<b>\$ 448,352</b>	<b>\$ 70,748</b>



## State of Wisconsin Investment Board

MAILING ADDRESS  
PO BOX 7842  
MADISON, WI 53707-7842

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



15 February 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 December 31, 1998.

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.

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)  
October 1, 1998 - December 31, 1998

**Custodial and Banking Fees**

Bank of New York	\$ 48,805	
Bankers Bank	2,500	
Boston Company, The	885,754	
Firststar	1,709	
<b>Total Custodial and Banking Fees</b>	<b>938,768</b>	<b>\$ 938,768</b>

**Legal Fees, Services and Expenses**

Cox, Castle & Nicholson	1,650	
Grant & Eisenhofer PA	9,499	
Hogan & Hartson LLP	4,500	
McDermott Will & Emery	13,422	
Michael Best & Friedrich	6,103	
Potter, Anderson & Corroon	1,889	
Solheim, Billing & Grimker SC	522	
Stafford Rosenbaum Attorneys	5,844	
Taft, Stettinius	9,339	
William E. Avera	2,622	
<b>Total Legal Fees, Services and Expenses</b>	<b>55,391</b>	<b>55,391</b>

**Domestic Equities Index Fees**

Wells Fargo Inst. Trust	528,795	
<b>Total Domestic Equities Index Fees</b>	<b>528,795</b>	<b>528,795</b>

**Investment Consulting**

AG Risk Management	27,250	
American Stock Exchange	2,174	
Asset Strategy Consulting	62,500	
Audit Force Inc.	2,703	
Bloomberg, LP	63,519	
Commerce Clearing House, Inc.	5,812	
Council of Institutional Investors	25,000	
CP Risk Management	5,469	
Factset Research Systems, Inc.	17,635	
Garland Associates Inc	1,000	
IDC Portfolio Mgmt Inc.	6,250	
Institutional Shareholder Services	5,400	
Investor Responsibility Research Center	2,808	
Kenneth Purdy Consulting	2,691	
Michael A. Wagner	46,448	
NASDAQ Stock Market	200	
New York Stock Exchange	3,430	
Options Price Reporting Authority	960	
Reuters	60,978	
Smithers & Co.	15,000	
Standard & Poors Securities	33,600	
Telerate	5,992	
Toronto Stock Exchange	486	
Wilshire	121,950	
<b>Total Investment Consulting</b>	<b>519,256</b>	<b>519,256</b>

STATE OF WISCONSIN INVESTMENT BOARD  
Quarterly Direct Charges Under ss. 25.18 (1) (a) or (m)  
October 1, 1998 - December 31, 1998

**Real Estate Advisory Fees**

Bristol Group, Inc.	200,909	
Clarion Partners	1,659	
Gaylord Brothers	105,829	
Heitman Capital Management Corp.	132,372	
Kensington Realty Advisors	103,829	
Lend Lease Real Estate Investment	517,473	
MIG Realty Advisors, Inc.	58,651	
PM Realty Advisors Inc.	39,025	
Sentinel Realty Advisors Corp.	23,653	
Trammell Crow Realty Services, Inc.	10,000	
Westbrook Real Estate	509,708	
Whitehall Street Real Estate	2,598	
Wispark Corporation	12,088	
<b>Total Real Estate Advisory Fees</b>		1,717,793

**Total**

**\$ 3,760,004**





## State of Wisconsin Investment Board

MAILING ADDRESS  
PO BOX 7842  
MADISON, WI 53707-7842

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

March 31, 1999

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:

As provided under section 25.17(14m) of the Statutes, attached is the Investment Board's annual performance report to the Legislature. This report discusses our progress in meeting investment goals, the types of investments managed by the Board, our performance in 1998 and investments in Wisconsin.

### Key points of note in this report:

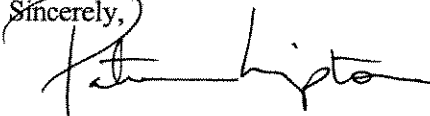
- For the fourth consecutive year, the Fixed (balanced) Retirement Fund and Variable Retirement Fund both earned double digit returns. The performance of the US stock market was one of the most volatile on record and the disparity in returns from different sectors of the stock market was also among the largest ever. Market gains were driven by a handful of large company stocks, with only 15 companies accounting for half of the total return for the S&P 500.
- The Fixed (or balanced) Fund returned 14.6% in 1998. The Fixed Fund surpassed the 13.5% return for balanced mutual funds but fell short of the 15.3% median return for a peer group of public funds in 1998. Heavier exposure to small company stocks, and a large cash position in the non traditional portfolio, accounted for much of the difference in our performance relative to our peers.
- The Variable Fund returned 17.5% for the year matching the return for its benchmark. It trailed the 28.6% return for the S&P 500. The Variable Fund is primarily a stock fund but is diversified into a number of markets which are not represented in the S&P 500, including smaller company stocks, international stocks and emerging markets.
- We currently monitor the volatility of returns, interest rate sensitivity, foreign currency exposure, emerging market risk, liquidity and the use of derivatives. There has been no significant overall change in these risk elements for the Fixed and Variable Funds since our last report to the Legislature in March 1998. They are considered prudent given our liability structure.

- SWIB completed a strategic plan that considered future financial needs of the WRS and investment strategies that are likely to add the greatest value:
  1. The WRS actuary updated demographic and cash flow projections for the next 50 years. This study showed that the WRS is well positioned to meet its current and future obligations.
  2. We worked with outside experts to confirm that a global and diversified investment strategy will earn the best return with the least risk over the long term. Within this strategy there will be a growing role for private market investments that offer greater returns but are more staff intensive to manage.
- The State Investment Fund (SIF) returned 5.3% for the year and outperformed its benchmark for the one-five- and ten-year periods. The SIF is the short-term cash management fund for local governments, state agencies and the Fixed and Variable Trust Funds. The SIF return ranked 8th out of 217 government funds in the IBC/Donoghue Government Index and 238th out of 897 money market funds in the IBC/Donoghue All Taxable Money Market Index.
- SWIB's investments in companies headquartered in Wisconsin totaled \$2.4 billion as of June 30, 1998. An additional \$5.6 billion was invested in companies not headquartered here but with 20 or more Wisconsin employees. Our investments in Wisconsin are made within the context of our fiduciary responsibility to the Retirement Funds. We are developing an initiative to invest up to \$50 million in biotechnology companies - a plan that has the potential to earn attractive returns and spur development of a leading-edge industry in Wisconsin.

Several critical areas in our 1999-01 biennial budget will directly affect our performance. Assets under management have doubled in the last five years and increased by \$10 billion in just the last 18 months. We are having increasing difficulty recruiting and retaining the experienced staff needed to manage portfolios that are among the largest in the world. Your support for budget measures to address this problem will be crucial.

