



# Thrift Savings Plan

# Guide to TSP Investments

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Federal Retirement  
Thrift Investment Board

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# Introduction

The Thrift Savings Plan (TSP) is a retirement savings and investment plan for Federal employees. Congress established the TSP in the Federal Employees' Retirement System Act of 1986. Participation in the TSP was extended to members of the uniformed services in the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001. The purpose of the TSP is to provide retirement income. It offers Federal employees, including members of the uniformed services, the same types of savings and tax benefits that many private-sector corporations offer their employees under so-called "401(k) plans."

In the TSP, as in most similar retirement savings plans, the responsibility for choosing among investment options rests with each participant. The investment choices you make will most likely have a significant effect on the income available to you in retirement.

The Federal Retirement Thrift Investment Board, which administers the TSP, cannot give personal investment advice. However, this booklet can help you with your TSP investment decisions by providing information about investment approaches, the TSP investment funds, and how the funds are administered.

The best place to start learning about TSP investments is the *Summary of the Thrift Savings Plan for Federal Employees* or the *Summary of the Thrift Savings Plan for the Uniformed Services*. The Plan Summary is available from your personnel office or service TSP representative and can also be downloaded and printed from the TSP Web site ([www.tsp.gov](http://www.tsp.gov)). You should read the Plan Summary before making any TSP investment decisions.

This booklet is intended for TSP participants who have read the Plan Summary but want more information on the TSP investment options and TSP investment operations and procedures. The booklet has three sections, five appendices, and a glossary. The first section discusses long-term investment approaches and techniques as well as historical performance of TSP investment funds and the benchmarks which the TSP investment funds track. Additional information about the performance of the TSP investment funds can be found in the appendices as well as on the TSP Web site at [www.tsp.gov](http://www.tsp.gov). The second section discusses the composition and management of the five TSP investment funds: the Government Securities Investment (G) Fund, the Fixed Income Index Investment (F) Fund, the Common Stock Index Investment (C) Fund, the Small Capitalization Stock Index Investment (S) Fund, and the International Stock Index Investment (I) Fund. It also describes the components of earnings of the TSP funds, TSP administrative expenses, and sources of investment performance information. The third section describes the operations of the TSP funds and the processes for making investment allocations. The appendices furnish certain TSP statistical and computational information, as well as certain TSP Fact Sheets. The glossary contains definitions of investment and financial terms used throughout the booklet.

The information in this booklet was updated as of December 31, 2002. More recent investment performance information is contained in the *TSP Highlights* mailed with your participant statement. In addition, you can get the most recent data for the five funds on the TSP Web site at [www.tsp.gov](http://www.tsp.gov) and on the ThriftLine at (504) 255-8777.

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# I. Investment Considerations and Approaches

## Investment Considerations

To develop an investment approach for your TSP account, you should consider several factors: your investment objective, your time horizon, your comfort with or aversion to risk, your level of desire for diversification, the potential returns of your investments, and the effects of inflation and taxes. All of these factors will affect the decisions you make about investing your TSP account. These factors, along with investment techniques that you can use to manage your account, are discussed below. While these factors and techniques also apply to your investment decisions outside the TSP, the discussion in this booklet is limited to TSP investments.

## Your Investment Objective

Your investment objective is the first factor to consider, because the purpose of your savings should influence how you invest your money. The TSP is a retirement savings plan, so your investment choices should be made with that long-term objective in mind. You should consider factors such as the extent to which you will rely upon your TSP account for your retirement income (as opposed to other sources of income), your time horizon (discussed below), and your expected financial needs in retirement.

Financial planners estimate that your needs in retirement could be anywhere from 65% to 100% of your pre-retirement income. And, depending upon your age at retirement, you may need to plan for a period of 20 or more years. When determining how your TSP account should be invested, you should consider whether other sources of retirement income — pensions, annuities, Individual Retirement Accounts (IRAs), Social Security benefits, and other savings and assets — will be sufficient to meet your retirement needs.

There may be times before retirement when your TSP investment objective must temporarily accommodate a short-term need (for example, if you decide to borrow from your TSP account to purchase a home or pay for education expenses). However, any decision to remove money from your account (even for loans, which you repay with interest) should be carefully considered, because any loan or withdrawal will affect the amount of money available to you for your retirement.

## Your Time Horizon and Risk Tolerance

Your time horizon is the number of years you have until you will need to withdraw your TSP account — generally when you retire. Thus, if you are 40 years old and you want to withdraw your account at age 65, your time horizon is 25 years.

In general, the greater the potential for large returns, the higher the risk of large losses, because the financial markets tend to reward with higher returns those investors who are willing to accept greater risk of

losses. Conversely, less risky investments are generally associated with the potential for smaller returns.

Only you can determine the level of risk with which you are comfortable. However, regardless of your personal level of risk tolerance, your time horizon should influence how you invest your money. If you have a lengthy time horizon, such as a 20- to 30-year career ahead of you, you may be more willing to accept a greater level of risk. This is because, over long investment periods, an investor has a chance to recoup short-term losses incurred during the period. Indeed, if you have a long time horizon, you may find that the greater risk lies in investing too conservatively.

If your time horizon is short, you may choose to move more of your account into less risky investments (which generally have a lower potential for high returns) to protect your assets. For example, if you need your money in 2 years and your investment experiences a 10% loss in the first year, you have only one year in which to recover your loss. If you are 25 years from retirement and lose 10% in the first 5 years, you have 20 years during which the losses may be regained. Thus, you may be willing to accept more risk to obtain the greater potential for higher returns generally afforded by more risky investments. Of course, there is no assurance that the market will provide the requisite gains in subsequent years. Instead, there could be further losses.

## **Diversification and Risk**

Diversification, one of the fundamental principles of investing, can affect the level of risk of your investments. Diversification involves spreading your money among different investments to reduce the likelihood that your overall holdings will be dramatically affected by fluctuations in the prices of investments or by non-payment of principal or interest. You can diversify among different types of investments (stocks, bonds, and money market instruments) that tend to move in opposite directions under a variety of economic conditions. You can also diversify within the same types of investments. In the stock market, for example, investing in a diverse group of stocks representing companies in a variety of industries tends to reduce the impact of changing economic conditions on one or several industries. In the bond market, diversification results from investing in bonds with varying maturities and credit quality in different sectors of the market.

While diversification does not insulate you from losses on particular investments, it can reduce the risk of incurring large losses on your entire portfolio. In a retirement savings plan, where you are building a large portfolio that will be invested for a long time, diversification is an important principle to consider. When deciding whether your TSP account is diversified adequately, you should also take into account your other sources of retirement income and the risks associated with your other assets or investments.



## **Risks and Returns of TSP Investment Options**

After considering your objective, time horizon, risk tolerance, and the amount of diversification you want, you should consider how the benefits and risks of each of the five TSP investment funds fit into your investment strategy.

Because it is impossible to predict with certainty the performance of stock or bond markets, investors often consider past performance to evaluate the relative risks and returns of investment alternatives. You should review performance over many years to observe how the investment performed under a variety of economic conditions; however, there is no guarantee that the past performance will be repeated in the future.

### ***The Five TSP Funds***

The five TSP funds permit participants to invest in different sectors of the major financial markets: the money market (short-term debt securities), the bond market (longer-term debt securities), and various sectors of the equity market (larger domestic, medium to smaller domestic, and international stocks). Each of the five funds has different investment characteristics and risks, which provides the opportunity for broadly diversified investments. The five funds are described briefly below. A detailed description of each of the five TSP funds begins on page 17.

**Government Securities Investment (G) Fund** — The G Fund is invested in short-term nonmarketable U.S. Treasury securities guaranteed by the full faith and credit of the U.S. Government. There is no possibility of loss of principal (i.e., the face amount of the security) from default by the U.S. Government and, thus, no credit risk. The current Board policy of investing only in short-term securities also eliminates the risk of loss from fluctuations in the value of securities as a result of changes in overall market rates of interest (market risk). G Fund earnings consist entirely of interest income on the securities. G Fund interest is reinvested by the Board as it is received from the U.S. Treasury each business day.

**Fixed Income Index Investment (F) Fund** — The F Fund is invested in a Lehman Brothers U.S. Aggregate (LBA) bond index fund. The LBA index represents a large and diversified group of securities in the major sectors of the U.S. bond markets: U.S. Treasury and Federal agency securities, corporate bonds (both U.S. and non-U.S.), mortgage-backed securities, and foreign government securities (dollar-denominated securities traded in the U.S. that are issued by foreign or international entities, such as sovereigns, multilateral lending institutions, foreign agencies, and foreign local governments). Although gains or losses in the value of securities resulting from changing market interest rates can make up a sizable portion of F Fund earnings in any one year, interest income on the securities is likely to be the dominant component of earnings in the long run. The risk of nonpayment of interest or principal is relatively low, but the possibility exists that there could be a default in the payment of interest or principal on securities other than

those of the U.S. Treasury. However, the risk is extremely limited because the LBA index includes only investment grade securities, and is broadly diversified.

**Common Stock Index Investment (C) Fund** — The C Fund is invested in a Standard & Poor's 500 (S&P 500) stock index fund. The S&P 500 index consists of 500 stocks representing approximately 79% of the market value of the U.S. stock markets. Historically, the primary source of earnings has been the net changes in the prices of stocks, although dividend income is also a source of earnings. Because the S&P 500 index is broadly diversified (that is, it includes many companies in many different industries), the effect of poor performance in a company or group of companies in one industry is reduced. However, losses will occur in the C Fund if the S&P 500 index declines in response to changes in overall economic conditions.

**Small Capitalization Stock Index Investment (S) Fund** — The S Fund is invested in a Wilshire 4500 stock index fund. The Wilshire 4500 index consists of the stocks of the companies which are actively traded in the U.S. stock markets, excluding the companies in the S&P 500 index. It represents approximately 21% of the market value of the U.S. stock markets. The primary source of earnings is the net changes in the prices of the stocks, although dividend income is also a source of earnings. The Wilshire 4500 index tends to fluctuate more than the S&P 500 index because the stock prices of the smaller companies in the Wilshire 4500 index tend to react more strongly (positively and negatively) to changes in the economy. Therefore, an S Fund investment can be more volatile and potentially riskier than a C Fund investment. Although the Wilshire 4500 index is even more broadly diversified than the S&P 500 index, losses will occur in the S Fund if the Wilshire 4500 index declines in response to changes in overall economic conditions.

**International Stock Index Investment (I) Fund** — The I Fund is invested in a Morgan Stanley Capital International EAFE (Europe, Australasia, Far East) stock index fund. The EAFE index consists of the stocks of companies in 21 countries representing 42% of the value of world stock markets. (The U.S. stock market represents 47% of the value of world stock markets.) The primary source of earnings is the net changes in the prices of stocks, although, at times, currency changes relative to the U.S. dollar can be a greater component of earnings than stock price gains or losses. Dividend income is also a source of earnings. The EAFE index is broadly diversified among countries and industries, so the effect of poor performance in one stock market or group of companies is reduced. Losses will occur in the I Fund if the EAFE index declines in response to changes in overall economic conditions or to increases in the value of the U.S. dollar. EAFE index returns tend to fluctuate more than S&P 500 index or Wilshire 4500 index returns, and therefore I Fund investments can be more volatile and potentially riskier than C or S Fund investments.

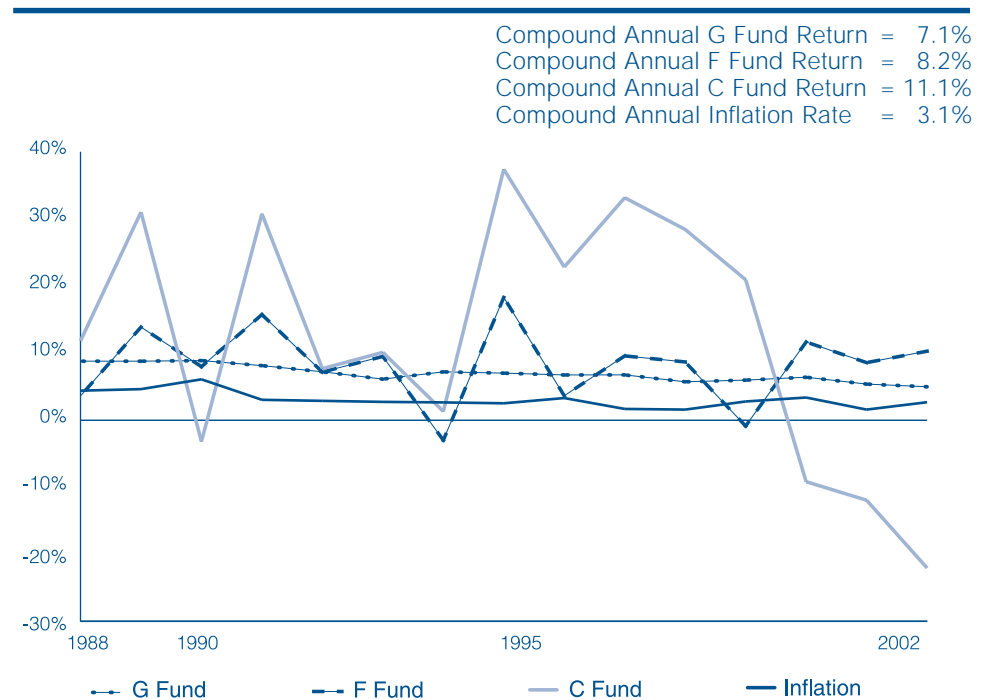
**Historical Performance  
of TSP Investment  
Options**

Although there is no guarantee that the past performance of the S&P 500, Wilshire 4500, and EAFE indexes is an indicator of future performance, the historical returns of the three stock indexes do show that the investor who remained invested in stocks over long periods generally was rewarded with a higher return than investors in fixed-income securities, such as those held by the G Fund and (indirectly) the F Fund.

Fifteen years of performance data are available for the three original TSP investment funds — the G Fund, the F Fund, and the C Fund. (See Appendix 1.) Chart 1 compares the performance of the three funds for the years 1988 through 2002. The compound annual return over the 15-year period was 7.1% for the G Fund, 8.2% for the F Fund, and 11.1% for the C Fund. Chart 1 illustrates that, while providing the highest returns, the C Fund is the riskiest of the three funds because the returns are the most volatile (that is, they varied more from year to year). Both the F Fund and the C Fund have experienced years during the time period shown in which the return was negative. (The S Fund and the I Fund are not included in Chart 1 because they were established in May 2001. To compare the performance of the indexes which the S and I Funds track to the benchmarks of the other three funds for the same period, see Appendix 2.)

Chart 1

**G Fund, F Fund, and C Fund Returns  
1988\* – 2002**



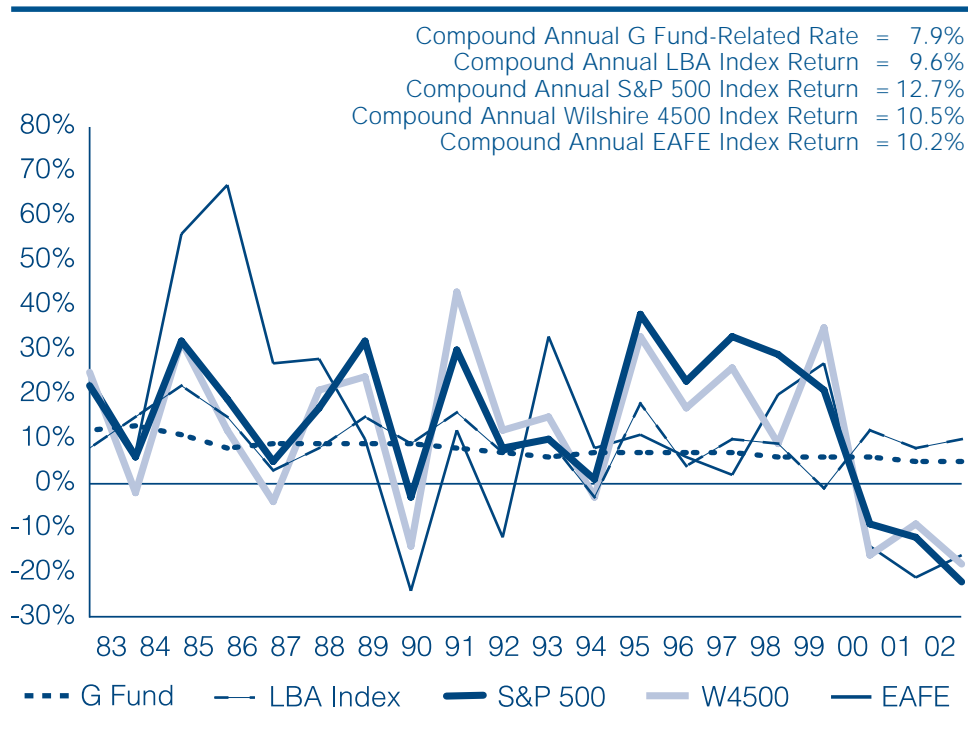
\* The first F Fund and C Fund investments occurred on January 29, 1988.

Chart 2 compares the performance of the securities tracked by the five TSP funds for the 20-year period 1983 – 2002: G Fund-related securities, the LBA index (F Fund), the S&P 500 index (C Fund), the Wilshire 4500 index (S Fund), and the EAFE index (I Fund). The compound annual return for the 20-year period was 7.9% for the G Fund-related securities, 9.6% for the LBA index, 12.7% for the S&P 500 index, 10.5% for the Wilshire 4500 index, and 10.2% for the EAFE index. The compound annual inflation rate for the same period was 3.1%.

Chart 2 shows that the S and I Funds are riskier than the C Fund because the S and I Fund returns have been more volatile, with larger fluctuations from year to year. For example, the EAFE index dramatically outperformed both the S&P 500 and the Wilshire 4500 for the years 1985 through 1988. However, between 1986 and 1990 the EAFE returns declined sharply, and the EAFE index significantly underperformed both of the other stock indexes from 1989 through 1992. Then, after significantly outperforming both of the other stock indexes in 1993 and 1994, it underperformed them for much of the remaining period shown.

Chart 2

### G Fund-Related Securities, LBA Index, S&P 500 Index, Wilshire 4500 Index, and EAFE Index 1983 – 2002



Examples of the greater volatility of the Wilshire 4500 versus the S&P 500 can be seen in 1990 and 1991. In 1990, the Wilshire 4500 yielded the fourth largest loss for either of the two domestic stock indexes during the 20 years presented. This was followed in 1991 by its highest return for the 20-year period. Similarly, in 1998 both the S&P 500 and

the Wilshire 4500 showed declines in their returns compared to the prior year, but the Wilshire 4500 decline was far greater. Then, in 1999, the return for the Wilshire 4500 increased so dramatically that it substantially outperformed the S&P 500. In 2000, the Wilshire 4500 suffered its second largest loss in the 20-year period, underperforming the S&P 500, which also suffered a loss.