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

Sincerely,

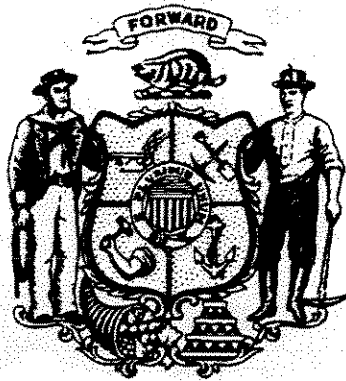


Patricia Lipton  
Executive Director

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 Performance Report*



**March 1999**

## *State of Wisconsin Investment Board* Investment Performance Report

This is the State of Wisconsin Investment Board (SWIB) annual report to the Legislature regarding the Board's investment performance, as provided under s. 25.17(14m) of the Statutes. This report includes:

1. An assessment of the Board's progress in meeting its annual investment goals.
2. Information on the types of investments held by the Board, including: (a) the market values of the investments; (b) the degree of risk associated with the investments; (c) the Board's use of derivatives; (d) any ventures by the Board into new markets; (e) any use of new investments by the Board; and (f) 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.
3. A discussion of the amounts and categories of investments made within the state and the progress in meeting the objectives of a biennial plan for investment in Wisconsin.

As of December 31, 1998, assets under management totaled \$60.6 billion. This amount includes the assets of the Wisconsin Retirement System Trust Funds, the State Investment Fund and several smaller funds established by the State.

<b>Funds Managed by SWIB</b> December 31, 1998		
Fund	\$ in Millions	% of Total
<b>Wisconsin Retirement System (WRS)</b>	<b>\$55,565</b>	<b>92%</b>
<i>Fixed Trust Fund</i>	48,761	81%
<i>Variable Trust Fund</i>	6,804	11%
<b>State Investment Fund (SIF)*</b>	<b>4,436</b>	<b>7%</b>
<b>Other Funds</b>	<b>571</b>	<b>1%</b>
State Life Insurance Fund	63	
Local Property Insurance Fund	22	
Historical Society Endowment Fund	11	
Patients Compensation Fund	472	
Tuition Trust Fund (EDVEST)	3	
*Excludes WRS Trust Funds		
<b>TOTAL</b>	<b>\$60,573</b>	<b>100%</b>

## Fixed Retirement Trust Fund

With assets of over \$48.7 billion, the Fixed (or balanced) Fund is the largest trust under SWIB's management. Over 440,000 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 assets.

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.

Our January 1999 strategy report to the Legislature discussed investment objectives and asset allocation plans for the Fixed Fund. Our strategy takes a long-term focus, in keeping with the nature of the Fund's liabilities. The following table indicates the allocation of Fixed Fund assets as of December 31, 1998. A complete listing of investments is provided in SWIB's annual financial report.

<b>Fixed Retirement Trust Fund Holdings</b>		
	<b>December 31, 1998</b>	
	\$ in Millions	% of Total
<b>Equities</b>		
Domestic		
<i>Active Portfolios</i>	\$7,556	15%
<i>Quantitative Portfolios</i>	837	2%
<i>Passive Index Funds</i>	10,185	21%
International		
<i>Active Portfolios</i>	5,595	11%
<i>Passive Index Fund</i>	712	2%
Leveraged Buy-Outs	959	2%
Emerging Markets	394	1%
Venture Capital	100	---
<i>Total Equities</i>	\$26,338	54%
<b>Fixed Income</b>		
Public Bonds		
<i>Active Portfolios</i>	\$7,271	15%
<i>Passive Index Fund</i>	3,870	8%
Private Placements	3,105	6%
International/Global Bonds	3,371	7%
Emerging Markets	109	---
<i>Total Fixed Income</i>	\$17,726	36%
<b>Real Estate</b>	\$1,869	4%
<b>Non Traditional</b>	\$746	2%
<b>Cash</b>	\$2,081	4%
<b>TOTAL</b>	\$48,760	100%

## Fund Performance

The basic investment objective for the Fixed Fund is to achieve a long-term rate of return that averages 8.0% per year [3.2% per year in excess of the actuary's assumed national wage rate growth]. An 8.0% annual return is the minimum investment requirement set by the WRS actuary to accumulate the funds needed to pay projected benefits over time.

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: (a) indices which measure the performance of the broader markets for stocks, bonds and other assets (approximately 75% of the benchmark); and (b) the performance achieved by privately managed funds with characteristics similar to SWIB's portfolios (approximately 25% of the benchmark).

Investment strategy for the Fixed Fund has a long-term focus. Therefore, the success of strategies is also evaluated on a long-term basis. The following table compares Fixed Fund returns to its benchmarks over the one-, five- and ten-year periods ending December 31, 1998.

**Fixed Retirement Trust Fund Performance**  
**Annualized Returns For Periods Ending December 31, 1998**

	<u>One Year</u>	<u>Five Years</u>	<u>Ten Years</u>
Fixed Fund Return	14.6%	13.4%	12.9%
Investment Benchmark	15.5	13.7	12.6
Actuarial Benchmark	8.0	8.0	8.0

- The Fixed Fund outperformed the actuarial benchmark for all three time periods.
- On a total return basis, the Fixed Fund beat the investment benchmark for the ten-year period. Two factors primarily lead to performance that was below the one- and five-year benchmarks. First, we are over-weighted in small company stocks. This sector performed poorly in 1998 and our portfolio has an emphasis on technology and biotechnology stocks that were out of favor. Second, the cash position in our non traditional portfolio was increased significantly at mid-year. This detracted from performance as the stock market strongly recovered in the fourth quarter.
- On a risk-adjusted basis, the Fund met its investment benchmark for the five-year period and exceeded the benchmark for the ten-year period, as measured by returns adjusted for volatility.
- The Fixed Fund surpassed the 13.5% average return in 1998 for balanced mutual funds, as reported by Lipper, Inc. The Fixed Fund fell short of the median one-year return of 15.3% for 39 public funds with assets over \$1.0 billion. For the five- and ten-year periods, the Fixed Fund lagged average returns by .2% to .4%. This difference is attributable primarily to the portion of assets allocated to equities, with higher equity allocations producing higher returns.<sup>1</sup>
- SWIB's 1997 total costs of 13 basis points (13 cents per \$100 managed) compares favorably to median cost of 15.2 basis points for a peer group of 11 large public funds. SWIB's costs are also less than the typical cost for funds of similar size and asset mix (14.3 basis points).<sup>2</sup>

<sup>1</sup> Trust Universe Comparison Service (TUCS) data

<sup>2</sup> Cost Effectiveness Measurement, Inc. data

## Portfolio Highlights

Our domestic equities portfolios returned 18.7% in 1998. The market was exceptionally volatile and narrow last year with only 15 stocks providing half of the return for the S&P 500. In addition, the disparity of returns from different sectors of the stock market was unusually large in 1998. While the performance of some large company stocks was exceptional, small company stocks returned -2.6%, as measured by the Russell 2000 index. SWIB invests in a diversified mix of small to large companies.

- Our *large company* ("large-cap") portfolio investments are primarily through an S&P 500 index fund which had a 28.6% return in 1998. SWIB also directly owned stock in all 15 of the companies whose performance accounted for most of the S&P 500 gain. Our actively managed *mid-cap portfolio* had a strong year, posting a return of 10.6% versus 8.8% for its benchmark.
- Our *small company* ("small cap") portfolio returned -3.7% for the year versus -2.3% for its benchmark. Small-cap stocks continued to be out of favor in the market. However, valuation spreads relative to larger company stocks make small company stocks attractive as long-term investments. Historical returns show that over the long run, small-cap stocks yield a higher rate of return. In fact, the periods of under-performance have been of a lesser magnitude than periods of added performance. Since SWIB is a long-term investor, we continue to position ourselves to capture excess small-cap returns when those markets rebound.

As noted in our 1999 strategy report, we are shifting approximately 25% of our internally managed small-cap portfolio to a small-cap index fund. This change will bring our actively managed portfolio to a more optimal size, further diversify our holdings and facilitate rebalancing among asset classes.

- In June 1998, SWIB added two *quantitative domestic equities portfolios*. The management of these portfolios differs from the "fundamental analysis" process SWIB has emphasized for our internal portfolios. Quantitative management uses proprietary computer models to automate the process of evaluating particular stocks. In terms of investment style and portfolio return, it is expected that quantitative management should fall between a fundamental strategy and passive (index) strategy. To manage these new portfolios, SWIB contracted with JP Morgan (JPM) and Grantham Mayo Van Otterloo (GMO). Since inception, JPM's return of 10.5% exceeded its benchmark return of 9.2% while GMO's return of 8.6% slightly trails the 9.2% benchmark.

The 19.2% return for our international equities portfolios was slightly ahead of the 19.1% return of its benchmark. SWIB maintained a strong focus on European stocks and less concentration in Asia. SWIB's portfolios remain ahead of their benchmarks since inception of the international program in 1989. In 1997, SWIB began investing in an index fund that now represents approximately 12% of the international portfolio.

The longer duration of SWIB's fixed income portfolios provided a strategic advantage as interest rates fell in 1998. Our investments in bonds and private placements returned a combined 9.8%, surpassing a 8.7% gain in the Lehman Aggregate Bond Index. Our *core public bonds portfolio* had another strong year, returning 11.1% compared to 10.0% for its benchmark. Our *international fixed income portfolios* returned 11.9% in 1998, surpassing the 11.5% return for the benchmark. The internally managed *global fixed income portfolio* returned 10.3% versus 10.0% for its benchmark. The mandate for the internal and external portfolios is being broadened in 1999 to enable the managers to invest either in domestic or international investments.

The non traditional portfolio was in transition in 1998. Structured to invest opportunistically across asset classes in domestic and foreign markets, this portfolio invests in a wide array of securities, including domestic stocks, government bonds, international and private equity funds in the markets of Eastern Europe, Asia and South America. With the retirement of the Investment Director in January 1999, our intent is to temporarily shift the focus of the portfolio to private equities. We therefore initiated the liquidation of the majority of US

stocks in this portfolio in June. The portfolio was 40% in cash by the end of the fourth quarter, when the US market rebounded. As a result, the portfolio's annual return was 5.0% compared to its benchmark return of 21.7%. On a risk-adjusted basis, however, the portfolio out-performed its benchmark.

**Real estate** investments gained 15.3% for the year as returns from this market continued to improve. Due to the implementation of new long-term strategies, SWIB's return trailed the 16.6% gain for the benchmark. The portfolio is significantly ahead of its benchmark for the five- and ten-year periods. As we reported in January, SWIB has joined with Northwestern Mutual Life (NML) in a new \$500 million commercial real estate investment program. We will have an opportunity to participate in loans originated by NML that meet our due diligence requirements. This approach provides a cost-effective way to extend our resources.

**Cash** investments earned 5.3% in 1997, ahead of the 5.1% gain in the benchmark for short-term assets. These assets are managed in the State Investment Fund. Our portfolio managers anticipated the downturn in interest rates and lengthened the maturity of Fund investments to lock-in a better rate of return for a longer period of time.

## **Risk Management**

A central focus of Fixed Fund performance analysis is the review of the level of risk incurred in earning returns. SWIB is engaged in a multi-year effort to upgrade systems and procedures for measuring and managing investment risk. Our work in this area continues to progress. Our measurement of investment risk for the Fixed Fund currently focuses on the following areas. There has been little change in the levels of risk in these 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. Our annual assessment for 1999 concluded that assets are positioned to meet or exceed the long-term required rate of return. 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.
2. **Volatility.** Less year-to-year fluctuation in Fixed Fund returns helps to stabilize required contributions into the WRS. For the five- and ten-year periods ending December 31, 1998, the volatility of the Fixed Fund was less than that of the benchmark.
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 15% of the Fixed Fund is exposed to foreign currency risk resulting from these holdings. The international portfolio managers make currency hedging decisions. International equity currency risk is further managed through diversification across international regions, economies, sectors and individual investments. The majority of our international fixed income holdings are fully hedged against currency risk.



- *Emerging markets:* Investments in developing countries represent approximately 2% 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 73% 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 in the Fixed Fund improved to \$17.2 million for the year ending December 31, 1998 from losses of \$2.1 million for the year ending December 31, 1997. Appendix A describes the derivatives exposure in this Fund.

## Variable Retirement Trust Fund

About 11% 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. Participants who chose the Variable Fund option accepted a greater degree of risk for the potential of greater long-term investment earnings.

Assets of the Variable Fund were valued at \$6.8 billion as of December 31, 1998. The following table provides a breakdown of current categories of investment within each asset class. A complete listing of each investment held by the Fund is provided in the Board's annual fiscal report.

<b>Variable Trust Fund Holdings</b>		
	<b>December 31, 1998</b>	
	\$ in Millions	% of Total
<b>Equities</b>		
Domestic		
<i>Active Portfolios</i>	\$1,886	28%
<i>Quantitative Portfolio</i>	209	3%
<i>Passive Index Funds</i>	2,768	41%
International		
<i>Active Portfolios</i>	1,393	20%
<i>Passive Index Fund</i>	269	4%
Emerging Markets	98	1%
<i>Total Equities</i>	<u>\$6,623</u>	<u>97%</u>
<b>Cash</b>	\$ 181	3%
<b>TOTAL</b>	<u>\$6,804</u>	<u>100%</u>

### Fund Performance

As is the case for the Fixed Fund, investment strategy and performance measurement for the Variable Fund have a long-term focus. The following table compares Variable Fund returns to its benchmark over the one-, five- and ten-year periods ending December 31, 1998.

**Variable Retirement Trust Fund Performance**  
**Annualized Returns For Periods Ending December 31, 1998**

	<u>One Year</u>	<u>Five Years</u>	<u>Ten Years</u>
Variable Fund Return	17.5%	16.7%	14.5%
Benchmark: S&P 500	28.6	24.1	19.2
Benchmark: Broad Equity*	17.5	17.8	15.7

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

- The Variable Fund outperformed the Fixed Fund for all three time periods.
- The one-year return for the Variable Fund equaled the return for the broad equity benchmark but lagged the benchmark over longer periods on an absolute and risk-adjusted basis. 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 which are not represented in the S&P 500, including international and emerging markets, venture capital and smaller growth stocks. These categories now represent about 54% 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.

Previous comments regarding domestic equities portfolio performance and strategies under the Fixed Fund also apply to the Variable Fund, due to the common holdings of the two funds. Because domestic equities represent a larger percentage of total holdings in the Variable Fund (74%) than in the Fixed Fund (41%), the impact of the strategy changes on the Variable Fund would be expected to have a greater impact on total Fund performance.

In 1998, we upgraded our information systems to enable us have the option to choose a separate investment strategy for the Variable Fund. In April 1999, SWIB Trustees will begin to consider this possibility of strategy changes.