Chart 2 also shows that the G Fund-related securities and the LBA index were less volatile than the three stock indexes, but also yielded lower compound annual returns than the three stock indexes for the 20-year period.

Charts 3 and 4 further illustrate that while the highest returns for the EAFE and Wilshire 4500 indexes tend to be higher than those of the S&P 500, their losses tend to be more frequent and larger than those of the S&P 500.

Chart 3

**S&P 500 Index vs. Wilshire 4500 Index  
Annual Returns  
1983 – 2002**

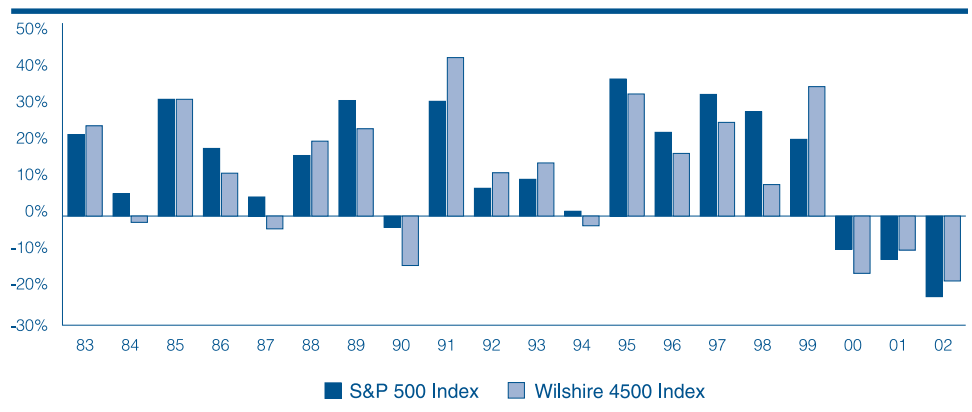
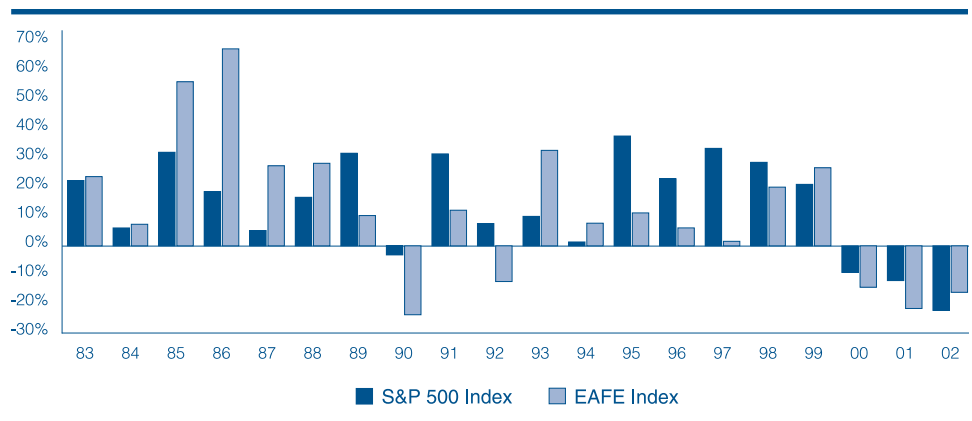


Chart 4

**S&P 500 Index vs. EAFE Index  
Annual Returns  
1983 – 2002**



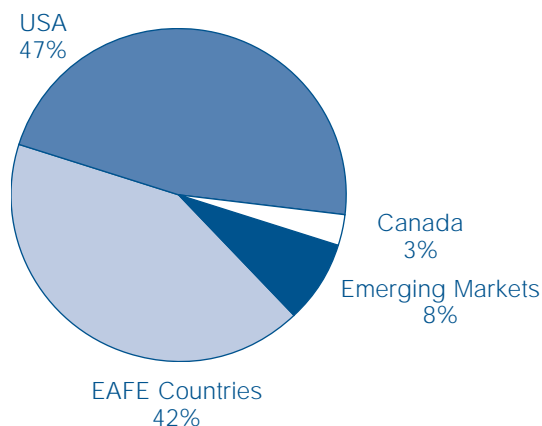
## Diversification Offered by the TSP Funds

The G, F, C, S, and I Funds offer the opportunity to diversify investments, as described above. The G, F, C, and S Funds provide broad diversification between and within the U.S. bond and stock markets. The short-term G Fund securities complement the longer-term securities in the LBA index to provide full coverage of the U.S. fixed-income markets. The LBA index contains notes and bonds that represent the different sectors of the bond market and different maturities within those sectors. The S&P 500 index contains stocks of large companies in the U.S. stock market, and the Wilshire 4500 index contains actively traded stocks of all U.S. companies except those in the S&P 500 index.

The C, S, and I Funds offer diversification between domestic and international stock markets. Like the C and S Funds, the I Fund is broadly diversified; it contains stocks of companies in 21 countries representing many different industries. As shown in Chart 5, as of December 31, 2002, the stock markets of the countries in the EAFE index represented 42% of world stock markets, while the U.S. stock market represented 47% of world markets. Thus, the C, S, and I Funds together cover over 89% of the market value of world stock markets.

Chart 5

### World Stock Markets Allocation of Stock Market Value December 31, 2002



Over long periods of time, domestic and international stocks have performed differently in response to fundamental differences in national economies and government policies. As shown in Chart 2, there have been periods when the EAFE index outperformed the S&P 500 index and the Wilshire 4500 index, as in 1985 – 88, 1993 and 2002, or underperformed them, as in 1990 – 92, 1995 – 97, and 2001. If there is a tendency for domestic and international stocks to move differently under varying conditions, investing in a combination of the C, S, and I Funds may provide the opportunity to benefit from the potential for higher returns while at the same time reducing risk. Risk is reduced

because movements in one stock market may be offset, or hedged, by movements in a different direction in the other markets, reducing the likelihood of incurring large losses on the entire portfolio.

You can follow the principle of diversification in your TSP account by choosing a mix of investments in the G, F, C, S, and I Funds with which you are most comfortable. You may invest in the riskier F, C, S, and I Funds for the potential of attractive returns, with the knowledge that the indexes in which they are invested are widely diversified portfolios. You can further offset the risk of stock and bond market losses by investing in the risk-free G Fund.

## **The Effects of Inflation and Taxes on TSP Savings**

In addition to your investment objectives, time horizon, your desired level of diversification, and the risk-versus-return relationship of TSP investment alternatives, you should consider the effects of inflation and taxes on the purchasing power of the money you are saving for retirement.

### ***Inflation***

The Consumer Price Index (CPI) represents the change in the price of a fixed set of consumer goods, and is a common measure of the inflation rate. The U.S. economy has experienced inflation every year since 1954. An item that cost \$10 in January 1955 cost \$67.86 in December 2002, based on the CPI rates during the period. The purchasing power of your investments will be reduced by cumulative inflation unless you earn a rate of return high enough to offset inflation. Although it is impossible to predict future inflation rates, it is instructive to look at historical inflation rates under a variety of economic conditions.

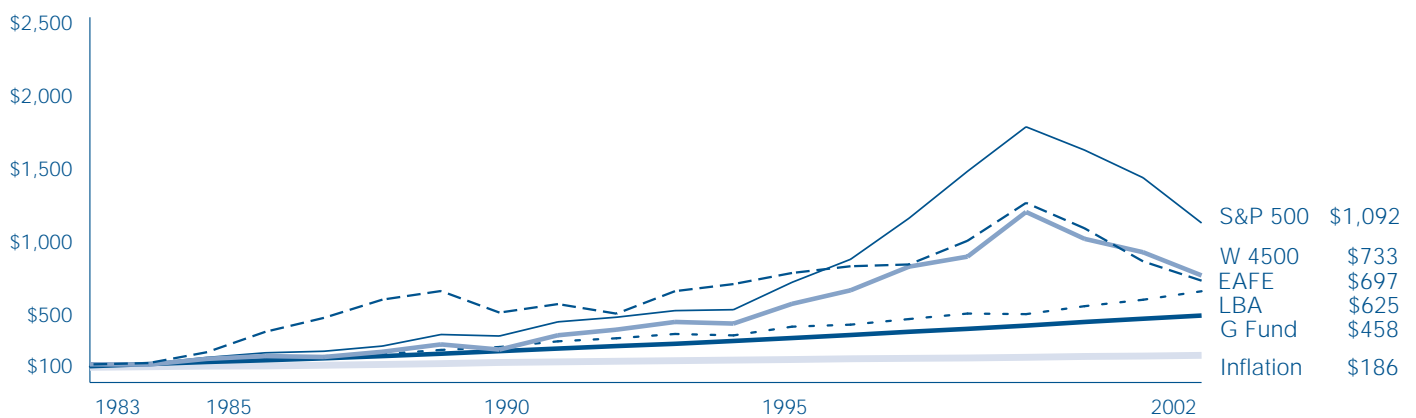
Over many years, stock returns have been higher than those of fixed-income securities and have exceeded inflation by even wider margins. Chart 6 shows the growth of \$100 invested in G Fund-related securities, the LBA, the S&P 500, the Wilshire 4500, and the EAFE index over the 20 years from 1983 – 2002, relative to the effect of inflation. The hypothetical \$100 in each of the five investments would have grown more than inflation, but the \$100 invested in each of the three stock indexes would have grown to a larger amount than the \$100 invested in the two fixed-income vehicles. Chart 6 also illustrates the larger fluctuations in value in the three stock indexes relative to the short-term G Fund securities and the longer-term notes and bonds in the LBA, as demonstrated by the ups and downs shown for the three stock indexes compared to the more gradual upward trend of the G fund securities and the LBA.

### ***Taxes***

The TSP offers substantial tax advantages compared with most other investment alternatives available to you. You do not pay income taxes on any part of your basic pay that you contribute to the TSP, reducing your tax bill for the current year. You also do not pay current income taxes on the earnings in your account, which allows substantial additional growth in compound earnings compared to an investment in which earnings are subject to income taxes each year.

Chart 6

## Growth of \$100 in G Fund-Related Securities, LBA, S&P 500, Wilshire 4500, EAFE, and Inflation 1983 – 2002



However, amounts withdrawn from your TSP account will be subject to income taxes.\* This means that, in addition to the reduction in the purchasing power of your TSP account because of inflation, taxes will further reduce the retirement income available to you from your TSP account.

You may not know what your tax rate is going to be when you retire or how you will choose to withdraw funds from the TSP, nor can you predict inflation or investment returns in coming years. The simple example outlined below, however, demonstrates how inflation and taxes can reduce the real value of your investments. Therefore, you should consider the effect of inflation and your personal tax situation in your financial planning for retirement.

Using a simplified one-year example, which ignores the long-term tax benefits of the TSP, assume you invest \$100 in tax-deferred contributions for a year and earn 10% (\$10). If inflation is 6% (\$6), and the marginal tax rate on your earnings is 40% ( $\$10 \times .40 = \$4$ ) for Federal, state, and local income taxes, your net return after taxes and inflation will be zero, in which case you will have just maintained the purchasing power of your \$100 investment. Had there been a lesser return or a higher rate of inflation, the \$100 investment would have lost purchasing power. It is partly the risk of loss in purchasing power that leads many financial experts to advise individuals to place at least some of their long-term investments in the stock market. Despite the volatility

\*Members of the uniformed services who participate in the TSP can also make contributions from their combat pay, which is tax-exempt. These contributions are not subject to income taxes when withdrawn from participants' TSP accounts; however, earnings on these contributions are subject to income taxes when withdrawn.



# Investment Approaches

## Your Investment Strategy

of the stock market, stock market investments have more effectively preserved purchasing power over time than other investment alternatives.

When making your TSP investment decisions among the G, F, C, S, and I Funds, you should consider your age, your total financial situation (including your estimated income from other investments and other retirement benefits), and your expected income needs during retirement.

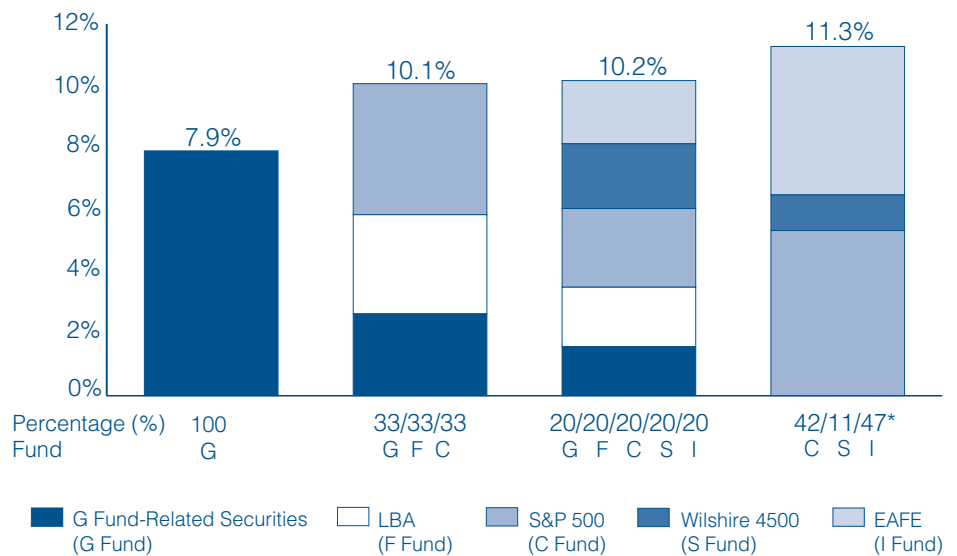
Generally, if you are relatively young, you are in a better position to accept the risk of short-term losses in exchange for the potential for higher long-term returns. Therefore, you may want to consider investing a larger portion of your account in stocks (C, S, and I Funds) and a smaller portion in the G and F Funds. C, S, and I Fund investments may help you keep ahead of inflation. Also, F Fund investments will balance overall returns when market interest rates, and thus G Fund rates, are declining.

If you are nearing retirement age and you expect that you will need most or all of your TSP account immediately upon retirement, you may want to consider reducing your F, C, S, and I Fund balances and increasing your G Fund balance. However, if you expect to receive substantial income from other investments or from FERS or CSRS annuities, uniformed services retired pay, or Social Security, which include cost-of-living increases, you may conclude that you will have sufficient other purchasing power in retirement. You may therefore decide to defer withdrawing your TSP account until sometime after retirement (and thereby extend your investment horizon). Depending on the age at which you retire, your investment horizon may be long enough that you may choose not to change the proportions of your TSP account that you allocate to the C, S, and I Funds. On the other hand, if you have large investments in stocks outside of the TSP, you may wish to diversify by investing your TSP account largely in the G or F Fund.

Chart 7 illustrates the returns from various portfolio mixes of G Fund-related securities, LBA (F Fund), S&P 500 (C Fund), Wilshire 4500 (S Fund), and EAFE (I Fund) investments, based on their compound annual returns during the 20 years from 1983 – 2002. The compound annual returns range from 7.9% for a 100% G Fund investment, to 10.1% for an equal investment in the G, F, and C Funds, to 10.2% for equal investments in the G, F, C, S, and I Funds, and to 11.3% for an all-stock investment of 42% in the C Fund, 11% in the S Fund, and 47% in the I Fund. (In all cases, the returns are for the securities and indexes related to the TSP funds; the TSP funds themselves were not available over this entire time period.)

Chart 7

**Portfolio Mix of G Fund-Related Securities,  
LBA, S&P 500, Wilshire 4500, and EAFE  
Compound Annual Return, 1983 – 2002**



\* This portfolio approximates the relative market capitalizations of the stocks constituting the S&P 500, Wilshire 4500, and EAFE indexes, respectively.

**Investment Techniques**

Once you have decided how you want to invest your money, you must decide on a strategy for implementing that decision. There are two ways to change the investment of your account. You can redistribute your existing TSP balance among the funds by making interfund transfers, and you can change the allocation of your future payroll contributions (as well as loan payments and transfers from other retirement plans) among the funds. Regardless of your investment strategy, you should review your TSP investment mix from time to time to determine whether it is consistent with your retirement planning.

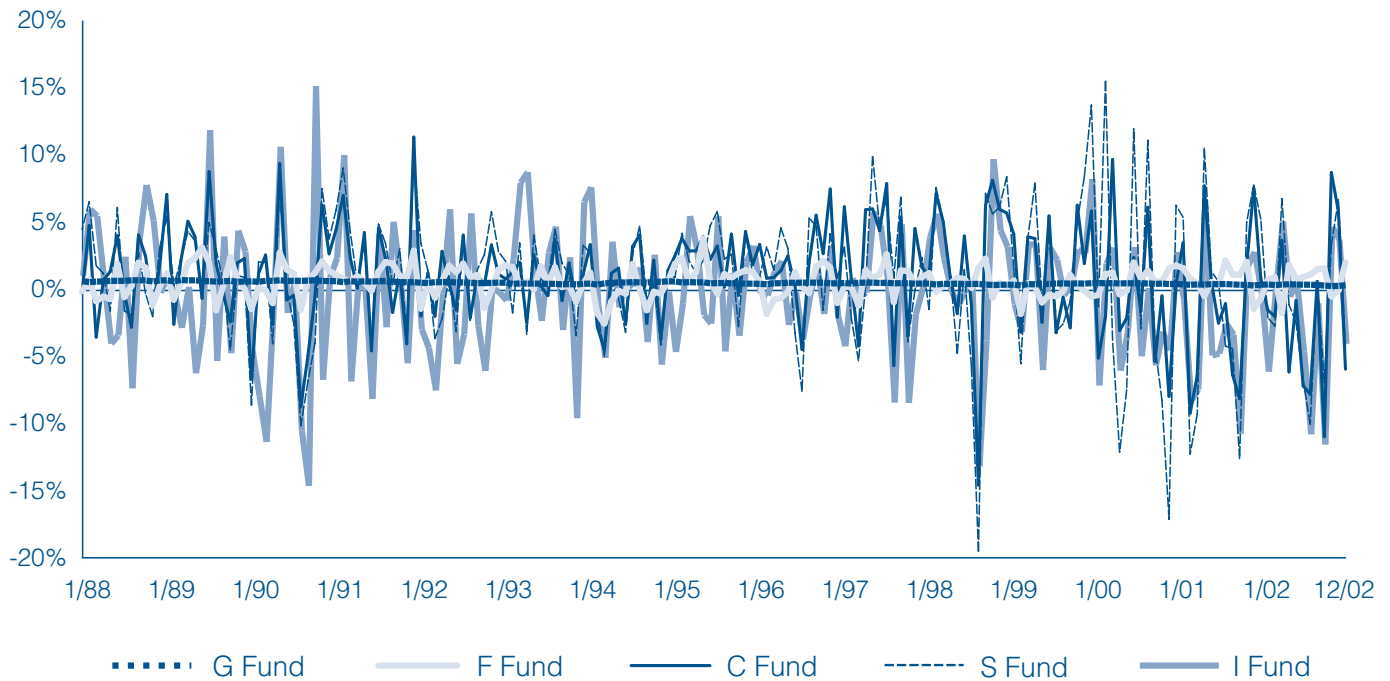
***Interfund Transfers***

Interfund transfers are a useful tool for managing the money already in your account. If you wish to change your investment strategy because, for example, your circumstances have changed, you can make an interfund transfer to change your investment mix to reflect your new strategy. If you wish to maintain your investment strategy, but you have experienced gains or losses that have changed the investment proportions you intended, you can make an interfund transfer to restore your account to the proportions you prefer. This is sometimes referred to as “rebalancing” your account. You can make an interfund transfer most efficiently on the TSP Web site or the ThriftLine. You can also mail Form TSP-50 (or TSP-U-50, for uniformed services), Investment Allocation, to the TSP record keeper, or you can call a TSP Participant Service Representative at (504) 255-8777 to request an interfund transfer.

**Market timing** — Investors engage in “market timing” when they move money from one investment to another based on their opinion regarding the likely performance of those investments in the near future. Market timing is usually motivated by the belief that one can make profits during periods of good investment performance and avoid losses during periods of poor performance by skillfully switching money among different investments. If the investor guesses correctly often enough, the

**Chart 8**

**G, F, C, S, and I Fund Monthly Returns\***  
January 1988 – December 2002



\*The S and I Funds were implemented in May 2001. For months before May 2001, the returns shown for the S and I Funds are the returns of the respective indexes which they track.

result may be better investment returns than for investors who gradually “buy and hold” the same investments. While it is certainly possible to “beat the market” by market timing for short periods, most investment experts believe such success is highly unlikely over long periods.

Chart 8 shows monthly returns for the five investment funds. As the many peaks and valleys illustrate, significant movements can occur rapidly in the stock and bond markets. By the time the market timer reacts to the situation, the market may be moving in the opposite direction. If you miss one or two brief upswings in a decade, your investments may underperform the average market return for the entire period. Depending on the particular events that spur a market timer to action, he or she may capture some upswings and may avoid some downswings, but these switching tactics are unlikely to be consistently successful over long periods.

## ***Allocating Future Contributions***

Allocating future payroll contributions to the funds of your choice as a means for changing your investment mix avoids the market-timing risks associated with interfund transfers of large amounts at one time; you change your investment mix gradually, thus reducing the risk of short-term market volatility. You may change your contribution allocation at any time on the TSP Web site or the ThriftLine. You can also mail Form TSP-50 (for civilians) or Form TSP-U-50 (for members of the uniformed services), Investment Allocation, to the TSP record keeper, or you can call a TSP Participant Service Representative at (504) 255-8777 to request a contribution allocation. Your new allocation generally will take effect with your next payroll contribution.

**Dollar-cost averaging** — Dollar-cost averaging is a long-term “buy and hold” strategy of investing fixed dollar amounts at regular intervals over time. As a result, the investor buys more shares when market prices are low and fewer shares when market prices are high. (See Section III for an explanation of share-based accounting in the new TSP record keeping system.) Dollar-cost averaging thus results in an investor’s average purchase price per share being lower than the average price of the shares over time. TSP participants can take advantage of dollar-cost averaging by consistently contributing to the TSP investment funds through payroll deductions. The following chart is an example of the advantage of dollar-cost averaging.

<b>Period</b>	<b>Investment Amount</b>	<b>Share Price</b>	<b>Shares Purchased</b>
1	\$200	\$50	4
2	\$200	\$40	5
3	\$200	\$20	10
4	\$200	\$40	5
<b>Totals</b>	<b>\$800</b>	<b>\$150</b>	<b>24</b>

- Average share price =  $\$150/4 = \$37.50$  over the four periods
- Investor’s cost per share =  $\$800/24 = \$33.33$

The success of dollar-cost averaging depends on regular investing over a long period of time regardless of price fluctuations, as is done through consistent payroll contributions to the TSP. It will only result in lowering the investor’s average cost per share if investments continue when share prices are dropping. The same amount of money will buy more shares when prices are lower. This is what causes the investor’s average cost per share to be lower than the average share price. In the example shown in the above chart, if the \$800 were invested all at once, such as through an interfund transfer, the participant would have bought shares below the average share price only if the interfund transfer were made in Period 3. Thus, the participant would only have successfully “timed the market” if he or she guessed right by choosing the

third period for the interfund transfer. However, by gradually investing over the four periods, the participant in this example also pays less than the overall average price of the shares.

Dollar-cost averaging does not protect against losses when stock or bond markets are declining, but it does reduce the risk of investing by ensuring that stock and bond purchases are made at a variety of prices, buying more shares at lower prices and fewer at higher prices. Dollar-cost averaging also eliminates the risk of investing all of your money in the stock or bond market at market peaks.



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## II. TSP Investment Fund Management

### Passive Management

The G, F, C, S, and I Funds are “passively managed.” This is accomplished by the TSP’s investing in index funds that use a “buy and hold” strategy. In contrast, “active investment management” often involves the buying and selling of securities based on the identification of companies or industries that appear to be undervalued or that may offer good growth potential. The assumption underlying active investment management is that securities selected on the basis of certain criteria will “beat the market.” Passively managed funds, in contrast, attempt only to replicate the performance of the market, or of a segment of the market.

### Indexing

Indexing is a common form of passive management in which securities are held in amounts based on their relative representation in the bond or stock markets. The philosophy of indexing is that over the long term it is difficult to exceed the average return of the market. Because securities are held based on their representation, indexing does not require research into the future prospects of individual companies or individual securities. Also, securities in the indexes are bought and sold less often. As a result, the investment management fees and trading costs incurred from a passive indexing style of management are generally much lower than similar costs associated with active management.

### G Fund

By law, the G Fund must be invested in nonmarketable U.S. Treasury securities specially issued to the TSP. The G Fund is invested exclusively in short-term securities, with maturities currently ranging from one day to 4 days over holiday weekends. Such daily investments are kept by electronic entries and do not involve any transaction costs to the TSP. The G Fund rate is set once a month by the U.S. Treasury based on a statutorily prescribed formula (described below), and all G Fund investments earn interest at that rate for the month. The Board pursues a strategy of investing the G Fund in short-term securities, as described above, regardless of the G Fund rate. As a result, the value of G Fund securities does not fluctuate; only the interest rate changes. Thus, when the monthly G Fund interest rate goes up, G Fund earnings increase; when the G Fund interest rate declines, G Fund earnings decrease.

All investments in the G Fund earn interest at a statutory rate that is equal to the average of market yields on outstanding U.S. Treasury marketable securities having 4 or more years to maturity. The G Fund rate is calculated by the U.S. Treasury using the closing market bid prices (the prices at which dealers are willing to buy securities) of approximately 61 U.S. Treasury securities on the last day of the previous month. These market prices are used to calculate the yield of each security. The yield of each security has a weight in the G Fund rate calculation based on the

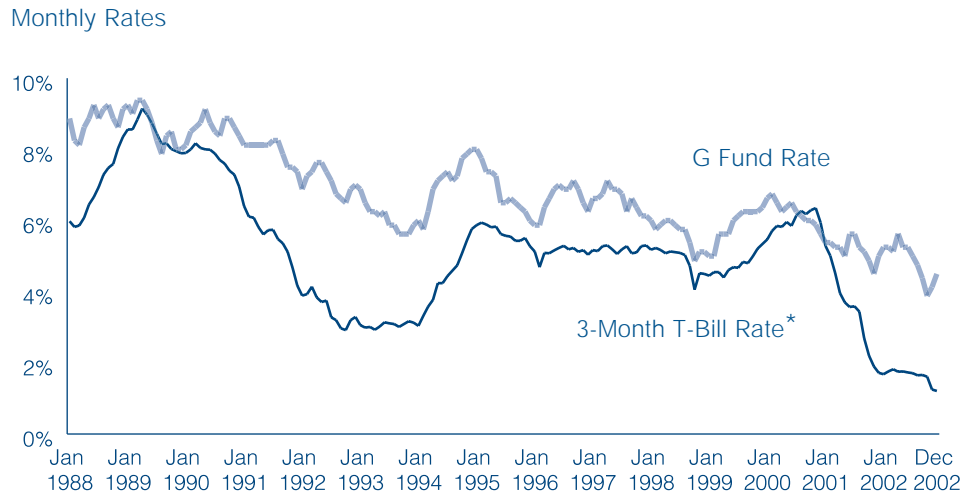
market value of that security. (Market value is defined as the outstanding dollar amount of the security measured at its current market price. The larger the dollar amount of a security outstanding, the larger its weight in the calculation.) Thus, the G Fund rate is a weighted average of yields of approximately 61 Treasury marketable notes and bonds with a weighted average maturity of approximately 14 years. (The G Fund rate formula is the same as that used to calculate the interest rate for the investments of the Social Security Trust Funds and the Civil Service Retirement Trust Fund.)

The G Fund rate calculation and the Board’s policy of investing exclusively in short-term securities result in a longer-term rate on short-term securities. Generally, long-term interest rates are higher than short-term rates; therefore, G Fund securities generally yield a higher rate of return to TSP participants than the rates of return on short-term marketable Treasury securities.

The G Fund can be compared with 3-month marketable Treasury securities (T-bills). Chart 9 shows the G Fund yield versus that of 3-month T-bills from January 1988 through December 2002. The G Fund interest rate averaged 1.7 percentage points more per year than 3-month T-bill rates during the period.

Chart 9

### G Fund Yield Advantage January 1988 – December 2002



\* Source: Federal Reserve Statistical Release G.13  
(Yields expressed on a coupon-equivalent basis)



# The TSP Index Funds

The asset managers of the F, C, S, and I Funds are selected through a competitive bidding process. Proposals from prospective asset managers are evaluated on criteria that include trading costs, fiduciary record, experience, fees, and the ability to track the appropriate index.

The Board currently has contracts with Barclays Global Investors (Barclays) to manage the index funds in which the F, C, S, and I Fund assets are invested. Barclays is the largest investment manager of index funds in the United States, and has nearly \$750 billion in total assets under management.

Set forth below are the Barclays index funds in which the TSP funds invest and the indexes that they track:

TSP Fund	Barclays Fund	Index Tracked
F Fund	Barclays U.S. Debt Index Fund	Lehman Brothers U.S. Aggregate (LBA) Index
C Fund	Barclays Equity Index Fund	Standard & Poor's 500 (S&P 500) Index
S Fund	Barclays Extended Market Index Fund	Wilshire 4500 Index
I Fund	Barclays EAFE Index Fund	Morgan Stanley Capital International EAFE (Europe, Australasia, Far East) Index

The four Barclays funds are commingled trust funds in which the assets of public and corporate tax-exempt employee benefit plans are combined and invested together. Barclays keeps separate accounting records for each plan that is invested in these funds. As of December 31, 2002, these funds included the investments of 219 employee benefit plans.

Because the securities in their index funds are held in trust by Barclays, they are not assets of Barclays. The assets in those funds cannot be used to meet the financial obligations of Barclays or any related companies. **Therefore, the F, C, S, and I Fund assets, which in substance are the securities in the related Barclays funds, are protected from any adverse financial situation involving Barclays or any of its subsidiaries or affiliates.**

Barclays is a fiduciary with respect to F, C, S, and I Fund assets. In its fiduciary role, Barclays must, by law, act solely in the interest of the participants and beneficiaries whose assets it holds in trust. Barclays is subject to a variety of laws and audits designed to protect pension plan assets. Barclays' operations are subject to review by the Office of the Comptroller of the Currency, the Securities and Exchange Commission, the Federal Reserve, and the Department of Labor. In addition, the four Barclays funds are audited annually. Barclays has insurance which

covers breaches of fiduciary responsibility and losses incurred as a result of errors or omissions.

The Barclays funds are not mutual funds and are not open to individual investors. They are open only to tax-exempt employee benefit plans. However, although the Barclays index funds are not mutual funds, they operate in a manner similar to mutual funds. The funds are traded by purchases or sales of shares (also called units) that represent a fraction of the total value of the index fund. Investment gains and losses (net of trading costs incurred by the index fund) are reflected in changes in the share prices, which are calculated by Barclays at the end of each business day based on the market value of the underlying securities held in each fund. The share prices of the Barclays funds are different from and should not be confused with the share prices of the five TSP funds. (See Section III.)

The Barclays funds accept purchases and make redemptions at the daily share prices each business day. The amount purchased or redeemed by each of the TSP investment funds on any given day is determined by the participant activity affecting that fund, including payroll contributions, loan repayments, loan disbursements, withdrawals, and interfund transfers. When money coming into the fund due to this activity exceeds money going out, the net amount is used to *buy* shares of the related Barclays index fund at that day's share price. The cash is transferred to Barclays the following business day; in the interim, the money is invested in G Fund-related securities and earns the G Fund rate of interest. When participant activity results in a net outflow from a TSP fund, the TSP fund *sells* shares of the related Barclays index fund at that day's share price. Barclays transfers the proceeds to the TSP the following business day.

The Barclays index funds may incur trading costs when they purchase or sell securities. However, because of the large asset size and the large number of clients in the Barclays index funds, F, C, S, and I Fund purchases (or sales) of Barclays index fund shares frequently can be partially or fully exchanged with the shares of other clients who are selling (or buying) shares, thus avoiding trading costs. When trading costs are incurred, they either reduce the amount of the F, C, S, or I Fund contributions invested in the related Barclays index fund, or they are charged to the related Barclays index fund, thereby reducing the share price of the fund. In either case, trading costs reduce the total return to TSP participants in that fund. In some cases, Barclays' trading costs may be negative. This occurs when securities are traded at prices more favorable than the closing prices at which the related index is valued. In such cases, the negative trading costs either increase the number of shares purchased by the TSP or are credited to the Barclays index fund, in both cases increasing the total return to TSP participants.

## **F Fund**

By law, the F Fund must be invested in fixed-income securities. The Board has chosen to invest the F Fund in a bond index fund that tracks the overall performance of the U.S. bond market. To accomplish this goal, the F Fund is invested in the Barclays U.S. Debt Index Fund, which invests in notes and bonds in the LBA index.

The F Fund returns will move up and down with the returns in the bond market. As interest rates rise, bond prices, and thus the returns of the LBA index and the F Fund, will fall. This is because the coupon rate (rate at which interest is paid) on new securities is higher than the coupon rate on older securities that were issued when interest rates were lower. The price investors are willing to pay for older securities must decline to make the yields equal to those available on new securities. Thus, during periods of rising interest rates, the bonds in the LBA index can be expected to experience losses. Conversely, during periods of falling interest rates, bond prices and the LBA index will experience gains. The F Fund offers the opportunity for increased rates of return relative to the G Fund over the long term, especially in periods of generally declining interest rates. **The F Fund remains invested in the Barclays U.S. Debt Index Fund regardless of conditions in the bond market or the economy.**

## ***LBA Index***

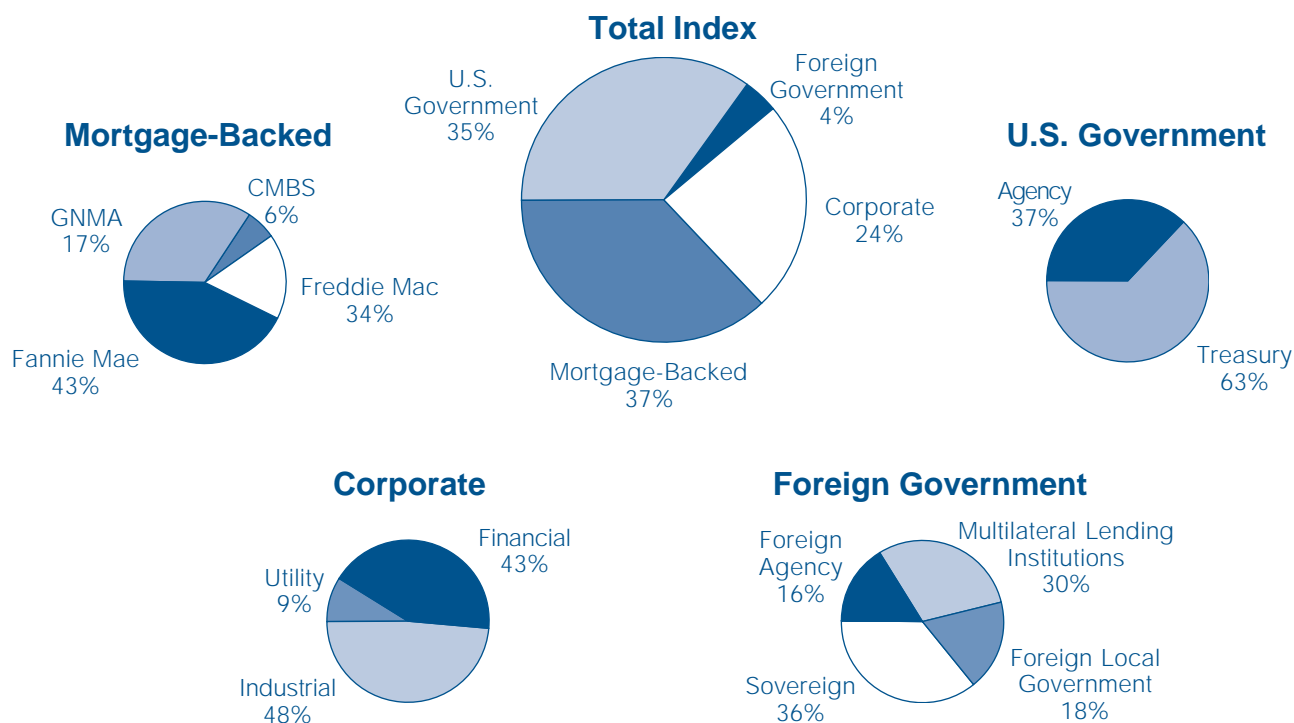
The LBA index is designed to measure the performance of the major bond markets in the United States and to represent the broadest sectors of those markets. The LBA index consists of high quality fixed-income securities with maturities of more than one year, representing the U.S. Government, mortgage-backed securities, corporate, and foreign government sectors of the U.S. bond market. The composition of the market value of the LBA index as of December 31, 2002, is shown by sector in Chart 10. Also shown are the percentages of the market values of the different types of securities that make up each sector.

As shown in Chart 10, mortgage-backed securities constituted approximately 37% of the LBA index as of December 31, 2002. These securities include fixed-rate, pass-through securities backed by residential mortgage pools of the Government National Mortgage Association (GNMA or Ginnie Mae), Fannie Mae, and Freddie Mac (Federal Home Loan Mortgage Corporation). Mortgage-backed pass-through securities are those in which investors own an interest in a pool of mortgages that serves as the underlying asset; investors receive a *pro rata* share of the cash flows, through an intermediary, from the monthly payments of mortgages in the pool.