### **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. As is the case for the Fixed Fund, the international portfolio managers make currency hedging decisions. International equity currency risk is further managed through diversification across international regions, economies, sectors and individual investments. The Variable Fund does not have international fixed income holdings.
- *Emerging markets:* Investments in developing countries represent approximately 2% 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:* The unrealized gains/losses from derivative investments in the Variable Fund remained at \$-0- for the year ending December 31, 1998, as it was in 1997. Appendix A describes the derivatives exposure in the Variable Fund.

## 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. Earnings for the State Investment Fund 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, 1998 (excluding WRS trust funds). The following table indicates the average month-end SIF balance and participation in 1998: The \$6.1 billion average balance in 1998 exceeded the \$5.9 billion average balance for 1997.

<b>State Investment Fund Participants</b> Average Month-End Balances for Calendar Year 1998		
Source	Amount (in millions)	Percent of Total
Local Government Investment Pool	\$2,938	48%
State funds	2,022	33%
WRS trust funds	1,143	19%
<b>TOTAL</b>	<b>\$6,103</b>	<b>100%</b>

The investment goals for SIF are, first and foremost, safety of principal; second, liquidity; and finally, rate of return. The following table shows the actual allocation of SIF assets as of December 31, 1998. A complete listing of each SIF investment is included in the Board's annual fiscal report.

<b>State Investment Fund Holdings</b>		
<b>Asset Type</b>	<b>December 31, 1998</b>	
	Amount* (In Millions)	Percent of Total
Cash	\$-0-	0%
US Government:		
Treasury Bills	-0-	---
Notes and Bonds	344	5.3
Agencies	4,831	74.5
Open Repurchase Agreements	485	7.5
Asset-Backed Securities	40	.6
Mortgage-Backed Securities	5	.1
Yankee/Euro Dollar Issues	0	---
Certificates of Deposit & Bankers Acceptance	227	3.5
Commercial Paper and Corporate Notes	551	8.5
<b>TOTAL</b>	<b>\$6,483</b>	<b>100%</b>

\* Total value exceeds participant holdings due to check float and timing of postings.

### **Fund Performance**

The benchmark for measuring SIF investment performance is an equally weighted blend of:

1. The interest rates for 90-day U.S. Treasury bills and 30-day certificates of deposit plus the performance of the Merrill Lynch One- to Three-Year Government Bond Index; and
2. The performance of over 65 money market funds (as measured by the Donoghue Institutional Money Market Index) plus a group of selected money management funds.

The following table compares the performance of the SIF to its investment benchmark for the one-, five- and ten-year periods ending December 31, 1998.

<b>State Investment Fund Performance</b>			
<i>Annualized For Periods Ending December 31, 1998</i>			
	<u>One Year</u>	<u>Five Years</u>	<u>Ten Years</u>
State Investment Fund Return	5.3%	5.2%	6.0%
Investment Benchmark	5.1	5.1	5.4

- The State Investment Fund outperformed its benchmark for all three time periods.
- Short-term rates dropped almost 1% in 1998, with most of the decline coming in the second half of the year. As the year unfolded, economic troubles spread from Asia to Russia to South America. In addition, Japan had its most severe economic problems since World War II. In an effort to minimize the impact of the world financial crisis on the U.S. economy, the Federal Reserve lowered interest rates. This combined with "flight to quality" investors, who bought U.S. Treasury securities to avoid the world's instability, drove interest rates to new lows in late 1998.

The SIF took two major steps in anticipation of these events. First, assets were shifted into U.S. Government and Agency securities, increasing from 63% of the portfolio on December 31, 1997 to 87% on December 31, 1998. Secondly, we increased the average maturity on the fund from 50 days in May to 80 days in June. By lengthening the average maturity, higher rates were locked in for a longer period of time. This strategy worked well as rates fell in the second half of the year.

- For the year ending December 31, 1997, SIF's 5.3% return ranked eighth out of 217 government funds in the IBC/Donoghue Government Index and 238th out of 897 money market funds in the IBC/Donoghue All Taxable Money Market Index.

### **Risk Assessment**

Risk assessment 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 87% of the Fund is invested in U.S. 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, 1998 was 80 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 68% of the fund was invested in securities maturing within 90 days to meet this contingency.
3. **Interest Rate Sensitivity**. Interest rates for 71% 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, 1997.

For the full five-year period including fiscal years ending June 30, 1997 through 2001, SWIB plans to make new investments in the state of between \$2.2 and \$3.7 billion. For the two-year period ending June 30, 1998, SWIB's new investments in Wisconsin totaled over \$2 billion. New investments made in Wisconsin companies for the year ending June 30, 1998 are presented in Appendix B. The companies included are either headquartered in Wisconsin or easily identified as having a significant portion of their business activities in Wisconsin.

The state's Department of Commerce advises SWIB as to the types of businesses in the state that have high economic development potential. The Secretary of Commerce also provides comments on SWIB's performance for the biennial reporting period. The Department of Commerce encouraged SWIB to continue to retain a Wisconsin investment focus, particularly in our Private Placements and Wisconsin certificate of deposit programs. The report also suggested that SWIB explore investments in Wisconsin firms with strong export potential.

As stated, the reporting law focuses attention on new investments—planned and made. However, as noted in the following table, SWIB continues its practice of reporting on all investments in Wisconsin made to date, as well as those in the past year.

To estimate the dollar volume of investments made by SWIB in Wisconsin, two categories are defined. The first is investments in companies that are headquartered in Wisconsin. The second is investments in companies that employ 20 or more people in the state. Clearly, these two categories constitute a narrow definition of a Wisconsin investment. There are many companies that contribute significantly to the economic well being of the state that will be excluded on the basis of the criteria established. For example, some companies which are large purchasers of Wisconsin products or which supply important services to Wisconsin are excluded. Our reason for excluding them is not that their contribution is unimportant, but rather that identifying all of those companies that qualify under broader definitions would be impossible.

The table that follows shows the dollar volume of all investments in Wisconsin held by SWIB at the end of fiscal year 1998, classified by type of investment.

## Summary of SWIB Investments in Wisconsin

June 30, 1998

(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)	\$117.5	\$1,508.8	\$1,626.3
Liquid Assets (2)	838.3	504.5	1,342.8
Public Equities (1)	848.8	2,565.4	3,414.2
Real Estate (1)	75.4	0.2	75.6
Private Placements (1)(3)	495.8	1,041.7	1,537.5
<b>Total</b>	<u>\$2,375.8</u>	<u>\$5,620.6</u>	<u>\$7,996.4</u>

(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 1998, \$1.3 million, or 5.4% of the \$23.4 million total listed and equivalent over-the-counter commission dollars, was paid to Wisconsin brokerage firms. In addition, approximately \$844,400 was paid to Wisconsin brokerage firms for initial public offerings.

We are developing an initiative to invest up to \$50 million in biotechnology start-up companies in Wisconsin and the Midwest. Under the approach we are considering, SWIB would invest in one or more venture capital funds with a biotechnology focus. SWIB has considerable experience in making venture capital fund investments and we are very familiar with the biotechnology area. This initiative has the potential to earn attractive returns and spur development of a leading edge industry in Wisconsin.

## Appendix A

### 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 approve 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. The market value of these instruments is offset by the value of the underlying securities that are being hedged. As of December 31, 1998, 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 four equity options as of December 31, 1998.
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 counter-parties 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, 1998 was approximately \$48.5 million. Net realized appreciation for these contracts was approximately \$2.4 million.

The following table compares the market value of derivative positions in the Fixed Fund on December 31, 1997 to the values as of December 31, 1998. This table indicates that the unrealized gains and losses from derivative investments improved from losses of \$2.1 million in 1997 to a \$17.2 million gain in 1998.

<b>Derivative Investment Activities</b>		
<b>Fixed Retirement Trust Fund</b>		
	12/31/97	12/31/98
	Market Value	Market Value
	<u>(In Millions)</u>	<u>(In Millions)</u>
<b>Hedging Investments</b>		
Foreign Currency Forward Contracts	\$ 57.2	\$ 27.6
Market Gains/Losses on Underlying Securities	<u>(57.2)</u>	<u>(27.6)</u>
Net	\$ -0-	\$ -0-
<b>Other Derivative Investments</b>		
Interest Rate Swap Agreements	\$ -0-	\$ -0-
<b>Options</b>		
Written Options Cost	(33.2)	(20.5)
Less Market Value of Written Options	<u>14.4</u>	<u>.8</u>
Net	(18.8)	(19.7)
Purchased Options Cost	(43.9)	(44.1)
Less Market Value of Purchased Options	<u>60.6</u>	<u>81.0</u>
Net	\$ 16.7	\$ 36.9
<b>Net Unrealized Gains/(Losses)</b>	<u>\$ (2.1)</u>	<u>\$ 17.2</u>
<b>Futures Contracts</b>		
Market Value of Outstanding Contracts	-0-	48.5
Purchase price	<u>-0-</u>	<u>46.1</u>
Net Realized Appreciation on Open Contracts	<u>\$ -0-</u>	<u>\$ 2.4</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, 1997. This table indicates that the unrealized losses on derivative remained at \$-0-. The market value of open futures contracts held in the Variable Fund as of December 31, 1998 was approximately \$12.4 million. Net realized appreciation for these contracts was approximately \$500,000.

<b>Derivative Investment Activities</b>		
<b>Variable Retirement Trust Fund</b>		
	12/31/97	12/31/98
	Market Value	Market Value
	<u>(In Millions)</u>	<u>(In Millions)</u>
<b>Hedging Investments</b>		
Foreign Currency Forward Contracts	\$ 3.3	\$ 3.8
Market Gains/Losses on Underlying Securities	<u>(3.3)</u>	<u>(3.8)</u>
Net	\$ -0-	\$ -0-
<b>Options</b>		
Purchased Options Cost	\$ -0-	-0-
Less Market Value of Purchased Options	<u>-0-</u>	<u>-0-</u>
Net	\$ -0-	\$ -0-
<b>Net Unrealized Losses</b>	<u>\$ -0-</u>	<u>\$ -0-</u>
<b>Futures Contracts</b>		
Market Value of Outstanding Contracts	-0-	12.4
Purchase price	<u>-0-</u>	<u>11.9</u>
Net Realized Appreciation on Open Contracts	<u>\$ -0-</u>	<u>\$ .5</u>

## 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).

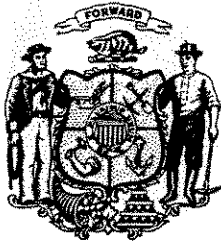
Payments made to amortize the derivatives loss resulted in a reduction of 0.34% in Fund earnings in 1998. This experience continues to closely match the effect projected in March 1995. As of December 31, the unamortized balance on the \$95 million was \$42.6 million.

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, 1998, the unamortized balance on these investments was \$42.6 million
2. **Interest rate swaps.** The fund no longer holds any interest rate swaps or bonds with interest rate swaps attached.



# State of Wisconsin Investment Board

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May 15, 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 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 April 8, 1999 the Board approved modifications to the Investment Policy Guidelines for the Global Fixed Income and International Equity portfolios of the Wisconsin Retirement System (WRS) Trust Funds. Attached are revised investment guidelines which replace, in their entirety, the previous guidelines for the Global Fixed Income portfolio. Also attached are the modified guidelines for the International Equities portfolio. Additions to the previous International Equities guidelines are shaded and deletions are the stricken material.

## Global Fixed Income Guideline Changes

SWIB currently has five portfolios with mandates designed to access developed non-U.S. fixed income markets: one internal Global Opportunistic Fixed Income portfolio and four externally managed International Fixed Income Portfolios. Although all five portfolios had identical mandates at the inception of the international fixed income program, the internal and external managers investment guidelines had been modified over the years, resulting in substantially different mandates.

Prior to the guideline changes adopted at the April Board meeting, the internally managed Global portfolio was primarily a U.S. Treasury portfolio which had been given the authority to invest in non-U.S. government debt markets on a opportunistic basis. Its benchmark was a U.S. Treasury benchmark, reflecting its primary mandate. In contrast, the externally managed International portfolios were 100% non-U.S. in nature, with non-U.S. hedged benchmarks. Comparability and the potential for interaction among internal and external managers regarding portfolio strategies was diminished under this structure.

European bond markets have been undergoing a period of change. Historically, European corporations have had close relations with banks and almost exclusively went to them to borrow money. Today, European companies are increasingly entering the bond market as a source of funds. This creates a new

opportunity for international fixed income managers to make attractive investments. In order to keep pace with the growing opportunities in these markets, the external public fixed income portfolios were given the authority to invest in non-U.S. corporate debt in 1998.

Recent strategic planning by SWIB staff and trustees recognized the globalization of financial markets. We expect this trend to intensify. We recognize that it is therefore important to enhance and expand our expertise to follow cross-border events if we are to meet our fiduciary responsibility. We have identified the need to redirect portfolio management philosophies across asset classes to a more global focus in the future.

In order to correct inefficiencies and to enact a global strategy which is more commonly accepted in the investment industry, a uniform global mandate was established for the internal Global and external International Fixed Income portfolios. Fully global developed markets, meaning U.S. and non-U.S., are now accessed at the managers' discretion. Accordingly, global benchmarks, including U.S. and non-U.S. fixed income assets, have been adopted. All portfolios have been given the authority to hold non-U.S. investment-grade corporate debt instruments, as well as a small allocation to emerging market debt.

In addition to placing an emphasis on global markets, the investment guidelines were modified to clarify the portfolio's allowable currency hedging activity. Industry-standard unhedged international benchmarks were chosen to reflect the global mandate. The use of currency hedging will now be optional and permissible only through traditional forward and exchange-traded instruments. The modified guidelines have the intent to permit the management of currency exposure and to benefit from a potential appreciation of foreign currencies against the U.S. dollar, should that occur.

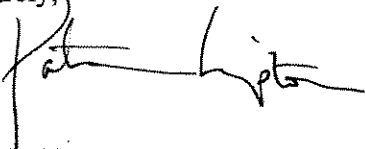
While each portfolio is expected to shift its investments to a more global focus, with a mix of U.S. and non-U.S. securities, it is anticipated that the aggregate exposure to non-U.S. instruments will not change substantially with these guideline modifications.

#### International Equities Guideline Changes

The International Equities guidelines were modified to include the same language regarding allowable currency hedging activity as adopted for the Global Fixed Income portfolio. The language does not materially modify the previous currency hedging activity for the portfolio. The purpose of the change is to apply consistent hedging policies across asset classes.