Fannie Mae and Freddie Mac are so-called “Government-sponsored enterprises,” or GSEs. They guarantee the payment of principal and interest on their mortgage-backed securities, but because they are not backed by the full faith and credit of the U.S. Government, yields on their securities are higher than the yields on Ginnie Mae securities. As shown in Chart 10, Fannie Mae and Freddie Mac securities represent 43% and 34% of the mortgage-backed securities sector, respectively.

Chart 10

## LBA Bond Index Bond Market Sectors December 31, 2002



The mortgage pools underlying Ginnie Mae pass-through securities contain FHA-insured or VA-guaranteed mortgages. Ginnie Mae guarantees the payment of principal and interest on its pass-through securities, and, because Ginnie Mae is an agency of the U.S. Government, these securities are backed by the full faith and credit of the United States. Ginnie Mae pass-through securities represent 17% of the mortgage-backed securities sector.

Commercial mortgage-backed securities (CMBS) are issued by private corporations and are backed by commercial real estate mortgages. They are not guaranteed by the U.S. Government or by GSEs. However, the LBA includes only investment-grade commercial mortgage-backed securities. Investment-grade securities are fixed-income securities rated at least Baa3 by Moody's Investors Service or BBB- by Standard & Poor's Corporation. Commercial mortgage-backed securities represent 6% of the mortgage-backed securities sector.

As shown in Chart 10, the U.S. Government sector represented 35% of the index as of December 31, 2002, and includes U.S. Treasury securities and Federal agency securities. The Treasury portion includes all public obligations of the U.S. Treasury with maturities of at least one year and an outstanding par value, or principal amount, of at least \$150 million.

The Federal agency portion is made up of publicly issued obligations of GSEs, such as the Federal Home Loan Bank System and the Federal Farm Credit Bank System, with maturities greater than one year and an outstanding par value of at least \$150 million.

The corporate sector represented 24% of the LBA index as of December 31, 2002, and includes all publicly issued (in the U.S.), fixed-rate, investment-grade securities of U.S. and non-U.S. companies in many different industries with maturities of at least one year and an outstanding par value of at least \$150 million.

The foreign government sector (4% of the index as of December 31, 2002) includes U.S. dollar-denominated securities issued or guaranteed by foreign or international entities (sovereigns, multilateral lending institutions, foreign agencies, and foreign local governments) which are traded in the United States.

On December 31, 2002, the LBA included 6,978 notes and bonds. The average LBA index coupon rate was 6.15%, which means that, on an annual basis, interest income equalled approximately 6.15% of the face value of the securities in the LBA index. The average LBA index maturity was 6.8 years, which means that any given security in the index is expected to be outstanding for 6.8 years before it is retired by its issuer. New issues are added continuously to the LBA index, and older issues drop out as they approach maturity.

**Barclays U.S. Debt Index Fund** — Because the LBA index contains such a large number of securities, it is not feasible for the U.S. Debt Index Fund to invest in each security in the index. As a result, Barclays uses mathematical models to select a representative sample of the various types of mortgage-backed, U.S. Government, corporate, and foreign government securities included in the overall index. Within each sector, Barclays selects securities that, as a whole, are designed to produce the same average coupon rate and average maturity as the LBA index. The performance of the U.S. Debt Index Fund is evaluated by comparing how closely its returns match those of the LBA index.

Commencing in May 2001, the F Fund began investing in the Barclays U.S. Debt Index Fund by purchasing shares of the Barclays U.S. Debt Index Fund “E”, which in turn holds shares of the Barclays U.S. Debt Index Master Fund. Before May 2001, the F Fund invested directly in the U.S. Debt Index Master Fund. The change was made to accommodate daily investments of F Fund assets. (Previously, investments were made twice per month.) As of December 31, 2002, the U.S. Debt Index Fund “E” held \$12.1 billion of the U.S. Debt Index Master Fund, which itself held \$19.9 billion of securities. F Fund holdings constituted \$11.0 billion of the December 31, 2002, value of the U.S. Debt Index Fund “E”.

## C Fund

By law, the C Fund must be invested in a portfolio designed to replicate the performance of an index that includes common stocks the aggregate value of which is a reasonably complete representation of the U.S. equity markets. The Board has chosen the S&P 500 index, which tracks the performance of major companies and industries in the U.S. stock markets. Thus, the objective of the C Fund is to match the performance of the S&P 500 index. The C Fund is invested in the Barclays Equity Index Fund, which tracks the S&P 500 index by buying shares of all of the stocks that the index comprises.

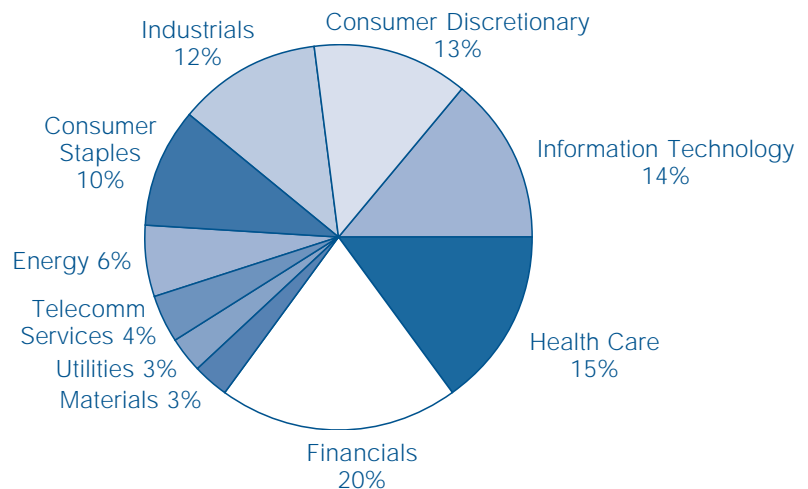
As prices of the stocks in the S&P 500 index rise and fall, returns on the S&P 500 index and on the C Fund will rise and fall. The C Fund gives participants the opportunity to diversify their investments and to earn the relatively high investment return that stocks can provide over the long term, while lessening the effect that the poor performance of an individual stock or industry will have on overall investment performance. **The C Fund remains invested in the Barclays Equity Index Fund regardless of stock market movements or general economic conditions.**

## S&P 500 Index

The S&P 500 index was designed by Standard & Poor's Corporation (S&P) to provide a representative measure of U.S. stock market performance. The index comprises stocks (primarily common stocks, but also 0.34% Real Estate Investment Trusts (REITs)) of 500 companies that are traded in the U.S. stock markets, primarily on the New York Stock Exchange. As of December 31, 2002, the 500 securities represented 105 separate industries classified into 10 major industry groups, as shown in Chart 11. The stocks in the S&P 500 make up approximately 79% of the market value of the U.S. stock markets.

Chart 11

**S&P 500 Index**  
**Percentage of Market Capitalization**  
**by Major Industry Group**  
**December 31, 2002**



Source: Standard & Poor's Corporation

The 500 stocks in the index are selected by the Standard & Poor's index committee primarily based on the companies' representation of their industry groupings. The committee does not select stocks because it believes they will experience superior stock price performance compared to the stock market in general (although it does try to select stocks that it considers relatively stable in order to minimize turnover in the index). The committee's objective is to maintain the S&P 500 index as a representative measure of overall U.S. stock market performance. Mergers and acquisitions are the most common reason for changes to the S&P 500 index. If a company in the S&P 500 index is acquired by or merged with another company, S&P will remove the company and add another firm in its place. S&P also removes any companies from the index that file for protection under the Federal bankruptcy laws.

Chart 12

### Largest Companies in the S&P 500 Index December 31, 2002

(Based on the total market value of the company  
relative to the total market value of the index)

Rank	Company	Percent of Total Value of the S&P 500 Index	Cumulative Percent
1	Microsoft Corporation	3.41	3.41
2	General Electric	2.99	6.40
3	Exxon Mobil Corporation	2.90	9.30
4	Wal-Mart Stores	2.75	12.05
5	Pfizer, Inc.	2.32	14.37
6	Citigroup, Inc.	2.23	16.60
7	Johnson & Johnson	1.97	18.57
8	American International Group	1.86	20.43
9	International Business Machines	1.62	22.05
10	Merck & Company	1.57	23.61
11	Proctor & Gamble	1.38	24.99
12	Coca Cola Company	1.34	26.33
13	Verizon Communications	1.31	27.64
14	Bank of America Corporation	1.28	28.92
15	Intel Corporation	1.27	30.20
16	Cisco Systems	1.17	31.36
17	SBC Communications, Inc.	1.11	32.47
18	Phillip Morris	1.03	33.51
19	Wells Fargo	0.98	34.49
20	PepsiCo, Inc.	0.90	35.38

Percentages do not add due to rounding.  
Source: Standard & Poor's Corporation

The S&P 500 is considered a "big company" index, and the largest companies in the index represent the largest portion of the index. The weighting of securities in the S&P 500 index is based on each stock's total market value (that is, its market price per share multiplied by the number of shares outstanding) relative to the market value of the other

stocks in the index. As of December 31, 2002, the largest 100 companies in the S&P 500 represented 70% of the S&P 500 market value.

Many of the stocks in the S&P 500 index are household names, such as General Motors, McDonald's, Microsoft, and Walt Disney. The 20 largest companies in the index, as of December 31, 2002, are listed in Chart 12.

Most of the companies in the S&P 500 index pay dividends. The dividend yield (annual dividends divided by current market price) for the S&P 500 index as of December 31, 2002, was 1.8%. This means that, at December 31 market prices, annual dividend income equalled approximately 1.8% of the market value of the S&P 500 index. Dividend yield varies with stock prices. Assuming relatively stable dividend payments, dividend yield will rise when stock prices fall and decline when stock prices rise. Thus, dividend income provides a cushion when S&P 500 stock prices are falling.

**Barclays Equity Index Fund** — The Equity Index Fund holds common stocks of all the companies represented in the S&P 500 index in virtually the same weights as they are represented in the S&P 500 index. A portion of Equity Index Fund assets is reserved to meet the needs of daily client activity. This liquidity reserve is invested in S&P 500 index futures contracts.

Commencing in May 2001, the C Fund began investing in the Barclays Equity Index Fund by purchasing shares of the Barclays Equity Index Fund "E", which in turn holds primarily shares of the Barclays Equity Index Master Fund. Before May 2001, the C Fund invested directly in the Equity Index Master Fund. The change was made to accommodate daily investments of C Fund assets. (Previously, investments of C Fund assets were made four times per month.) As of December 31, 2002, the Equity Index Fund "E" held \$39.0 billion of the Equity Index Master Fund, which itself held \$92.7 billion of securities. C Fund holdings constituted \$37.3 billion of the December 31, 2002, value of the Equity Index Fund "E".

## **S Fund**

By law, the S Fund must be invested in a portfolio designed to replicate the performance of an index that includes common stocks the aggregate market value of which represents the U.S. equity markets, excluding the stocks that are held in the C Fund. The Board has chosen the Wilshire 4500 index, which tracks the performance of the actively traded non-S&P 500 stocks in the U.S. stock market. The objective of the S Fund is to match the performance of the Wilshire 4500 index. The S Fund is invested in the Barclays Extended Market Index Fund, which tracks the Wilshire 4500 index.

As prices of the stocks of the companies in the Wilshire 4500 index rise and fall, the Wilshire 4500 index and the S Fund returns will rise and fall. The S Fund gives participants the opportunity to diversify their investments and to earn the relatively high investment return that the stocks of small and medium-sized companies can provide over the long term,



while lessening the effect that the poor performance of an individual stock or industry will have on overall investment performance. **The S Fund remains invested in the Barclays Extended Market Index Fund regardless of stock market movements or general economic conditions.**

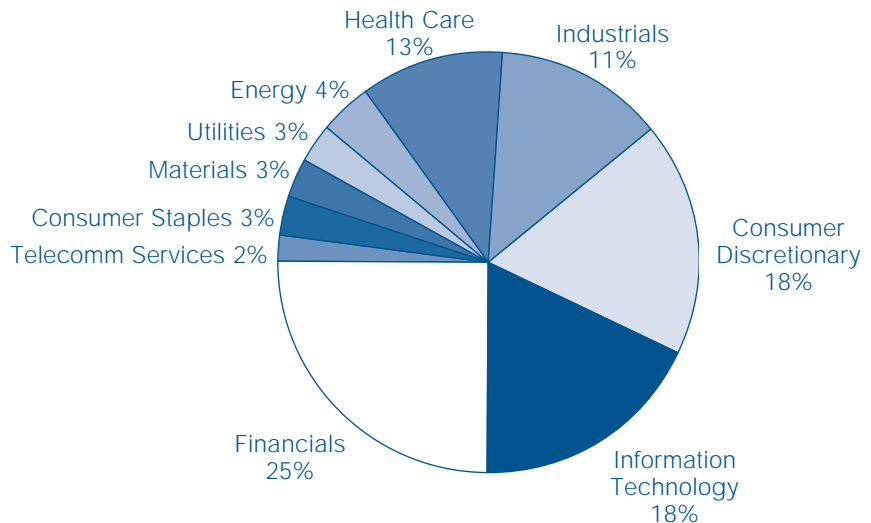
### **Wilshire 4500 Index**

The Wilshire 4500 index (comprising the companies in the Wilshire 5000 Total Market index other than those in the S&P 500 index) is the broadest measure of the non-S&P 500 domestic stock markets. The index includes all non-S&P 500 stocks with established prices on any given day. These are mostly common stocks, but as of December 31, 2002, the index included 6.4% REITs. As of December 31, 2002, the Wilshire 4500 index represented approximately 21% of the market capitalization of the U.S. stock markets, and the S&P 500 index represented approximately 79% of the domestic markets. Thus, the S Fund and the C Fund combined cover virtually the entire U.S. stock market.

The Wilshire 4500 index, computed and published by Wilshire Associates, actually contains more than 4,500 securities. As of December 31, 2002, the index included the stocks of 5,172 companies. The percentage composition of the Wilshire 4500 by major industry group is shown in Chart 13.

Chart 13

**Wilshire 4500 Index  
Percentage of Market Capitalization  
by Major Industry Group  
December 31, 2002**



Source: Wilshire Associates

The weighting of stocks in the Wilshire 4500 index is based on each security's total market value (that is, its market price per share multiplied by the number of shares outstanding) relative to the market value

of the other securities in the index. As of December 31, 2002, the largest 100 companies in the Wilshire 4500 index represented 27% of the Wilshire 4500 market value. The 20 largest companies in the index as of December 31, 2002, are listed in Chart 14.

Chart 14

## Largest Companies in the Wilshire 4500 Index December 31, 2002

(Based on the total market value of the company  
relative to the total market value of the index)

Rank	Company	Percent of Total Value of the Wilshire 4500 Index	Cumulative Percent
1	Berkshire Hathaway, Inc.	5.30	5.30
2	Liberty Media Corp.	1.01	6.31
3	Cox Communications, Inc.	0.80	7.11
4	Kraft Foods, Inc.	0.52	7.63
5	General Motors-H	0.49	8.12
6	Fox Entertainment Group, Inc.	0.43	8.55
7	USA Interactive	0.42	8.97
8	Genentech, Inc.	0.35	9.32
9	M & T Bank Corp.	0.35	9.66
10	Amazon.com, Inc.	0.34	10.01
11	Washington Post	0.33	10.34
12	Affiliated Computer Services	0.33	10.67
13	Gilead Sciences, Inc.	0.32	10.99
14	Scripps Co.	0.29	11.28
15	Unionbanca Corporation	0.28	11.56
16	Symantec Corp.	0.28	11.84
17	CNA Financial Corp.	0.27	12.11
18	Globalsantafe Corp.	0.27	12.38
19	Echostar Communications Corporation	0.26	12.64
20	Weatherford International Ltd.	0.25	12.88

Percentages do not add due to rounding.  
Source: Wilshire Associates

As of December 31, 2002, approximately 26% of the companies in the Wilshire 4500 index paid dividends. The dividend yield (annual dividends divided by current market price) for the Wilshire 4500 index as of December 31, 2002, was 1.32%. This means that, at December 31 market prices, annual dividend income equalled approximately 1.32% of the market value of the Wilshire 4500 index. Dividend yield varies with stock prices. Assuming relatively stable dividend payments, dividend yield will rise when stock prices fall and decline when stock prices rise. Thus, dividend income provides a cushion when Wilshire 4500 stock prices are falling.

**Barclays Extended Market Index Fund** — Because the Wilshire 4500 index contains such a large number of stocks, including illiquid stocks (stocks that have a low trading volume) and stocks with prices less than

\$1.00 per share, it is not practicable for the Extended Market Index Fund to invest in every stock in the index.

Although the Barclays Extended Market Index Fund holds stocks of most of the companies in the index with market capitalizations greater than \$1 billion, Barclays uses a mathematical sampling technique to select stocks. Barclays' mathematical model considers size and industry group to match the index industry weights. Within each industry group, Barclays selects stocks that, as a whole, are expected to produce a return that is very close to the Wilshire 4500 index. The performance of the Extended Market Index Fund is evaluated by comparing how closely its returns match those of the Wilshire 4500 index. A portion of Extended Market Index Fund assets is reserved to meet the needs of daily client activity. This liquidity reserve is invested in S&P 400 and Russell 2000 (other broad equity indexes) futures contracts.

The S Fund invests in the Barclays Extended Market Index Fund by purchasing shares of the Barclays Extended Market Index Fund "E", which in turn holds primarily shares of the Barclays Extended Market Index Master Fund. As of December 31, 2002, the Extended Market Index Fund "E" held \$2.2 billion of the Extended Market Index Master Fund, which itself held \$10.7 billion in securities. S Fund holdings constituted \$1.2 billion of the December 31, 2002, value of the Extended Market Index Fund "E".

## **I Fund**

By law, the I Fund must be invested in a portfolio designed to track the performance of an index that includes common stocks the aggregate market value of which represents the international equity markets, excluding the U.S. equity markets. The Board has chosen the Morgan Stanley Capital International EAFE (Europe, Australasia, Far East) index, which tracks the overall performance of the major companies and industries in the European, Australian, and Asian stock markets. The objective of the I Fund is to match the performance of the EAFE index. The I Fund is invested in the Barclays EAFE Index Fund, which tracks the EAFE index.

As prices of the stocks of the companies in the EAFE index rise and fall, the values of the EAFE index and the I Fund will rise and fall. In addition, the EAFE index (and the I Fund) returns will rise or fall as the value of the U.S. dollar decreases or increases relative to the value of the currencies of the countries represented in the EAFE index. At times, the effect of currency movements may be greater than stock price changes or dividend income for particular countries or groups of countries. The stocks of the companies in the EAFE index trade on the stock exchanges of their respective countries, and their stock prices are expressed in the currency of each respective country. These stock prices are converted to U.S. dollars to determine the value of the EAFE index. For example, the stock of British Airways, a company included in the EAFE index, trades on the London Stock Exchange and is priced in the British pound sterling (£). If the price of British Airways stock is £4, and the current exchange rate is £1 = \$1.66, then the price of British Airways stock in U.S. dollars is \$6.64 (4 x \$1.66).