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

Sincerely,



Patricia Lipton  
Executive Director

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

## GLOBAL BOND PORTFOLIO

**Description:** The GLOBAL Bond Portfolio invests in fixed income obligations of governments, government-related entities and corporations around the world, including the U.S. Only countries rated "Free" or "Partly Free" by Freedom House Index are eligible.

**Portfolio Purpose and Objectives:** The portfolio is designed to add incremental return over the domestic fixed income market, through investment in the fixed income securities of various sovereign, government agency, supra-national issuers or corporations around the world, in addition to the U.S. The portfolio is intended to access the large and expanding universe of global fixed income investments. Political and foreign currency risk which may result will be diversified by geography. In addition, the portfolio manager may hedge foreign currency exposures as they deem appropriate. Risk and return of the portfolio are compared regularly with a benchmark established and reviewed annually by the SWIB Benchmark Committee.

### CRITERIA APPROVED FOR INVESTMENTS

Investments in the Global OPPORTUNISTIC Portfolio will be managed within the following guidelines:

1. Any investment purchased for the portfolio may be sold.
2. A security may be purchased if it is issued or fully guaranteed by a corporation, government, governmental subdivision or agency or supranational entity of any sovereign state or territory listed as "Free" or "Partly Free" in the most recent version of the Freedom House Index.
3. Total exposure to corporate debt may not exceed 20% of the Fair Market Value of the Assets at the time corporate debt is purchased. No more than 5% of the Assets may be invested in any one company.
4. No more than 10% of the portfolio may be invested in emerging market debt at the time of purchase.
5. Short-term investments may be purchased if they are issued either by the governmental entities described above or by banks actually rated at least A or equivalent.
6. Securities other than emerging market debt issued by the governmental entities described above must have a minimum local currency rating of A- or better or have an implied rating of A- or better at the time of purchase. An implied A- rating would be a rating based on comparable rating standards and criteria to A-, used by internationally recognized credit rating agencies. Another type of implied rating would be where the individual sovereign security was not rated but the sovereign issuer itself carried a rating of A- or greater. Where there are two ratings which differ, the lower rating shall apply.

7. Securities issued by a corporation must have a minimum rating of BBB- or better at the time of purchase. The rating must come from internationally recognized credit rating agencies. Where there are two ratings which differ, the lower rating shall apply.
8. Notwithstanding the foregoing, the overall portfolio must carry a minimum weighted average rating of A-.
9. Make any other legal investment that is specifically approved by the Board.

#### **DERIVATIVES AUTHORITY**

Currency and interest rate exposure management is permitted but not required. Interest rate exposure management is permitted only through the use of exchange-traded interest rate instruments. Currency exposure management is permitted through the use of exchange-traded currency instruments, and through the use of spot and forward contracts in foreign currencies, provided the issuer or counter-party is a recognized exchange or is a bank or broker dealer with an actual credit rating of at least: (1) 'B/C' or better from Thomson Bankwatch (Keefe); (2) 'A1/P1' or better on short-term debt from S&P or Moody's; (3) 'A' or better on long-term debt from S&P or Moody's. Direct currency hedging is permitted to directly hedge currency exposure back to the U.S. dollar. Cross-currency exposure management to transfer out of an exposed currency and into a benchmark currency is permitted. Total effective currency exposure from held securities and currency management activities shall not exceed the aggregate value of security holdings. No derivatives-based currency management of U.S. or non-U.S. cash and cash equivalent positions is permitted. All other derivative investment strategies must be reviewed and approved by the SWIB Risk Management Committee.

Note: Outside fixed income managers operate under separate authority. The same changes will be made to their guidelines.

## INTERNATIONAL EQUITIES PORTFOLIO

**Description:** The International Equities portfolio is constructed of publicly traded non-U.S. equity securities of primarily non-emerging market countries, including ADR's, and is broadly diversified across both geography and industry groups. The portfolio was established in 1989 as part of the Board's International Investment Program. This portfolio (the internal portfolio) was created in conjunction with several other international equities portfolios which are managed for SWIB by outside managers under separate, contractual arrangements. The investment authority for such managers parallels the authority set forth herein.

**Portfolio Purpose and Objectives:** The portfolio is intended to provide added return and diversification through exposure to non-U.S. markets and economies. The portfolio is intended to access the large and expanding universe of global investment opportunities. To minimize political and foreign currency risk, the portfolio is expected to be widely diversified both geographically and by industry group. Due to the long-term nature of the portfolio and its geographical diversification, foreign currency exposure is generally expected to be unhedged. In special circumstances, the portfolio manager may hedge foreign currency exposure to protect US\$ value of investments. Risk and return of the INTERNATIONAL portfolio are compared regularly with the benchmark comprised of both passive indices and peer group components as established by the SWIB Benchmark Committee.

### CRITERIA APPROVED FOR INVESTMENTS

Investments in the International Equities Portfolio will be managed within the following guidelines:

1. Any investment purchased for the portfolio may be sold.
2. Purchase any legal, publicly-traded equity security, with a maximum of 10% of the portfolio in U.S. equity securities (preferred or common stock, warrant, ADR or ADS, right or convertible issue) of any company as follows:
  - a. Consistent with any market capitalization directives expressed in the Portfolio Purpose and Objectives section above, the issuer of such equity security has a market capitalization of \$100 million or greater and has been publicly traded for at least 24 months.
  - b. For the equity securities of issuers with less than \$100 million in market capitalization or which have traded for less than 24 months, such securities may be purchased provided a full investment analysis and report, in accord with industry standards, is prepared by SWIB staff prior to purchase.
3. Eligible equities must be issued by entities incorporated in or organized under the laws of any sovereign state or territory listed as "Free" or "Partly Free" in the most recent version of the Freedom House Index (other than the USA).



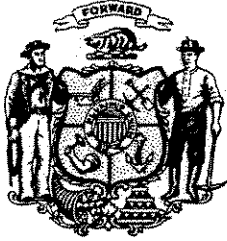
4. Investments in countries defined as emerging markets by the International Finance Corporation (IFC), a member of the World Bank Group, are limited to no more than 10% of the portfolio.
5. No more than 10% of the total assets of the portfolio may be invested in the equity securities of any single issuer.
6. No more than 10% of a class of equity securities of any issuer may be purchased. This 10% limit applies to SWIB's aggregate holdings as measured by the holdings (if any) in SWIB's internal domestic and international portfolios combined with holdings (if any) in externally managed SWIB international equities portfolios.
7. Make any other legal investment that is specifically approved by the Board.

#### **DERIVATIVES AUTHORITY**

~~Subject to review and approval of the SWIB Risk Management/Derivatives Committee, for the purpose of hedging foreign currency exchange rate risks, the portfolio may enter into forward foreign exchange contracts and foreign currency futures contracts. Substitute currency hedges and forward currency cross trades are permitted. All other derivative transactions are prohibited unless first reviewed and approved by the Risk/Derivatives Committee and Trustees.~~

Currency exposure management is permitted (but not required) through the use of exchange-traded currency instruments, and through the use of spot and forward contracts in foreign currencies, provided the issuer or counter-party is a recognized exchange or is a bank or broker dealer with an actual credit rating of at least: (1) 'B/C' or better from Thomson Bankwatch (Keefe); (2) 'A1/P1' or better on short-term debt from S&P or Moody's; or (3) 'A' or better on long-term debt from S&P or Moody's. Direct currency hedging is permitted to directly hedge currency exposure back to the U.S. dollar. Cross-currency exposure management to transfer out of an exposed currency and into a benchmark currency is permitted. Total effective currency exposure from held securities and currency management activities shall not exceed the aggregate value of security holdings. No derivatives-based currency management of U.S. or non-U.S. cash and cash equivalent positions is permitted. All other derivative investment strategies must be reviewed and approved by the SWIB Risk Management Committee.