If the value of the U.S. dollar rises relative to the currencies of the countries in the EAFE index, the prices of the EAFE stocks expressed in U.S. dollars will fall, and consequently so will the value of the EAFE index. Using the previous example, if the U.S. dollar increases in value so that the new exchange rate is £1 = \$1.50, the price in U.S. dollars of British Airways stock drops to \$6.00 (4 x \$1.50). Thus, even if the price of the stock does not fall on its stock exchange, the increase in the value of the U.S. dollar causes the price of the stock, in U.S. dollars, to fall.

If the value of the U.S. dollar falls, the stock prices of the companies in the EAFE index, converted to U.S. dollars, will increase, resulting in gains in the value of the EAFE index. Again using the above example, if the U.S. dollar falls to an exchange rate of £1 = \$1.75, the price of British Airways stock increases to \$7.00 (4 x \$1.75). The price of the stock may not change in the British stock market, but when the value of the U.S. dollar falls, the stock price, in U.S. dollars, increases.

The I Fund gives participants the opportunity to diversify their investments and to earn the relatively high investment return that international stocks can provide over the long term, while lessening the effect that the poor performance of an individual stock, country, or industry will have on overall investment performance. **The I Fund remains invested in the Barclays EAFE Index Fund regardless of conditions in the international stock markets or the value of the U.S. dollar relative to the currencies of the countries in the EAFE index.**

### ***EAFE Index***

The EAFE index, developed by Morgan Stanley Capital International (MSCI), is the most widely used international stock index. The EAFE index is designed by MSCI to provide broad coverage of the non-U.S., non-Canada world equity markets. As of December 31, 2002, the EAFE index included common stocks of 21 countries. For each country in the index, MSCI selects common stocks of companies that, in the aggregate, represent 85% of the market value of that country's publicly available, or "free-float adjusted" (i.e., freely traded), stock. Excluded by the free-float adjustment are non-publicly available stocks (also known as "strategic holdings"), including holdings of governments, controlling shareholders and their families, company management, and other companies. Also excluded are shares subject to foreign ownership limitations imposed either by governments or by a company.

The EAFE index is based on the free-float adjusted market value of a country's stock market relative to the similarly adjusted market value of the stock markets of the other countries in the index. In addition, the weights of the stocks in the EAFE index are based on each stock's free-float adjusted market value relative to the free-float adjusted market value of other stocks of that country that are included in the index.

As of December 31, 2002, there were 1,000 stocks in the EAFE index. Chart 15 lists, as of December 31, 2002, the 21 countries in the EAFE index and the percentage of the index each one represented, as well as the number of companies from each country in the index.

Chart 15

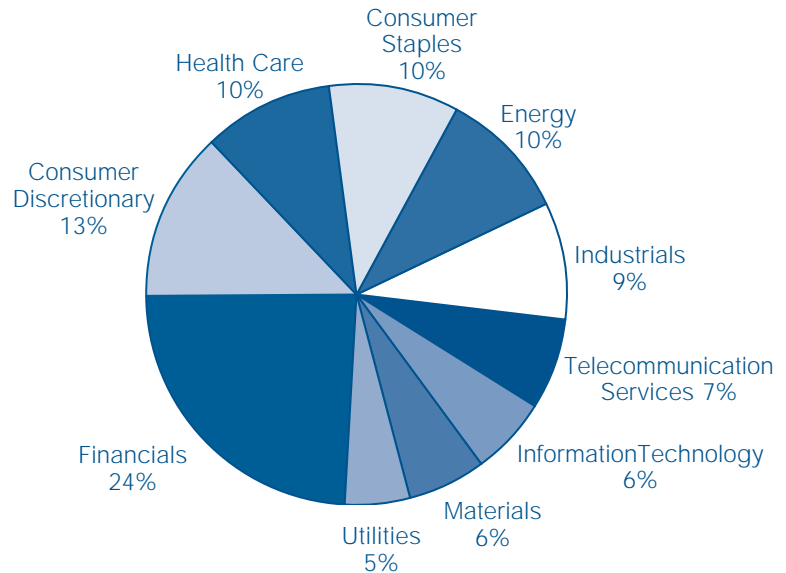
**EAFE Index**  
**Country Composition**  
**December 31, 2002**

Country	Percent of Total Value of Index	Number of Companies
<b>Europe</b>		
Austria	0.1	11
Belgium	1.0	17
Denmark	0.7	24
Finland	2.0	18
France	9.3	54
Germany	5.8	47
Greece	0.4	23
Ireland	0.7	11
Italy	3.9	42
Netherlands	5.5	24
Norway	0.5	20
Portugal	0.4	10
Spain	3.3	30
Sweden	1.9	37
Switzerland	8.1	36
United Kingdom	<u>27.7</u>	<u>128</u>
Europe	<b>71.5%</b>	<b>532</b>
<b>Australasia/Far East</b>		
Australia	4.7	72
Hong Kong	1.6	29
Japan	21.2	319
New Zealand	0.2	13
Singapore	<u>0.8</u>	<u>35</u>
Australasia/Far East	<b>28.5%</b>	<b>468</b>
<b>EAFE Index</b>	<b>100%</b>	<b>1,000</b>

Source: Morgan Stanley Capital International

MSCI selects the companies in the EAFE index based on considerations such as reflecting the spectrum of business activities across and within the industries represented in a country's stock market, assuring adequate size and liquidity of a stock so that international institutional investors can effectively replicate the index, and ensuring continuity (i.e., low turnover) of the companies that are included in the index. The EAFE index includes 23 industry groups covering the 10 economic sectors shown in Chart 16.

**EAFE Index**  
**Percentage of Market Capitalization**  
**by Economic Sector**  
**December 31, 2002**



Source: Morgan Stanley Capital International

MSCI monitors the composition of the index and makes changes to ensure that companies in the index are representative of their industries and stock markets. MSCI will also make changes to the EAFE index because of mergers, acquisitions, and bankruptcies.

Like the S&P 500, the EAFE index includes many large companies, and the largest companies represent the largest portion of the index. As of December 31, 2002, the largest 100 companies in the EAFE index represented 59% of the EAFE market value. The 20 largest companies in the index, as of December 31, 2002, are listed in Chart 17.

Most of the companies in the EAFE index pay dividends. The dividend yield (dividends divided by current market price) for the EAFE index as of December 31, 2002, was 2.8%. This means that, at December 31 market prices, annual dividend income equalled approximately 2.8% of the market value of the EAFE index. The dividend yield varies with stock prices. Assuming relatively stable dividend payments, the dividend yield will rise when stock prices fall and decline when stock prices rise. Thus, dividend income provides a cushion when EAFE stock prices are falling.

**Barclays EAFE Index Fund** — The EAFE Index Fund holds common stocks of all the companies represented in the EAFE index in virtually the same weights as they are represented in the index. A portion of

Chart 17

## Largest Companies in the EAFE Index December 31, 2002

(Based on the total market value of the company  
relative to the total market value of the index)

Rank	Company	Country	Percent of Total Value of the EAFE Index	Cumulative Percent
1	BP Amoco (British Petroleum)	United Kingdom	2.92	2.92
2	Vodafone Group	United Kingdom	2.35	5.28
3	GlaxoSmithKline	United Kingdom	2.20	7.48
4	HSBC Holdings (GB)	United Kingdom	1.98	9.46
5	Novartis	Switzerland	1.89	11.35
6	Royal Dutch Petroleum Co.	Netherlands	1.77	13.12
7	Total Fina Elf	France	1.72	14.85
8	Nestlé	Switzerland	1.59	16.43
9	Nokia Corp.	Finland	1.44	17.87
10	Royal Bank of Scotland	United Kingdom	1.25	19.12
11	Shell T & T	United Kingdom	1.21	20.32
12	Toyota Motor Corp.	Japan	1.19	21.52
13	Astrazeneca Avis Europe	United Kingdom	1.17	22.69
14	UBS Namen	Switzerland	1.15	23.84
15	Roche Holding Genuss	Switzerland	0.93	24.77
16	ENI	Italy	0.84	25.61
17	Telefónica	Spain	0.78	26.39
18	Barclays	United Kingdom	0.78	27.17
19	Lloyds TSB Group	United Kingdom	0.76	27.93
20	HBOS Group	United Kingdom	0.76	28.69

Source: Morgan Stanley Capital International

EAFE Index Fund assets is reserved to meet the needs of daily client activity. This liquidity reserve is invested in a combination of certain national equity index futures contracts of the countries in the index, including, for example, FTSE 100 (United Kingdom), DAX (Germany), CAC 40 (France), ALL ORDS (Australia), Nikkei 300 (Japan), and Hang Seng (Hong Kong) index futures contracts.

The I Fund invests in the Barclays EAFE Index Fund by purchasing shares of the Barclays EAFE Index Fund “E”, which in turn holds primarily shares of the Barclays EAFE Index Master Fund. As of December 31, 2002, the EAFE Index Fund “E” held \$583 million of the EAFE Index Master Fund, which itself held \$21.5 billion of securities. I Fund holdings constituted \$480 million of the December 31, 2002, value of the EAFE Index Fund “E”.

## TSP Fund Earnings

The Board calculates earnings separately for each of the TSP investment funds. G Fund earnings consist entirely of the interest earned in the G Fund, offset by administrative expenses. F, C, S, and I Fund earnings consist of the components shown in Chart 18.

Chart 18

## Components of G, F, C, S, & I Fund Earnings

	G Fund	F Fund	C, S, and I Funds
<b>Gross Earnings</b>	Interest	Capital gain/loss (net of trading costs)	Capital gain/loss (net of trading costs)
		Interest on notes and bonds	Dividends
		Interest on short- term investments	Interest on short- term investments
		Securities lending income	Securities lending income
<b>- Expenses</b>	TSP expenses	TSP expenses	TSP expenses
		Management fees	Management fees
<b>= Net Earnings</b>	<b>Net Earnings</b>	<b>Net Earnings</b>	<b>Net Earnings</b>

**Capital gain or loss** — The F, C, S, and I Funds' daily capital gain or loss reflects the change in the share prices of the Barclays U.S. Debt Index Fund, Barclays Equity Index Fund, Barclays Extended Market Index Fund, and Barclays EAFE Index Fund, respectively, from the previous day's prices (net of trading costs charged to the TSP). The changes in the share prices of the Barclays funds derive from interest income (U.S. Debt Fund only), dividends (stock funds only), and changes in the value of the underlying securities held by the four funds. The change in the value of the stocks in the EAFE Index Fund also includes the change in the value of the U.S. dollar relative to the value of the currencies of the countries represented in the EAFE index. Barclays uses the closing market prices to calculate the daily share price for each of its index funds.

The F, C, S, and I Funds may be charged trading costs in connection with the purchase or sale of Barclays index fund shares. These trading costs reduce the amount invested in the index funds, thus reducing gains or increasing losses.\*

**Interest/dividend income** — The G Fund earns interest on the Treasury securities it holds. Barclays credits interest income to the U.S. Debt Index Fund each business day. The interest income is reinvested in the U.S. Debt Index Fund and included in the share price. Barclays also credits its dividend income to the three stock funds in which the TSP invests. The dividend income is reinvested in the Equity Index Fund, Extended Market Index Fund, and EAFE Index Fund, respectively, and included in their share prices.

\*Because of the large size of the Barclays index funds in which the TSP funds are invested, purchases or sales of index fund shares may be partially or fully exchanged with shares being bought or sold by other clients. Such exchanges serve to reduce trading costs.



**Interest on short-term investments** — The F, C, S, and I Funds earn interest on short-term investments. Before F, C, S, and I Fund monies are transferred to Barclays for investment in the respective index funds, or while they are awaiting disbursement of loans or withdrawals from the TSP, they are invested temporarily in the same U.S. Treasury securities as those issued to the G Fund. The resulting interest is credited to the appropriate fund.

**Securities lending income** — Securities lending income is earned when Barclays lends notes and bonds (F Fund) or stocks (C, S, and I Funds) held by the related index funds to a select group of brokers. The brokers put up collateral, primarily cash and Treasury securities, exceeding the market value of the securities. The collateral is monitored for the life of the loan to ensure that its value does not fall below 102% (105% for I Fund stocks) of the market value of the borrowed securities. The cash collateral is invested in short-term money market instruments and in certain other short-term investments, such as interest rate swaps. These investments generate income which is included in the share price of the related Barclays fund (or credited to the TSP against the funds' management fees).

**Administrative expenses** — Major expenses of the TSP include the development and operating costs of its computerized record keeping system and the TSP Service Office (both of which are managed by the TSP record keeper, the U.S. Department of Agriculture's National Finance Center, located in New Orleans, Louisiana), as well as costs of printing and mailing TSP publications and participant statements.

There are two sources of funds for operating the TSP. The first source is forfeitures of any non-vested Agency Automatic (1%) Contributions. (FERS employees who leave Federal service before they are vested in the TSP — generally before completing 3 years of Federal service — forfeit the Agency Automatic (1%) Contributions and earnings on those contributions.) Any administrative expenses not covered by the forfeitures are paid from the second source — earnings on participant and agency contributions.

The daily earnings of the G, F, C, S, and I Funds are reduced by each fund's proportional share of accrued TSP administrative expenses. F, C, S, and I Fund earnings are also reduced by accrued Barclays' investment management fees for each fund. The result is net earnings, which are used to calculate the daily share price for each fund (see Section III).

The effect of administrative expenses on the rates of return of the five funds is measured by the expense ratio of each fund. The F, C, S, and I Fund expense ratios include management fees (but not trading costs). An investment fund's expense ratio of .06%, for example, means that a participant's earnings in that fund were reduced approximately \$0.60 for every \$1,000 of account balance in that fund. Thus, a participant's share of administrative expenses is based on the size of his or her account balance.

The net expense ratios for the TSP investment funds for 1988 – 2002 were:

Year	G Fund	F Fund	C Fund	S Fund	I Fund
1988	.34%	.30%	.29%		
1989	.21%	.23%	.20%		
1990	.11%	.13%	.13%		
1991	.13%	.16%	.15%		
1992	.13%	.15%	.14%		
1993	.12%	.14%	.13%		
1994	.10%	.12%	.11%		
1995	.09%	.11%	.10%		
1996	.08%	.10%	.09%		
1997	.07%	.08%	.07%		
1998	.06%	.08%	.07%		
1999	.05%	.07%	.06%		
2000	.05%	.07%	.06%		
2001*	.06%	.06%	.06%	.05%**	.05%**
2002	.06%	.06%	.07%	.07%	.07%

\* The expense ratios for 2001 exclude approximately \$41 million of capitalized expenses that were written off in 2001. These expenses arose from the Board's July 2001 termination of its contract with American Management Systems, Inc., for the creation of a new computerized record keeping system. In June 2003, the Board settled its litigation against AMS, receiving \$5 million. The remaining approximately \$36 million were charged to participant accounts on June 23, 2003, and will be included in the 2003 expense ratios.

\*\* The S and I Funds were implemented in May 2001. Thus, the 2001 expense ratios shown for those funds are for 8 months.

## Comparing F, C, S, and I Fund Performance with Index Performance

The F, C, S, and I Fund returns vary from the returns of the indexes they track (i.e., the LBA index, S&P 500 index, Wilshire 4500 index, and EAFE index) primarily for four reasons.

First, the monthly TSP returns for each investment fund are calculated as the percentage change in the share price (calculated to two decimal places) of that fund during the month. Residual earnings (see “Daily Valuation Shares, and Share Prices,” page 40) for each fund which are not sufficient to cause a \$.01 change in the share price on the last day of the month are carried forward to the following month. This generally causes differences between the monthly returns of the TSP funds and those of their respective Barclays index funds. However, over long periods of time, these differences should not be significant.

Second, F, C, S, and I Fund returns are shown after TSP accrued administrative expenses, investment management fees, and trading costs have been deducted. In contrast, the index returns are shown without any such deductions.

Third, F, C, S, and I Fund contributions awaiting transfer to the investment manager or awaiting disbursement of loans and withdrawals from the TSP are invested in G Fund-related securities. The interest earned

may contribute to slight differences between the F, C, S, and I Fund returns and the index returns.

Fourth, there may be differences in returns between the Barclays index funds in which the F, C, S, and I Funds are invested and the underlying indexes, e.g., because of trading costs incurred by the Barclays funds and differences between the weighting of the securities holdings of the Barclays funds and those of the respective indexes.

Each month the Board publishes the returns for the G, F, C, S, and I Funds for the most recent 12 months. The last 12-month returns represent the return on the money in your account which was invested in the fund for the entire 12-month period. (Appendix 3 describes how the Board calculates the period and compound annual returns shown in TSP publications.)

You can follow the performance of the indexes that the F, C, S, and I Funds track in a number of ways:

The Lehman Brothers U.S. Aggregate (LBA) Index, which the F Fund tracks, is published in *The Wall Street Journal*. A preliminary index value is listed in the “Market Lineup,” which may be found on the first inside news page of the Money and Investing section.

The S&P 500 index, which the C Fund tracks, is published in most daily newspapers, as well as on the S&P Web site at [www.spglobal.com](http://www.spglobal.com). The daily S&P 500 index values do not include the effects of the reinvestment of dividends. As a result, the C Fund returns (before deduction of net administrative expenses), which do include the reinvestment of dividends, may be slightly higher than the returns calculated using the published S&P 500 index values. The S&P Web site also provides monthly total returns, which do include dividends, and other information, including a list of the 500 companies in the S&P 500 index.

The Wilshire 4500 index, which the S Fund tracks, is not published in newspapers, but you can follow its performance on the Wilshire Web site at [www.wilshire.com](http://www.wilshire.com). The Wilshire Web site provides returns both with and without dividend reinvestment.

The EAFE index, which the I Fund tracks, is published on the Morgan Stanley Web site at [www.msdata.com](http://www.msdata.com). The EAFE index value for the previous business day is updated on the Web site each morning. Preliminary EAFE index values are also available in *The Wall Street Journal*. In the Markets Diary table in Money & Investing (Section C), the “MSCI EAFE” line in the “Global Stocks” section provides the *preliminary* estimate of the closing EAFE index value for the previous business day. The actual closing index values are available the following business day in the Foreign Markets section in Money & Investing. The “EAFE MSCI” line in the table called “MSCI Indexes” represents the actual closing index values. For example, the preliminary EAFE index value for Monday is in the Tuesday edition of *The Wall Street Journal*, and the actual EAFE index

## Sources of TSP Investment Performance Information

value for Monday is in the Wednesday edition. Thus, there is a 2-day lag before the actual EAFE index value is provided in *The Wall Street Journal*.

The Barclays EAFE Index Fund returns will differ from the returns calculated using the EAFE index values published in *The Wall Street Journal* because the values provided in *The Wall Street Journal* do not include the reinvestment of dividends.