Note: Outside international managers operate under separate authority. The same changes will be made in their guidelines.



## State of Wisconsin Investment Board

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June 21, 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 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 June 9, 1999 the Board approved modifications to the Investment Policy Guidelines for the Wisconsin Retirement System (WRS) Trust Funds. Attached are the modified guidelines. Additions to the previous guidelines are shaded and deletions are the stricken material.

### Formation of Alternative Investments Committee

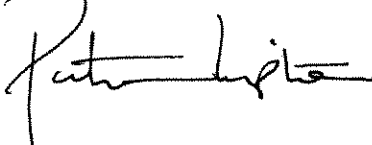
SWIB currently has four portfolios with mandates designed to include private investment programs: the non traditional portfolio, the private placements core portfolio, the leveraged buy-out portfolio and the venture capital portfolio.

Previously, private investment transactions were brought to the full Board for review and approval. In order to address inefficiencies in this process, the Board adopted policy changes that created an Alternative Investments Committee. The purpose of this Committee is to develop, administer and monitor policies and procedures for our private investment programs. The Committee will function as a panel of review for all private investment proposals and will report all private transaction activity to the full Board. We have used a similar model for real estate investments and it has been effective.

The attached guideline changes reflect the creation of this committee, detailing its function with respect to the alternative investment portfolios. It is not anticipated that these changes will have any effect on the investment structure of the underlying portfolios.

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

Sincerely,



Patricia Lipton  
Executive Director

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

## NON-TRADITIONAL INVESTMENTS

**Description:** The Non-Traditional Portfolio represents a broadly diversified portfolio, invested in a wide variety of "non-traditional" investments which may not fall within current parameters or traditional SWIB asset classes. The portfolio is intended to be global in nature and focus on unconventional investment instruments which have been undervalued due to complex or novel structuring, indeterminate risk exposures and other factors creating market inefficiencies. It is anticipated that the portfolios will be invested in both public and private equities and fixed income investments, partnership and other fund investments and a variety of structured and derivative investments.

**Portfolio Purpose and Objective:** The portfolio is expected to improve SWIB overall performance through enhanced returns and diminished volatility for SWIB funds. The Non-Traditional asset class will be limited to a small percentage of the total Fixed Retirement Investment Trust assets.

### A. SPECIAL OPPORTUNITIES PORTFOLIO - "EQUITY" (SOE)

#### CRITERIA APPROVED FOR INVESTMENTS

Investments in the Special Opportunities Portfolio will be managed within the following guidelines:

1. Any investment purchased for the portfolio may be sold.
2. The portfolio shall have an EQUITY investment focus.
3. Subject to the limitations below, purchase any legal, U.S. or non-U.S., public or privately traded, equity security (including, common stock, preferred stock, preference stock, convertible issues, warrants, derivative equivalent equity securities, ADR's); sovereign, agency or supra-national bonds of any sovereign state or territory listed as "free" or "partly free" in the most recent version of the Freedom House Index (including the U.S.); corporate bonds, or other credit/fixed income obligations denominated in the currency of any country; or any publicly traded investment "fund" which invests in the above investments.
4. When aggregated with any other SWIB portfolios, up to 10% of the issued and outstanding shares of any class of publicly traded equity of a company may be purchased provided that the market value of the holding at the time of the last purchase does not exceed 10% of the sum of (1) the market value of all investments owned by the non-traditional portfolios, and (2) any dollars allocated to the non-traditional portfolios but not yet invested.
5. Purchase units of limited partnerships or other investment funds which trade on an exchange or over-the-counter.
6. Subject to review and approval of the SWIB Risk Management Committee, purchase and sell any futures or options contract, on a fully margined basis, provided that the underlying

stock, bond, currency, or other commodity equivalent value of the future plus any option premium at risk will not exceed 20% of the value of the special opportunities portfolio investments plus allocated but uninvested dollars. Futures investments may be used on a non-fully margined basis for arbitrage purposes and hedging transactions.

7. Use of interest rate, index, currency or other SWAPS to create a synthetic security or otherwise replicate or hedge the return on of a security or particular group of securities. Such transactions shall be entered into with banks or other recognized SWAP dealers (swap counterparties) which are rated at least "B/C" by Thompson Bankwatch (Keefe); or "A-1"/"A" by S&P; or "P-1"/"A" by Moody's. All dealers must be recognized by and report to the Federal Reserve Bank.
8. At least 50% of the market value of the special opportunities portfolio must be in readily marketable investments at the time any investment is made. Readily marketable shall be defined as either publicly tradable; readily tradable to other institutional investors under an exemption from registration; or other legal transfers permitted by the securities regulations of the relevant jurisdiction.
9. Concentration of investments within a single issuer shall be limited to no more than 10% of the market value of any special opportunities portfolio, provided however that non-G7\* sovereign and supra-national issuers shall be limited to 25%. There shall be no limit on G7\* sovereign issues.
10. Except as provided in this paragraph below, the Investment Director must obtain Trustee ~~Alternative Investments Committee~~ approval for privately placed investment funds, direct loans to private companies, any "leveraged" investments or investments which exceed the limits specified above. Rule 144A private placements may be purchased in an amount of up to 25% of the portfolio value without Trustee ~~Committee~~ approval.
11. No more than 33% of the market value of the portfolio may be invested in public or private investments in emerging markets as defined by the International Finance Corporation (IFC). Investment funds which anticipate investing more than 50% of the fund's capital in emerging markets shall be included in the above limit.
12. Make any other legal investment that is specifically approved by the Board.

## PRIVATE PLACEMENTS

### A. PRIVATE PLACEMENT PORTFOLIO

**DESCRIPTION.** The Private Placement Core Portfolio consists primarily of fixed income investments generally made outside the public securities markets to public and private entities. The investments are negotiated either directly between the borrower and SWIB, or between the borrower and SWIB as a member of a lending group. The investments are intermediate to long-term in maturity, may be secured or unsecured depending on the underlying credit, and may be made where the credit is based upon a guarantor or lessee of real or personal property, or other forms of credit enhancement.

Where the credit or transaction structure does not meet the criteria to place the investment under the approved securities, or the transaction would move the portfolio outside policy parameters, a recommendation for action is prepared by designated Division staff. The recommendation is subject to established procedures for review and approval by the Board of Trustees ~~Alternative~~ ~~Investments Committee~~.

Throughout these investment policies, "investment grade" means BBB- or better. "Non-investment grade" means BB or less.

**PORTFOLIO PURPOSE AND OBJECTIVES.** The Private Placement Core Portfolio invests Fixed Trust Funds in fixed rate intermediate term corporate debt instruments. These investments have specifically negotiated repayment terms of mutual benefit to the lender and borrower. The investments are significantly less liquid than comparable public instruments but are consistent with SWIB's long-term investment strategy. They generally carry a higher rate of return due to reduced liquidity, complex structuring and/or national credit stature and history. The loans generally provide for the repayment of principal over the life of the loan rather than entirely at maturity. This helps to reduce interest rate risk. Risk and return of the portfolio are compared regularly with the benchmark comprised of both passive indices and peer group components as established by the SWIB Benchmark Committee.

### CRITERIA APPROVED FOR INVESTMENTS

Investments in the Private Placements Portfolio will be managed within the following guidelines:

1. Any investment purchased for the portfolio may be sold.
2. Purchase investments previously approved by the Board ~~Alternative Investments Committee~~ or investments which comply with the following criteria:
  - a. Bonds, Debentures, Notes, Investment Trust Certificates, Mortgages, or similar credit instruments must be payable in U.S. dollars and:

- i. Each issue purchased must be from an issuer whose bonds or private placements have been rated by a national rating agency and the most recent rating shall apply. Instruments of the United States, its departments, agencies and corporations created by and regulated under an Act of Congress are exempt from rating and may be purchased up to the limits imposed by cash allocation or any statutory constraints.
- ii. No more than the applicable percentage of the sum of aggregate holdings of the public bond and private placement portfolios, measured at par value, plus cash at any point in time may be purchased:

In any U.S. or Canadian Company:

<u>Rating</u>	<u>Percent</u>
AAA	3%
AA	2%
A	1%
BAA or BBB	0.5%

- iii. Any individual issue of debt securities, the principal and interest of which is guaranteed by the full faith and credit of the United States Government, shall not exceed 5% (measured by par value) of the fund's total cash and invested assets. All other single issues of debt securities shall not exceed 1% of total cash and invested assets.
  - iv. Aggregate holdings (measured by par value) of debt securities of issuers in any single industry shall not exceed 15% of the Fund's total cash and invested assets.
  - v. No more than ten percent (10%) of the portfolio may be invested in non-U.S./non-Canadian issues. Such issues must be U.S. dollar denominated and be rated at least investment grade by a national rating agency.
  - vi. There shall be no limit on the aggregate amount of debt securities where the principal and interest is payable by or guaranteed by the full faith and credit of the United States government.
- b. Approved investments must be reported to the Board at the next following Board meeting.
3. Prior to funding an investment where real property is a material component, the property shall be evaluated for the presence of environmental or code compliance problems. Where

material problems are present, funding shall not occur until an assessment has been conducted and the noncompliance has been corrected, and an adequate remediation program is in place or other provisions have been made to address the liability.

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

## **B. LEVERAGED BUY-OUT PORTFOLIO**

The Leveraged Buy-out Portfolio consists of interests in leveraged buy-out funds. LBO funds can be limited to debt, equity or both of the companies in which the fund invests. Typically, these constitute limited partnership interests, though the corporate form of ownership may also be utilized. The limited partnership interests may be under a master limited partnership which does the actual leveraged buy-outs, or under limited partnerships set up for each buy-out with a separate commitment agreement providing for the funding.

### **CRITERIA APPROVED FOR INVESTMENTS**

Investments in the Leveraged Buy-Out Portfolio will be managed within the following guidelines:

1. No more than 20% of the combined value of the Leveraged Buy-out Portfolio and the Venture Capital Partnerships Portfolio may be invested in non-U.S. investments. Only such investment funds which anticipate investing less than 50% of such fund's capital in emerging markets as defined by the International Finance Corporation (IFC) may be purchased.
2. All proposed leveraged buy-out funds and direct private investments must be submitted to the Board ~~Alternative Investments Committee~~ for approval prior to commitment.
3. Make any other legal investment that is specifically approved by the Board.

## **C. VENTURE CAPITAL PARTNERSHIPS AND CORPORATIONS PORTFOLIO**

The Venture Capital Portfolio consists of an allocation for investment in venture capital partnerships and corporations. The venture capital partnerships and corporations, in turn, invest in various stages of a new company's development, generally prior to a public offering of the company's stock. The portfolio is expected to have a higher number of failed investments in the partnerships or corporations, while being offset by a higher number of companies with major successes than would be found in companies whose stock is publicly traded.

### **CRITERIA APPROVED FOR INVESTMENTS**

Investments in the Venture/Capital Portfolio will be managed within the following guidelines:



1. No more than 20% of the combined value of the Leveraged Buy-out Portfolio and the Venture Capital Partnerships Portfolio may be invested in non-U.S. investments. Only such investment funds, which anticipate investing less than 50% of such fund's capital in emerging markets as defined by the International Finance Corporation (IFC), may be purchased.
2. All proposed investments in venture capital partnerships and corporations and direct private investment must be submitted to the Board Alternative Investments Committee for approval.
3. Make any other legal investment that is specifically approved by the Board.

#### **D. SMALL INVESTMENT POOL**

The Small Investment Pool was established as a limited pool to facilitate prompt turnaround on investment decisions involving certain small investments in portfolio funds, in existing Wisconsin portfolio companies or in new funds. Potential investment returns must reflect the level of risk involved and investments must meet the same standards applied to other private placement loans, investments or funds of the type being made. Approved investments must be reported to the Board at the next following meeting.

#### **CRITERIA APPROVED FOR INVESTMENTS**

Investments in the Small Investment Pool will be managed within the following guidelines:

1. Any investment purchased for the Small Investment Pool may be sold.
2. Make debt or equity investments in portfolio funds, in Wisconsin-related portfolio companies or in new funds within the following parameters:
  - a. Size: minimum of \$100,000 and maximum of \$3,000,000 per investment.
  - b. Type of investments:
    - i. Seed capital funds with a stated policy of investing at least 80% of funds in Wisconsin-based companies.
    - ii. Venture capital funds which seek out companies that have growth potential or invest in troubled companies in turnaround situations or post-bankruptcy restructuring.
    - iii. Leveraged buy-out funds that have a stated policy of investing in non-hostile transactions where there is a minimum of 25% equity.

- iv. Companies in which SWIB has an outstanding private placement loan and which rank in the Board's highest category of credit quality compared to other outstanding private placements.
3. Direct investments in new companies may not be made from the pool.
4. Each pending investment must be reported to the Board in the Monthly Pipeline Report or otherwise in writing prior to its approval.
5. Make any other legal investment that is specifically approved by the Board.

#### **E. DERIVATIVES AUTHORITY**

All derivative strategies must be reviewed and recommended by the Risk/Derivatives Committee and approved by the Trustees ~~Alternative Investments Committee~~.

#### **F. MATERIAL CHANGES**

The Private Placement Investment Director or Assistant Investment Director, with the concurrence of the Executive Director or Assistant Executive Director, may modify or waive provisions in existing investment agreements, provided that material changes to investment terms originally approved by or reported to the Board may not be voluntarily made without prior approval of the Board ~~Alternative Investments Committee~~. A material change shall be interpreted to include the following, whenever the action involves the lesser of \$1 million or 10% of SWIB's original investment:

1. Forgiveness of debt;
2. Extension of a maturity or payment date by more than two years, or an extension of 6 months if interest does not accrue on the full amount during the deferral;
3. Conversion of debt to equity;
4. Release of co-obligors or guarantors;
5. Reduction of an interest rate;
6. Release of collateral; or
7. Subordination or other lowering of SWIB's position in the capital structure.