There are several sources of information about the performance of the TSP funds: the *TSP Highlights* (which are included twice a year with your participant statement), the TSP Web site, the ThriftLine, and the TSP Fact Sheet, “G, F, C, S, and I Fund Monthly Returns.”

Your agency can provide you with a paper copy of the TSP Fact Sheet on monthly returns, or you can obtain this information from the TSP Web site. The Fact Sheet provides monthly returns, returns for the last 12 months, and the annual returns for the past 5 years. A sample Fact Sheet is provided in Appendix 4. The version of the Fact Sheet that is displayed on the Web site shows returns to two decimal places (the paper version uses one decimal place), and it also shows returns for the related indexes and G Fund securities. For information about how to use the TSP Web site and the ThriftLine, see the Fact Sheet “Using the TSP Web Site and the ThriftLine” in Appendix 5.

At the beginning of each month, the Board announces the statutory G Fund interest rate for the month. The G Fund interest rate announced at the beginning of each month is the statutory nominal interest rate expressed on a *per annum* basis, that is, the rate that you would receive if your G Fund investments were invested at that rate for one year. You can estimate the monthly G Fund return by dividing the annual rate by 12, for example,  $6.0\% \div 12 = .50\%$ . The statutory interest rate is not adjusted for administrative expenses or compounding. In contrast, the monthly G Fund returns contained on the Web site, the ThriftLine, and in the Fact Sheet represent the actual returns, after expenses, on investments in the G Fund for that month.

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## III. TSP Operations

From its inception in April 1987 through the implementation of the new record keeping system in 2003, the TSP was a monthly valued, dollar-based plan, which meant that the value of the assets in participants' accounts was determined once a month, as of month end, when monthly earnings were posted to participant accounts. All transactions and account balances in the record keeping system were accounted for and presented to participants (e.g., on the TSP participant statement, Web site, or ThriftLine) solely in dollars. With the implementation of the new record keeping system, the TSP converted from monthly valuation to daily valuation, and from a dollar-based to a share-based system. This means that the value of your account is determined each business day based on the daily share price and the number of shares you hold in each fund. The method of calculation of the daily share price is described below.

### Conversion to Daily Valuation and Share-based Accounting

The final monthly processing cycle in the monthly valued system credited earnings and posted month-end transactions (e.g., loans, withdrawals, and interfund transfers) to TSP accounts. Following that processing cycle, the account balance for each TSP participant was transferred to the new daily valued record keeping system. At the time of the transfer to the new system, your account balance was converted from dollars to shares.

Your account balance was converted to shares by investment fund (G, F, C, S, and I) and by source of contributions (Employee Contributions, Agency Automatic (1%) Contributions, and Agency Matching Contributions). The initial share prices were established at \$10.00 for each fund. Your balance was converted to shares by dividing your dollar balance in each investment fund and source of contributions by \$10.00. The result was the number of shares posted to your account for each fund and source of contributions.

For example, assuming one source of contributions, a \$30,000 account balance with \$9,000 invested in the G Fund, \$3,000 in the F Fund, and \$18,000 in the I Fund was converted as follows:

<b>Fund</b>	<b>Balance</b>	<b>÷</b>	<b>Share Price</b>	<b>=</b>	<b>Number of Shares</b>
G	\$ 9,000	÷	\$10.00	=	900.0000
F	\$ 3,000	÷	\$10.00	=	300.0000
I	\$18,000	÷	\$10.00	=	1,800.0000

The value of your account balance after the conversion to shares was the same as it was before the conversion. The number of shares is maintained to four decimal places in the new system. For example, a

## Daily Valuation, Shares, and Share Prices

C Fund balance of \$25,836.92 purchased 2,583.6920 shares ( $\$25,836.92 \div \$10.00$ ) and retained its pre-conversion dollar value (2,583.6920 shares x \$10.00 share price = \$25,836.92 account balance).

At the end of each business day, after the stock and bond markets have closed, the daily change in the value of the holdings of each investment fund, net of accrued administrative expenses, transaction costs, and accrued investment management fees, are calculated (see “TSP Fund Earnings, pages 33 – 36). The earnings are then divided by the total number of shares in that fund to determine the incremental change in the share price for that day. The incremental amount, carried to ten decimal places, is added to the prior day’s share price and then truncated to two decimal places. (The daily share price for each fund is calculated to two decimal places.) The result is the share price for the investment fund for the current business day. The residual earnings attributable to the last eight decimal places are carried over to the next business day’s share price calculation. (In the G Fund, the net earnings are always positive; in the F, C, S, and I Funds, the net earnings can be positive or negative.) The daily share price for a fund may be the same as, higher than, or lower than the share price for the previous day, depending on whether there was a net gain or loss in that fund for the day which was sufficient to cause a change in the share price.

The daily earnings for each investment fund in your account are reflected in the daily change in the share price for each fund. For each day, the earnings for each investment fund equal the change in the share price times the number of shares in that fund at the beginning of that day. For example, if you owned 500 shares of the C Fund at the end of Day 1 when the share price was \$10.00 per share, and if on Day 2 the share price increased to \$11.00 per share, earnings would have increased your account balance by \$500:

$$\begin{aligned}\text{Net Earnings} &= \text{Number of Shares} \times \text{Change in Share Price} \\ &= 500 \times (\$11.00 - \$10.00) \\ &= 500 \times \$1.00 \\ &= \$500.00\end{aligned}$$

After the share price is calculated each business day, all other TSP transactions are processed. All transactions result in a purchase or sale of shares based on the share price for that day.

Contributions from all sources (Employee Contributions, Agency Automatic (1%) Contributions, and Agency Matching Contributions), as well as loan payments and transfers from other eligible retirement plans, are used to purchase shares in each investment fund based on your current contribution allocation. For example, if the amount of your employee contributions to your TSP account is \$100 each pay period and you have elected to invest 20% of your contributions in each of the five investment funds, \$20 will be used to purchase shares in each investment fund for the employee source of contributions. This calculation would be made in the same way for Agency Automatic (1%) Contributions and

Agency Matching Contributions. The number of shares purchased by each source in each fund is calculated by dividing the contribution (\$20) by the applicable share price, as illustrated by the examples in the following table, which assume only one source (i.e., employee contributions). The number of shares purchased or sold in any transaction is rounded to four decimal places for each fund/source combination. Therefore, participants who wish to calculate the dollar value of their TSP accounts cannot do so simply by multiplying the share price of that fund by the number of shares because the calculations made by the TSP record keeping system first determine the number of shares purchased by each source of contribution; then the record keeping system adds together the shares purchased by each source to obtain the total shares purchased for each fund. Participants may not obtain the same answer because of rounding.

<b>Investment Fund</b>	<b>Contribution</b>	<b>÷</b>	<b>Share Price</b>	<b>=</b>	<b>Number of Shares Purchased</b>
G	\$20.00	÷	\$10.06	=	1.9881
F	\$20.00	÷	\$10.17	=	1.9666
C	\$20.00	÷	\$ 9.70	=	2.0619
S	\$20.00	÷	\$11.92	=	1.6779
I	\$20.00	÷	\$10.97	=	1.8232

A description of how withdrawals, loans, and interfund transfers affect your account balance follows, with examples using the above share prices for a hypothetical day on which the transactions are processed.

When you borrow or withdraw from your account, shares are sold from your account at the applicable share price. The number of shares sold is calculated by dividing the amount required from each fund/source combination by the share price for that fund, rounded to four decimal places. For example, a \$5,000 loan from an account invested entirely in the G Fund would result in a sale of 497.0179 shares ( $\$5,000 \div \$10.06$  share price = 497.0179 shares). The 497.0179 shares are removed from the account, which reduces the number of shares in the G Fund, and therefore the G Fund balance, by \$5,000.

An interfund transfer is a combination of a purchase of shares and a sale of shares. For example, an interfund transfer to allocate 100% of the account balance to the G Fund in an account with a \$47,269.45 balance entirely invested in the C Fund would result in the sale of 4,873.1392 shares from the C Fund ( $\$47,269.45 \div \$9.70$  share price = 4,873.1392 shares), and the purchase of 4,698.7525 shares in the G Fund ( $\$47,269.45 \div \$10.06$  share price = 4,698.7525 shares).

The daily account balance is calculable after all transactions for the day are processed. First, the number of shares held in each source of contributions in each investment fund is multiplied by the share price for that fund. Second, the dollar balances held in each contribution source

within each investment fund are added together to produce the total balance in that investment fund. Finally, the balances in the five investment funds are added together to determine the participant's total account balance.

Your daily account balance provided on the TSP Web site and the Thrift-Line represents the current value of your account, including all earnings and other transactions — such as contributions, loan payments, withdrawals, loans, and interfund transfers — which have been processed as of the close of business on the last business day.

Your quarterly participant statement will show your account balance and transactions, expressed both in shares and in dollars.

## **Investment Allocations**

As discussed in Section I, there are two ways to change the investment of your TSP account: by making a contribution allocation or by making an interfund transfer.

### ***Contribution Allocations***

When you make a contribution allocation, you designate the way you want your future deposits to be invested in the G, F, C, S, and I Funds. A contribution allocation applies to your payroll contributions, any agency matching and automatic contributions, transfers you make into your account from IRAs or other retirement plans, and, if you have a TSP loan, any loan payments you make. A contribution allocation does not affect the money already in your account. You may make a contribution allocation directly with the TSP at any time. A contribution allocation stays in effect until you change it.

If you already had an account established when the TSP changed to the new record keeping system, any contribution allocation on file remained in effect. All contributions to new accounts are automatically invested in the G Fund until the participant makes a contribution allocation to invest in the other funds.

### ***Interfund Transfers***

An interfund transfer is the movement of some or all of your existing account balance among the G, F, C, S, and I Funds. An interfund transfer is different from the allocation of future contributions; the interfund transfer is a one-time transaction that involves only money that is already in your account. It does not affect the allocation of future contributions. You request changes in the percentage of your account balance that you want to be invested in each of the five funds after the transfer is completed. (You cannot request to have a specific dollar amount moved from one fund to another.) The percentages you request will be applied to all sources of contributions in your account.



## **Making Investment Allocations**

The Web site, [www.tsp.gov](http://www.tsp.gov), and the ThriftLine, (504) 255-8777, are the fastest and most efficient ways to change your contribution allocation and to request an interfund transfer. If you have not previously acknowledged the risk of investing in the F, C, S, and I Funds, you will be asked on the Web site or the ThriftLine to make an on-line, one-time acknowledgment of the risk of investing in these funds. Your acknowledgment of risk is effective immediately, and you may change your contribution allocation or request an interfund transfer at the same time. See the Fact Sheet "Using the TSP Web Site and the ThriftLine," Appendix 5. You can also mail Form TSP-50 (for civilians) or Form TSP-U-50 (for members of the uniformed services), Investment Allocation, to the TSP Service Office at the address on the form, or call a TSP participant service representative at (504) 255-8777 to make your request. By signing the form (which is mandatory) you will acknowledge the risk of investing in all four funds.

Requests for contribution allocations or interfund transfers entered by 11:00 a.m., central time, each business day will ordinarily be posted at the close of business on that day, and, in the case of contribution allocations, generally will affect the allocation of contributions and loan payments posted to your account that day.

Requests entered after 11:00 a.m., central time, each business day will ordinarily be posted at the close of business on the next business day. Requests made on a weekend, holiday, or other non-business day will ordinarily be posted at the close of business on the next business day.

You may change or cancel a pending request up to the 11:00 a.m., central time, deadline. After the deadline, a request for that day cannot be changed or canceled, but you may request a new contribution allocation or interfund transfer to be effective the next business day.

After your request for a contribution allocation or interfund transfer has been posted to your account, the TSP record keeper will send you a confirmation of your transaction.

Although the Board strives to ensure that the TSP Web site and the ThriftLine are available to accept transaction requests, the Board cannot guarantee that the Web site or the ThriftLine will be available 24 hours a day, 7 days a week. If either is unavailable because the computer system is down or the lines are busy, participants must try to make a request later. Moreover, even if a transaction request is made (or, in the case of a Form TSP-50, entered into the TSP system) before 11:00 a.m., central time, the Board does not guarantee that the transaction will be posted that business day, rather than on a subsequent day.

# **Appendices**

Appendix 1 (1)

## TSP Investment Fund Rates of Return 1988 – 2002

The monthly investment fund returns represent the actual total rates of return used in the monthly allocation of earnings to participant accounts. The returns are shown after deduction of accrued TSP administrative expenses. The F, C, S, and I Fund returns also reflect the deduction of trading costs and accrued investment management fees. The S and I Funds were implemented in May 2001.

Months	G Fund	F Fund*	C Fund
<b>1988</b>			
January**	.69%	(.06%)	(.20%)
February	.62	.81	4.82
March	.66	(.80)	(3.47)
April	.68	(.46)	.73
May	.71	(.63)	1.42
June	.72	1.97	4.08
July	.72	(.49)	(.24)
August	.76	.33	(2.74)
September	.76	2.07	4.12
October	.75	1.68	2.53
November	.68	(1.09)	(1.23)
December	.74	.31	1.78
<b>Annual Return</b>	<b>8.81%</b>	<b>3.63%</b>	<b>11.84%</b>
<b>1989</b>			
January	.76%	1.27%	7.14%
February	.67	(.68)	(2.51)
March	.78	.50	2.21
April	.75	2.05	5.14
May	.76	2.42	3.98
June	.70	3.19	(.58)
July	.69	2.06	8.83
August	.66	(1.48)	1.98
September	.68	.37	(.29)
October	.71	2.45	(2.33)
November	.65	.86	2.05
December	.67	.16	2.37
<b>Annual Return</b>	<b>8.81%</b>	<b>13.89%</b>	<b>31.03%</b>

\* From 1988 through 1990, the F Fund was invested in the Barclays Bond Index Fund, which tracked the Lehman Brothers U.S. Government/Corporate bond index.

\*\* The first F and C Fund investments in the Barclays Bond Index Fund and the Barclays Equity Index Fund, respectively, occurred on January 29, 1988.

Numbers in ( ) are negative.

Months	G Fund	F Fund*	C Fund
<b>1990</b>			
January	.68%	(1.38%)	(6.59%)
February	.64	.21	1.26
March	.72	.01	2.64
April	.71	(.94)	(2.52)
May	.76	2.80	9.44
June	.71	1.56	(.71)
July	.72	1.24	(.36)
August	.72	(1.42)	(8.65)
September	.73	.81	(4.85)
October	.76	1.32	(.46)
November	.70	2.15	6.36
December	.70	1.46	2.72
<b>Annual Return</b>	<b>8.90%</b>	<b>8.00%</b>	<b>(3.15%)</b>
<b>1991</b>			
January	.69%	1.15%	4.55%
February	.62	.86	7.07
March	.68	.67	2.40
April	.66	1.05	.18
May	.68	.57	4.30
June	.66	(.01)	(4.49)
July	.69	1.40	4.63
August	.69	2.12	2.37
September	.64	1.99	(1.63)
October	.62	1.09	1.39
November	.61	.89	(3.96)
December	.62	2.96	11.41
<b>Annual Return</b>	<b>8.15%</b>	<b>15.75%</b>	<b>30.77%</b>
<b>1992</b>			
January	.57%	(1.35%)	(1.89%)
February	.56	.66	1.29
March	.62	(.53)	(1.91)
April	.62	.67	2.91
May	.64	1.84	.49
June	.60	1.36	(1.45)
July	.60	2.00	4.11
August	.57	1.00	(2.02)
September	.54	1.15	1.15
October	.55	(1.30)	.42
November	.56	.01	3.39
December	.58	1.54	1.21
<b>Annual Return</b>	<b>7.23%</b>	<b>7.20%</b>	<b>7.70%</b>

**Appendix 1 (3)**

<b>Months</b>	<b>G Fund</b>	<b>F Fund</b>	<b>C Fund</b>
<b>1993</b>			
January	.58%	1.88%	.86%
February	.49	1.73	1.35
March	.52	.41	2.09
April	.51	.67	(2.39)
May	.51	.10	2.66
June	.51	1.79	.32
July	.49	.55	(.38)
August	.49	1.72	3.78
September	.45	.26	(.76)
October	.47	.38	2.04
November	.45	(.84)	(.93)
December	.49	.52	1.20
<b>Annual Return</b>	<b>6.14%</b>	<b>9.52%</b>	<b>10.13%</b>
<b>1994</b>			
January	.51%	1.33%	3.40%
February	.43	(1.72)	(2.70)
March	.52	(2.45)	(4.39)
April	.56	(.81)	1.28
May	.60	(.02)	1.66
June	.59	(.24)	(2.47)
July	.62	1.97	3.27
August	.60	.13	4.11
September	.59	(1.47)	(2.44)
October	.65	(.10)	2.24
November	.64	(.23)	(3.62)
December	.68	.69	1.49
<b>Annual Return</b>	<b>7.22%</b>	<b>(2.96%)</b>	<b>1.33%</b>
<b>1995</b>			
January	.67%	1.98%	2.58%
February	.59	2.38	3.87
March	.62	.60	2.94
April	.60	1.38	2.94
May	.61	3.84	3.98
June	.53	.71	2.31
July	.55	(.23)	3.30
August	.56	1.21	.26
September	.53	.95	4.19
October	.54	1.28	(.36)
November	.51	1.49	4.38
December	.50	1.39	1.92
<b>Annual Return</b>	<b>7.03%</b>	<b>18.31%</b>	<b>37.41%</b>

Months	G Fund	F Fund	C Fund
<b>1996</b>			
January	.49%	.66%	3.41%
February	.46	(1.75)	.91
March	.54	(.68)	.97
April	.54	(.56)	1.47
May	.58	(.11)	2.56
June	.57	1.34	.38
July	.58	.27	(4.39)
August	.58	(.18)	2.07
September	.58	1.72	5.60
October	.58	2.21	2.74
November	.53	1.69	7.54
December	.53	(.93)	(1.97)
<b>Annual Return</b>	<b>6.76%</b>	<b>3.66%</b>	<b>22.85%</b>
<b>1997</b>			
January	.56%	.30%	6.22%
February	.51	.24	.79
March	.57	(1.11)	(4.13)
April	.58	1.49	6.00
May	.58	.94	6.07
June	.56	1.18	4.45
July	.57	2.69	7.94
August	.53	(.86)	(5.59)
September	.54	1.48	5.46
October	.54	1.45	(3.38)
November	.50	.46	4.61
December	.52	1.01	1.71
<b>Annual Return</b>	<b>6.77%</b>	<b>9.60%</b>	<b>33.17%</b>
<b>1998</b>			
January	.51%	1.28%	1.12%
February	.44	(.07)	7.20
March	.50	.34	5.11
April	.49	.52	1.00
May	.51	.95	(1.72)
June	.48	.85	4.05
July	.49	.21	(1.09)
August	.49	1.66	(14.47)
September	.44	2.36	6.33
October	.41	(.52)	8.19
November	.42	.56	6.04
December	.43	.30	5.76
<b>Annual Return</b>	<b>5.74%</b>	<b>8.70%</b>	<b>28.44%</b>

**Appendix 1 (5)**

<b>Months</b>	<b>G Fund</b>	<b>F Fund</b>	<b>C Fund</b>
<b>1999</b>			
January	.42%	.71%	4.19%
February	.38	(1.74)	(3.09)
March	.47	.54	3.99
April	.46	.29	3.86
May	.47	(.89)	(2.36)
June	.49	(.33)	5.54
July	.52	(.43)	(3.14)
August	.53	(.05)	(.50)
September	.51	1.15	(2.78)
October	.53	.38	6.34
November	.51	(.01)	2.00
December	.54	(.45)	5.90
<b>Annual Return</b>	<b>5.99%</b>	<b>(.85%)</b>	<b>20.95%</b>
<b>2000</b>			
January	.56%	(.34%)	(5.03%)
February	.53	1.22	(1.93)
March	.55	1.32	9.74
April	.52	(.29)	(2.98)
May	.54	(.03)	(2.05)
June	.53	2.07	2.44
July	.53	.89	(1.56)
August	.52	1.46	6.19
September	.49	.64	(5.27)
October	.51	.66	(.40)
November	.48	1.65	(7.87)
December	.48	1.86	.50
<b>Annual Return</b>	<b>6.42%</b>	<b>11.67%</b>	<b>(9.14%)</b>

*(Continued on next page.)*

Months	G Fund	F Fund	C Fund	S Fund***	I Fund***
<b>2001</b>					
January	.46%	1.65%	3.55%	5.44%	(.5%)
February	.42	.87	(9.12)	(12.15)	(7.50)
March	.45	.51	(6.33)	(9.18)	(6.67)
April	.43	(.42)	7.78	10.58	6.95
May	.47	.61	.65	1.42	(4.13)
June	.47	.39	(2.42)	.66	(3.99)
July	.48	2.22	(.98)	(4.13)	(1.79)
August	.45	1.20	(6.27)	(4.32)	(2.58)
September	.43	1.15	(8.05)	(12.50)	(9.95)
October	.41	2.12	1.85	5.09	2.47
November	.37	(1.37)	7.62	7.84	3.56
December	.42	(.61)	.88	5.31	.52
<b>Annual Return</b>	<b>5.39%</b>	<b>8.61%</b>	<b>(11.94%)</b>	<b>(9.04%)</b>	<b>(21.94%)</b>
<b>2002</b>					
January	.4%	.8%	(1.5%)	(2.0%)	(5.3%)
February	.4	1.0	(1.9)	(2.6)	.7
March	.4	(1.7)	3.7	6.8	5.8
April	.5	1.9	(6.1)	(1.1)	.2
May	.4	.9	(.7)	(2.4)	1.3
June	.4	1.0	(7.1)	(6.7)	(3.9)
July	.4	1.2	(7.7)	(9.9)	(10.0)
August	.4	1.6	.7	.6	(.3)
September	.4	1.6	(10.9)	(6.8)	(10.7)
October	.3	(.4)	8.8	3.4	5.4
November	.3	(.0)	5.9	6.8	4.5
December	.4	2.1	(5.9)	(4.3)	(3.3)
<b>Annual Return</b>	<b>5.0%</b>	<b>10.3%</b>	<b>(22.0%)</b>	<b>(18.1%)</b>	<b>(16.0%)</b>

\*\*\* The 2001 returns shown reflect the returns of the Wilshire 4500 and EAFE indexes, respectively, for the first four months of 2001 and the actual returns of the S and I Funds for May (inception of S and I Funds) through December 2001.



Appendix 2

**G Fund-Related Securities, LBA Index, S&P 500 Index,  
Wilshire 4500 Index, and EAFE Index  
Rates of Return  
1988 – 2002**

<b>Year</b>	<b>G Fund-Related Securities</b>	<b>LBA Index</b>	<b>S&amp;P 500 Index</b>	<b>Wilshire 4500 Index</b>	<b>EAFE Index</b>
1988	9.19%	7.89%	16.61%	20.54%	28.25%
1989	9.01	14.53	31.69	23.94	10.36
1990	8.97	8.96	(3.10)	(13.56)	(23.59)
1991	8.26	16.00	30.47	43.45	12.19
1992	7.32	7.40	7.62	11.87	(12.22)
1993	6.23	9.75	10.08	14.57	32.68
1994	7.29	(2.92)	1.32	(2.66)	7.75
1995	7.10	18.47	37.58	33.48	11.27
1996	6.80	3.63	22.96	17.18	6.14
1997	6.80	9.65	33.36	25.69	1.55
1998	5.77	8.69	28.58	8.63	20.09
1999	6.03	(.82)	21.04	35.49	26.72
2000	6.42	11.63	(9.10)	(15.77)	(14.17)
2001	5.36	8.44	(11.89)	(9.33)	(21.44)
2002	4.98	10.27	(22.10)	(17.80)	(15.94)
<b>1988 – 2002 Compound Annual Rate of Return</b>	<b>7.03%</b>	<b>8.63%</b>	<b>11.48%</b>	<b>10.04%</b>	<b>3.08%</b>

Numbers in ( ) are negative.

## Calculation of Period and Compound Annual Returns

### Period Returns

You can follow the performance of the G, F, C, S, and I Funds by obtaining the daily share prices from the TSP Web site or from the TSP Service Office. The percent change in the share price from the end of the prior period (e.g., day, week, month, or year) to the end of the current period is the rate of return for that period. The following example shows how to calculate a monthly rate of return. You can use this method to calculate the return for any length of time.

Calculation of hypothetical monthly return for December 2002:

	<b>Share Price</b>
November 30, 2002	11.35
December 31, 2002	11.45

$$\text{Percent Change} = ((11.45 - 11.35)/11.35) \times 100 = .88\%$$

$$\text{Monthly Return} = .88\%$$

### Compound Annual Returns

The Board provides compound annual returns when showing investment performance for 10 years. The compound annual return represents the geometric average annual return for the period. An example of the calculation using the S&P 500 index returns from 1993 through 2002 is provided below.

**Step 1:** Convert percentages to decimals (move the decimal point two places to the left) and add 1. You must add 1 to the returns and multiply the resulting factors together to include the effect of compounding. Calculating the simple average (adding the returns and dividing by 10) ignores the effect of compounding.

1993	10.08%	=	.1008	+	1	=	1.1008
1994	1.32%	=	.0132	+	1	=	1.0132
1995	37.58%	=	.3758	+	1	=	1.3758
1996	22.96%	=	.2296	+	1	=	1.2296
1997	33.36%	=	.3336	+	1	=	1.3336
1998	28.58%	=	.2858	+	1	=	1.2858
1999	21.04%	=	.2104	+	1	=	1.2104
2000	(9.10%)	=	-.0910	+	1	=	.9090
2001	(11.89%)	=	-.1189	+	1	=	.8811
2002	(22.10%)	=	-.2210	+	1	=	.7790

**Step 2:** Multiply the factors together:

$$1.1008 \times 1.0132 \times 1.3758 \times 1.2296 \times 1.3336 \times 1.2858 \times 1.2104 \times .9090 \times .8811 \times .7790 = 2.4433$$

Note: If you subtract 1 from the result of this step ( $2.4433 - 1 = 1.4433$ ), and multiply by 100 ( $1.4433 \times 100 = 144.33\%$ ), you get the cumulative return for the period.

**Step 3:** Take the nth root (where n equals the number of years in the period) of the result of Step 2.

$$\sqrt[10]{2.4433} = 1.0934$$

**Step 4:** Subtract 1 and multiply by 100:

$$(1.0934 - 1) \times 100 = .0934 \times 100 = 9.34\%$$

9.34% equals the compound annual return for the S&P 500 index for 1993 – 2002. You may get slightly different results because of rounding.



# THRIFT SAVINGS PLAN FACT SHEET

## *G, F, C, S, and I Fund Monthly Returns*

January 6, 2003

Months	G Fund*	F Fund*	C Fund*	S Fund**	I Fund**
<b>1997 (Jan. - Dec.)</b>	<b>6.8%</b>	<b>9.6%</b>	<b>33.2%</b>	<b>25.7%</b>	<b>1.5%</b>
<b>1998 (Jan. - Dec.)</b>	<b>5.7%</b>	<b>8.7%</b>	<b>28.4%</b>	<b>8.6%</b>	<b>20.1%</b>
<b>1999 (Jan. - Dec.)</b>	<b>6.0%</b>	<b>(.8%)</b>	<b>21.0%</b>	<b>35.5%</b>	<b>26.7%</b>
<b>2000 (Jan. - Dec.)</b>	<b>6.4%</b>	<b>11.7%</b>	<b>(9.1%)</b>	<b>(15.8%)</b>	<b>(14.2%)</b>
<b>2001 (Jan. - Dec.)</b>	<b>5.4%</b>	<b>8.6%</b>	<b>(11.9%)</b>	<b>(9.0%)</b>	<b>(21.9%)</b>
<b>2002</b>					
January	.4%	.8%	(1.5%)	(2.0%)	(5.3%)
February	.4	1.0	(1.9)	(2.6)	.7
March	.4	(1.7)	3.7	6.8	5.8
April	.5	1.9	(6.1)	(1.1)	.2
May	.4	.9	(.7)	(2.4)	1.3
June	.4	1.0	(7.1)	(6.7)	(3.9)
July	.4	1.2	(7.7)	(9.9)	(10.0)
August	.4	1.6	.7	.6	(.3)
September	.4	1.6	(10.9)	(6.8)	(10.7)
October	.3	(.4)	8.8	3.4	5.4
November	.3	(.0)	5.9	6.8	4.5
December	.4	2.1	(5.9)	(4.3)	(3.3)
<b>Last 12 Months</b>	<b>5.0%</b>	<b>10.3%</b>	<b>(22.0%)</b>	<b>(18.1%)</b>	<b>(16.0%)</b>

Percentages in ( ) are negative.

\*The G Fund (Government Securities Investment Fund) is invested in special issues of U.S. Treasury securities. The F Fund (Fixed Income Index Investment Fund) is invested in the Barclays U.S. Debt Index Fund, which tracks the Lehman Brothers U.S. Aggregate bond index. The C Fund (Common Stock Index Investment Fund) is invested in the Barclays Equity Index Fund, which tracks the S&P 500 stock index.

\*\*The S Fund (Small Capitalization Stock Index Investment Fund) is invested in the Barclays Extended Market Index Fund, which tracks the Wilshire 4500 stock index. The I Fund (International Stock Index Investment Fund) is invested in the Barclays EAFE Index Fund, which tracks the EAFE (Europe, Australasia, Far East) stock index. The S and I Funds were implemented in May 2001. The returns shown reflect the actual performance of the S and I Funds for May 2001 and subsequent months. For the period before May 2001, the S and I Fund returns reflect the performance of the Wilshire 4500 and EAFE indexes (without deduction of any administrative expenses, trading costs, or investment management fees), respectively.

The monthly returns represent net earnings for the month after deduction of accrued administrative expenses, and, in the cases of the F, C, S, and I Funds, after deduction of trading costs and accrued investment management fees.

Future performance of the funds will vary and may be significantly different from the returns shown above. See the *Summary of the Thrift Savings Plan for Federal Employees* for detailed information.



# THRIFT SAVINGS PLAN FACT SHEET

## Using the TSP Web Site and the ThriftLine

General information about the Thrift Savings Plan (TSP), as well as specific information about your TSP account, are available through two electronic media — the TSP Web site and the ThriftLine (the TSP's automated telephone system). You can also use these media to perform certain account transactions. The Web site and ThriftLine are available 24 hours a day, 7 days a week.

To access your account information through either the TSP Web site or the ThriftLine, you will need your Social Security number (SSN) and your TSP Personal Identification Number (PIN). (If you have lost or forgotten your PIN, you can request a new one on the Web site or the ThriftLine.) Your TSP PIN is *not the same* as your PIN for any other Government system (e.g., Employee Express, PostalEASE, MyPay).

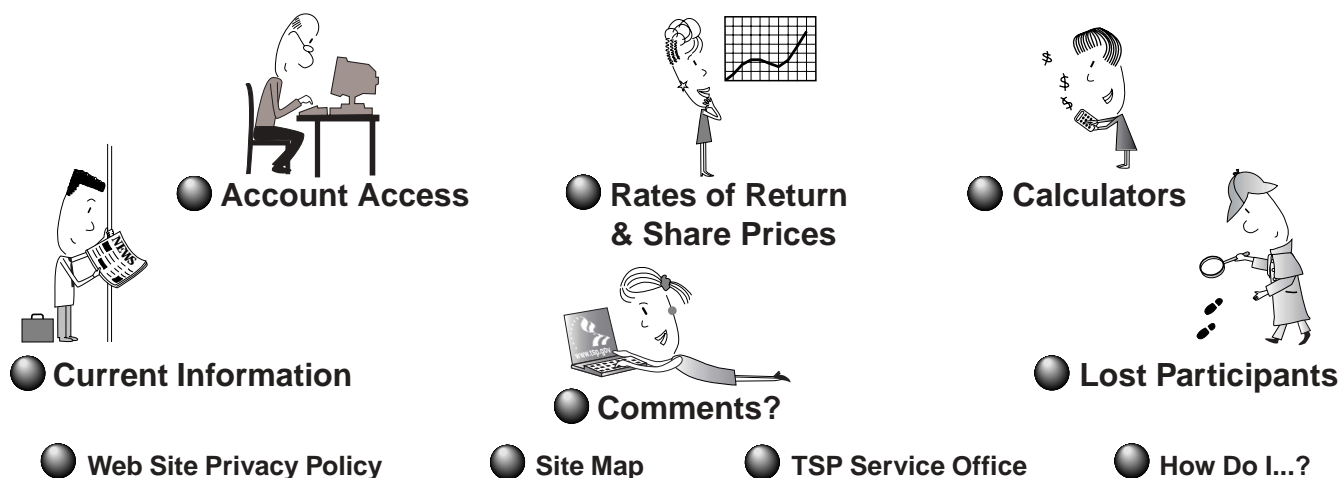
For basic information about the TSP, civilian employees should read the *Summary of the Thrift Savings Plan for Federal Employees*; members of the uniformed services should read the *Summary of the Thrift Savings Plan for the Uniformed Services*. You can obtain a copy from your agency or service if you are currently employed or from the TSP Service Office if you are separated from service. The Plan Summaries and other useful publications are also available in the Forms & Publications sections of the TSP Web site.

We are constantly updating the ThriftLine and enhancing the TSP Web site with new information and features. Visit our Web site often to stay abreast of the latest TSP developments.

### TSP Web Site — [www.tsp.gov](http://www.tsp.gov)

The TSP Web site provides *general information* about the TSP that is applicable to the entire Federal workforce, as well as *specific information* that is relevant only to civilians or only to members of the uniformed services. In the general section of the site, all participants can access their own ac-

counts, review current TSP information or rates of return, or use interactive calculators. In separate civilian and uniformed services sections, participants can find specific participation rules and the related forms and publications that apply to them.



## GENERAL INFORMATION

**Account Access**

You can find information about your TSP account and perform certain transactions in this section.

**Account Security.** To maintain the security of your TSP account, you can access specific account information on the Web site only if you enter a valid SSN and a 4-digit TSP PIN. (If you have both a civilian and a uniformed services account, you will be taken to the account that corresponds with the PIN you entered. If you have customized your PIN to be the same for both accounts, you will be asked which account you wish to access.) Your browser must be equipped with Secure Sockets Layer (SSL) and have 128-bit encryption.

For security, we recommend that you close your Web browser when you finish accessing your TSP account. If you have no activity in the secure section of the TSP Web site for more than 5 minutes, your session in the Account Access section will expire and you will have to log in again. Under no circumstances should you save your SSN and PIN on your browser.

**Options.** You have a number of options on the Account Access menu. You can:

- View your account balance in both dollars and shares. (This information is updated each business day.)
- View your quarterly participant statements.
- Review your current contribution allocation or change the allocation of your future contributions (and loan payments or money you transfer into the TSP from other plans) among the five TSP funds.
- Make, change, or cancel an interfund transfer request to redistribute your existing account balance.
- View the loan amount available to you and the current loan interest rate.
- Initiate (and, in some cases, complete) a loan or withdrawal request.
- Review your outstanding loan balance, loan terms, and prepayment information.
- Reamortize an outstanding loan.
- Change your TSP PIN to another 4-digit PIN of your choice.
- If you are separated from service, update your address in your TSP records.

**Other Sections**

**Rates of Return & Share Prices.** In this section, you will find daily and historical share prices, as well as monthly, 12-month, and historical monthly rates of return for the TSP funds and related indexes.

**Calculators.** The Web site offers several on-line calculators to help you make important decisions related to your TSP participation:

- *Projecting Your Account Balance* — Use this calculator to project the growth of your existing account balance and estimate the growth of your future TSP contributions and earnings.
- *Elective Deferral Calculator* — If you are in a high salary bracket, use this calculator to ascertain how much you can contribute each pay period without exceeding the IRS elective deferral limit before the end of the year.
- *Loan Calculator* — Use this calculator to estimate what your loan payments would be, based on the amount you want to borrow, the loan interest rate at the time you take your loan, and the duration of your loan.
- *Annuity Calculator* — Use this calculator to estimate the payments for any type of TSP annuity.
- *Monthly Payment Calculator* — Use this calculator either to estimate the number of monthly payments you will receive if you choose to withdraw your account in monthly payments of a specified amount, or to estimate the amount of your monthly payment if you choose to have monthly payments computed based on IRS life expectancy tables.
- *Retirement Planning Calculator* — Link to the American Savings Education Council's "Ballpark Estimate" calculator to estimate how much money you would need to meet your retirement goals.

**Current Information.** Look in this section for TSP and IRS contribution limits, the latest loan interest rate, TSP open season dates, the annuity interest rate index, Plan News, and other regularly updated information.

**Comments?** Use this section to send us your comments about the TSP Web site. Although we cannot answer individual questions, we review all comments and use many of your suggestions to improve the site.

**Lost Participants.** TSP participants whose accounts have been declared abandoned are listed in this section. To assist participants (or their beneficiaries) in claiming their accounts, lists are provided according to the names, last known states of residence, and last employing agencies of participants the TSP has been unable to locate.

**How Do I . . . ?** Use this section to link to information that is useful for managing your account (e.g., how to enroll, change, or stop your contributions, request an interfund transfer or contribution allocation, report a change of address, name a beneficiary, take out a loan, or make a withdrawal).

**Other Relevant Information.** You will also find links to the Web site privacy policy, a site map depicting how the Web site is organized, and information for contacting the TSP Service Office.

## SPECIFIC INFORMATION



### Civilian

- TSP Features
- Forms & Publications
- Info for Agency Reps



### Uniformed Services

- TSP Features
- Forms & Publications
- Info for Service Reps

### *For Federal Civilian Employees*

In the **Civilian** section of the Web site, you will find descriptions of important features of the TSP for FERS and CSRS participants, copies of TSP forms and publications, and information for agency representatives.

**TSP Features.** This area contains basic information for civilian participants about the various aspects of the TSP, including plan rules, tax advantages, agency contributions, investment options, the transfer of money into the TSP from other plans, the loan program, withdrawal options, and spouses' rights.

**Forms & Publications.** The latest versions of TSP forms for civilian participants, booklets, fact sheets, tax notices, and other documents are in this area. These forms and publications are available in Adobe Acrobat format for viewing and printing. If you do not have Adobe Acrobat installed on your computer, you can obtain a free copy from the Web site.

**Info for Agency Reps.** This area contains TSP Bulletins and information useful to agency personnel and payroll staff.

### *For Members of the Uniformed Services*

In the **Uniformed Services** section of the Web site, you will find descriptions of important features of the TSP for members of the uniformed services, copies of TSP forms and publications, and information for service TSP representatives.

**TSP Features.** This area contains basic information for members of the uniformed services about the various aspects of the TSP, including plan rules, tax advantages, investment options, the transfer of money into the TSP from other plans, the loan program, withdrawal options, and spouses' rights.

**Forms & Publications.** The latest versions of TSP forms for members of the uniformed services, booklets, fact sheets, tax notices, and other documents are in this area. These forms and publications are available in Adobe Acrobat format for viewing and printing. If you do not have Adobe Acrobat installed on your computer, you can obtain a free copy from the Web site.

**Info for Service Reps.** This area contains TSP Bulletins and information useful to service TSP representatives and payroll staff.

# ThriftLine — (504) 255-8777

The ThriftLine menu offers two main choices:

- Plan Information
- Account Information and Transactions

If you need personal assistance, you can press “0” to speak to a participant service representative at any time between 7:00 a.m. and 4:30 p.m., central time, on business days.

## Plan Information

You do not need your SSN or PIN to access Plan Information. Plan Information provides you with daily share prices for each of the TSP funds, the rate of return for each fund as of the end of each month, the compound 12-month rates of return, the current loan interest rate, and the current annuity interest rate index. If you choose Plan News, you will learn about changes to the TSP that may affect your participation or your account, as well as other current items of interest.

## Account Information and Activity

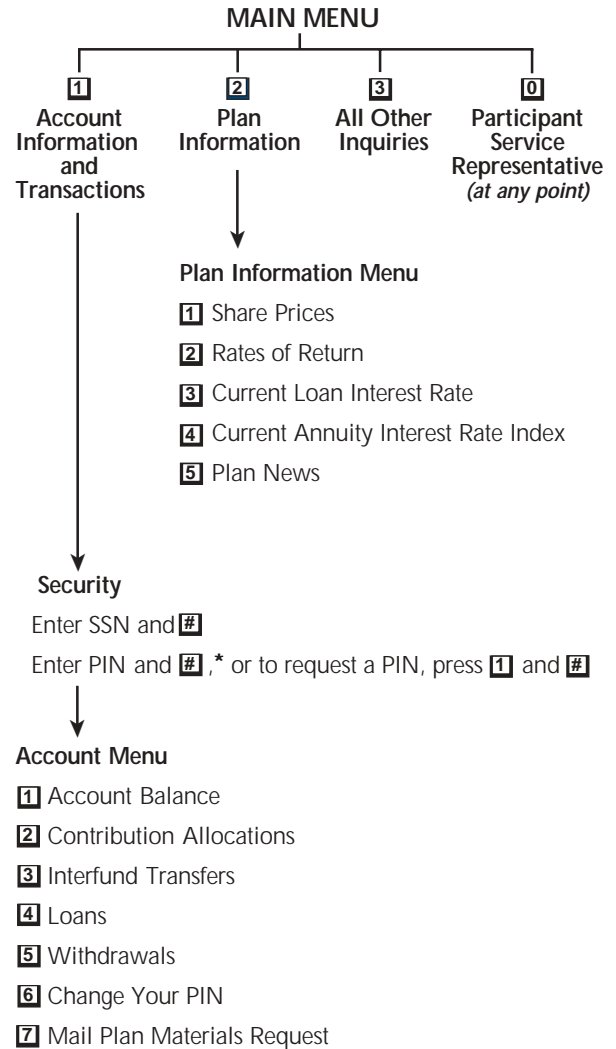
In this section, you can obtain personal account information, perform certain transactions, or change your PIN. Account information is updated each business day.

**Account Security.** When you access this section from the ThriftLine main menu, you are asked to provide your SSN and a valid TSP PIN. (**Note:** If you do not know your PIN, you can request to have a new PIN mailed to you. You will receive your new PIN in the mail in about 10 days.)

**Options.** You have a number of options in the Account Information and Transactions section. You can:

- Find out your account balance.
- Find out how your payroll contributions are currently allocated among the five funds, and, if you wish, change the allocation of your future contributions (including loan payments and money you transfer into the TSP from other plans).
- Request, change, or cancel an interfund transfer to redistribute your existing account balance.
- Find out your outstanding loan balance.
- Determine the current loan interest rate and the loan amount you are eligible to borrow.
- Change your PIN to 4 digits of your choice.

- Request that certain materials be mailed to you. If you have both a civilian and a uniformed services account, any transactions you request for one account will not affect the other account.



\* If you have both a civilian and a uniformed services account, you will be taken to the account that is specific to the PIN you entered. If you have customized your PIN to be the same for both accounts, you will be asked which account you wish to access.

## Blocking Access to Your TSP Account

You can block Web site and/or ThriftLine access to your TSP account by speaking to a participant service representative or by writing to the TSP Service Office, National Finance Center, P.O. Box 61500, New Orleans, LA 70161-1500. Include your Social Security number and your date of birth in your letter. If you later wish to reinstate electronic access, you must write to the TSP Service Office.

# **Glossary**



# Glossary

**Account balance:** The sum of the dollar balances in each source of contributions in each investment fund for an individual account.

**Accrued interest:** Interest calculated on a fixed-income security, such as a bond, from the date of issue or from the last interest payment date to the present.

**Active management:** A term used broadly to describe investment managers whose strategy focuses on buying and selling securities based upon an evaluation of the likely future performance of the securities. (Compare with Passive Management.)

**Asset allocation:** Choosing among asset classes such as stocks and bonds.

**Bond:** A debt security issued by a government entity or a corporation to an investor from whom it borrows money. The bond obligates the issuer to repay the amount borrowed on a stated maturity date and, traditionally, to pay interest at a fixed rate at regular, usually 6-month, intervals until maturity. Bonds generally have maturities of more than 10 years at the time they are issued.

**Bond rating:** The rating of corporate bonds according to their relative investment qualities. Bond ratings are performed by rating services such as Moody's Investors Service and Standard & Poor's (S&P) Corporation. Ratings are based on a credit analysis of the issuer and measure the likelihood that the issuer will make interest and principal payments when due. The bonds rated in the top four categories, ranging from Aaa (Moody's) or AAA (S&P), to Baa3 (Moody's) or BBB- (S&P), are considered investment-grade bonds. Lower rated bonds are considered speculative, and are sometimes referred to as "junk bonds." In determining whether securities are investment grade for purposes of inclusion in the LBA, Lehman Brothers will consider first the rating of Moody's; if none, then the S&P rating will be considered.

**Capital gain (loss):** The amount by which the sale price or current market price of a security exceeds (gain) or is less than (loss) the purchase price. A gain or loss is "realized" when the security is sold. However, in stock and bond funds, even unrealized gains and losses must be recognized and accounted for whenever the fund is valued.

**Capitalization:** The total stock value of a corporation's outstanding stock. Thus, the market capitalization of a corporation equals the current market price of its stock multiplied by the number of shares of stock outstanding. The capitalization of the S&P 500, for example, is the sum of the capitalization values of all 500 corporations in the index.

**Collateral:** The property that a borrower pledges to secure a loan. Collateral may be liquidated to pay the lender if the borrower defaults.

**Commercial mortgage-backed securities (CMBS):** CMBS are issued by private corporations and are backed by commercial real estate mortgages. They are not guaranteed by agencies of the U.S. Government or Government-sponsored enterprises. The F Fund holds only investment grade CMBS.

**Common stock:** Equity securities, issued as ownership shares in a publicly held corporation. Shareholders have voting rights and may receive dividends based on their proportionate equity holdings.

**Compound annual return:** The average annual return of an investment that includes the effect of compounding over a specified time period.

**Consumer Price Index (CPI):** The index calculated by the U.S. Bureau of Labor Statistics to represent the price of a specified group of goods for all urban consumers. Changes in the index measure the rate of inflation in the U.S.

**Contribution allocation:** The way deposits to a TSP account are being invested among the G, F, C, S, and I Funds. The contribution allocation applies to future contributions, loan payments, and transfers from other eligible retirement plans, not to the existing account balance.

**Coupon rate:** The annual interest rate on the principal amount of a bond which the issuer promises to pay to the bondholder.

**Credit risk:** The risk that a borrower will default on a scheduled payment of principal and/or interest.

**Currency risk:** The risk that the value of a currency will rise or fall relative to the value of other currencies. Currency risk occurs with investments in the EAFE index because of fluctuations in the value of the U.S. dollar in relation to the currencies of the 21 countries in the EAFE index. The change in the value of the U.S. dollar relative to the currencies of the countries in the EAFE index is included in the change in the daily EAFE index value, and therefore is included in the change in the Barclays EAFE Index Fund share prices and returns.

**Current yield:** The income received annually from an investment, usually as interest or dividends, expressed as a percentage of its market price. Yield should not be confused with total return. It can be misleading to fo-

cus on the yield of investments that do not have a fixed value, such as stocks, or of investments where the principal may be fixed but the market value can fluctuate, such as bonds.

**Default:** The failure of a bond issuer to pay interest or repay principal in full when scheduled.

**Diversification:** Spreading investments among different securities types, issuers, industries, and/or geographic regions to reduce exposure to any one source of investment risk.

**Dividend:** A company's payment to common stock holders, usually quarterly. Unlike bond coupon payments, stock dividends are not obligatory. Generally, dividends represent a portion of corporate earnings and, in the long term, are dependent on the business or economic success of the corporation.

**Dividend yield:** Dollar amount of dividends per share divided by the current price per share of common stock.

**Dollar-cost averaging:** The practice of investing a fixed amount of money in a security or in a fund at regular intervals regardless of market conditions or securities prices.

**EAFE (Europe, Australasia, Far East) index:** An index created by Morgan Stanley Capital International to provide broad coverage of the European, Australian, and Asian stock markets. The EAFE index is the most widely used international stock index. The I Fund tracks the EAFE index.

**Expense ratio:** A fund's total expenses, usually for a year, including management fees if applicable, expressed as a percentage reduction of investment return.

**Federal agency securities:** The collective term for securities issued by the two broad categories of Federal agencies — those that are a part of the Federal Government and those sponsored by it but owned privately (see *Government-sponsored enterprise*) — to raise capital for specific sectors of the economy, such as housing, agriculture, and education.

**Fannie Mae:** A Government-sponsored enterprise established by Congress in 1938 for the purpose of providing mortgage credit for low- to middle-income home buyers by raising funds in securities markets. Fannie Mae provides liquidity to the mortgage market through guarantees on pools of mortgage loans originated by various lenders.

**Fixed-income securities:** Notes, bonds, and similar debt instruments. Although the interest they pay is a fixed amount, the market values of the securities are not. Market values or prices fluctuate and, therefore, so do their yields and total returns. As interest rates rise,

the value of fixed-income securities falls; when interest rates fall, the value of fixed-income securities rises. (See *market risk*.)

**Freddie Mac (Federal Home Loan Mortgage Corporation):** A Government-sponsored enterprise established by Congress in 1970 to increase the availability of mortgage money for home buyers. It buys mortgages from a variety of lenders so lenders can use the funds to make new mortgages. Freddie Mac replenishes its cash by issuing mortgage-backed securities, which it guarantees.

**Government National Mortgage Association (GNMA or Ginnie Mae):** Established in 1968 as a Government corporation within the U.S. Department of Housing and Urban Development to increase liquidity in the secondary market for Government-backed residential mortgages. GNMA originated mortgage-backed securities (MBS) with its guaranty program in 1970. GNMA MBSs are issued by approved private lenders, collateralized by Federal Housing Authority (FHA)-insured and Veterans Administration (VA)-guaranteed mortgages, and backed by the full faith and credit of the United States.

**Government-sponsored enterprise (GSE):** A shareholder-owned corporation originally chartered by Congress with the intent of improving liquidity in certain sectors of the economy, such as housing.

**Index:** Generally, a number calculated to be a measure or indicator of performance over time of the prices of categories or groups of securities, or of trends in the values of economic variables, such as inflation.

**Indexing:** The practice of assembling a portfolio of securities with the goal of achieving an investment return equal or similar to the return of a target index, such as the S&P 500.

**Index fund:** A fund that attempts to match the investment return of a market index, such as the S&P 500, by holding securities in proportion to their representation in the index, or by holding a sample of the securities designed to match the performance of the overall index.

**Interest rate:** The nominal annual rate of return payable as interest on the face value of a fixed-income security.

**Interfund transfer:** A redistribution of an existing TSP account balance among the investment funds. Interfund transfers do not affect the allocation of future deposits to the TSP.

**Investment-grade bond:** A bond receiving one of the top four ratings from a well-known rating service (i.e., Baa3 or higher from Moody's Investors Service, BBB- or higher from Standard & Poor's Corporation).

**Lehman Brothers U.S. Aggregate Bond Index (LBA):** An index including all publicly issued, nonconvertible, fixed-rate domestic debt, with at least one year to maturity and an outstanding par value of at least \$150 million. The index includes a U.S. Government sector (including securities issued by the U.S. Treasury and by Government-sponsored enterprises, such as the Federal Home Loan Bank System and the Federal Farm Credit Bank System); a corporate sector (including investment-grade securities of both U.S. and non-U.S. corporations issued in the U.S.); a mortgage-backed securities sector (including all fixed-rate mortgage-backed securities guaranteed by GNMA, Fannie Mae, and Freddie Mac, as well as investment grade commercial mortgage-backed securities; and a foreign government sector (including U.S. dollar-denominated securities traded in the U.S. that are issued or guaranteed by foreign or international entities (sovereigns, multilateral lending institutions, foreign agencies, and foreign local governments)). The F Fund tracks the LBA index.

**Market:** A general reference to the interaction of investors, brokers, and dealers in buying and selling securities. The term "market" often refers to the secondary market, where most trading takes place, as opposed to the primary or original issue market.

**Market price or market value:** The price at which a security can be purchased or sold at a given time. Generally, the current price a securities broker, dealer, or other investor is willing to pay for a security.

**Market risk:** The characteristic of fixed-income securities whereby prices decline when interest rates rise and prices rise when interest rates decline. Market risk, also referred to as volatility, is greater with longer-term securities. Market risk also refers to price fluctuations in stocks.

**Maturity:** The length of time from issue date until the date on which an issuer is obligated to repay the principal of a fixed-income security.

**Money market:** The market in which short-term debt instruments (Treasury bills, commercial paper, certificates of deposit, etc.) are issued and traded.

**Mortgage-backed securities (MBS):** Securities designed to attract additional capital resources for residential mortgages through the securities markets. A typical MBS represents an interest in a pool of millions of dollars of conventional or Government-backed mortgages. MBS investors receive a monthly "pass-through" of principal and interest payments, as well as unscheduled principal payments from home owners who prepay their mortgages, and the principal of foreclosed mortgages. The LBA, which the F Fund tracks, includes fixed-rate mortgage-backed securities guaranteed by GNMA, Fannie Mae, and Freddie Mac. It also includes commercial mortgage-backed securities.

**Mutual fund:** An investment company that pools the money of investors for investment in a professionally managed portfolio of securities.

**Nonmarketable security:** A security that cannot be resold to other investors. For example, various Treasury obligations, including G Fund securities and U.S. Savings Bonds, are issued by the Treasury Department to specific investors. The Treasury will redeem the security in accordance with its terms, but the security cannot be resold to another investor.

**Par value:** Generally, the principal amount of a bond an issuer will repay at maturity. The current market price of a bond may be higher or lower than its par value.

**Passive management:** Generally, buying and holding a securities portfolio designed to represent a broad market index. Passive strategies are often based on the premise that it is difficult, if not impossible, to forecast future trends accurately in securities prices for long periods of time. Management fees and trading costs are generally lower in passively managed funds than in actively managed funds. The index funds in which the F, C, S, and I Funds invest are passively managed.

**Principal:** The face amount, the amount borrowed, or the par value of a debt security.

**Real Estate Investment Trust (REIT):** A real estate investment vehicle comparable to a mutual fund; a REIT holds a portfolio of real estate assets under professional management for the production of income.

**Rebalancing:** Restoring your account to the proportions you prefer by means of interfund transfers and/or contribution allocations.

**S&P 500 index:** The Standard & Poor's Corporation common stock index of 500 industrial, financial, utility, and transportation companies. The S&P 500 is an equity market index commonly used by institutional investors and retirement plan sponsors. The C Fund tracks the S&P 500 index.

**Securities:** General term for a variety of financial instruments, including stocks and bonds.

**Share:** A unit of ownership of stock of a corporation or in an investment fund.

**Short-term securities:** Usually refers to securities with maturities of one year or less.

**Total return:** The increase (or decrease) in the value of an investment, calculated to include capital gains or losses, all income, reinvestment of income, and currency gains or losses. It is the most comprehensive and meaningful measure of performance for comparing various investments. Total return should not be confused

with coupon rates or current yields, which are generally not as useful in comparing investments. Total returns covering a number of years are usually expressed as compound annual returns.

**Trading costs:** The costs involved in purchasing or selling a security.

**Treasury bill:** A U.S. Treasury security maturing in one year or less from its issue date. When purchased at prices below face value (i.e., at a discount), Treasury bills do not pay interest as such. An investor's return is the difference between the price paid when the bill is purchased and the proceeds received when the bill matures.

**Treasury bond:** A U.S. Treasury security maturing more than 10 years from its issue date. Interest is paid semiannually on Treasury bonds.

**Treasury note:** A U.S. Treasury security maturing from 2 to 10 years from its issue date. Interest is paid semiannually on Treasury notes.

**Volatility:** The variability of prices of securities over a period of time. The more the price of a security fluctuates, the greater is the volatility of that security. Securities with the greatest volatility generally are considered the riskiest investments.

**Wilshire 4500 index:** Wilshire Associates' index of all U.S. stocks (excluding the stocks in the S&P 500 index) actively traded in the stock markets on a daily basis. The S Fund tracks the Wilshire 4500 index.

