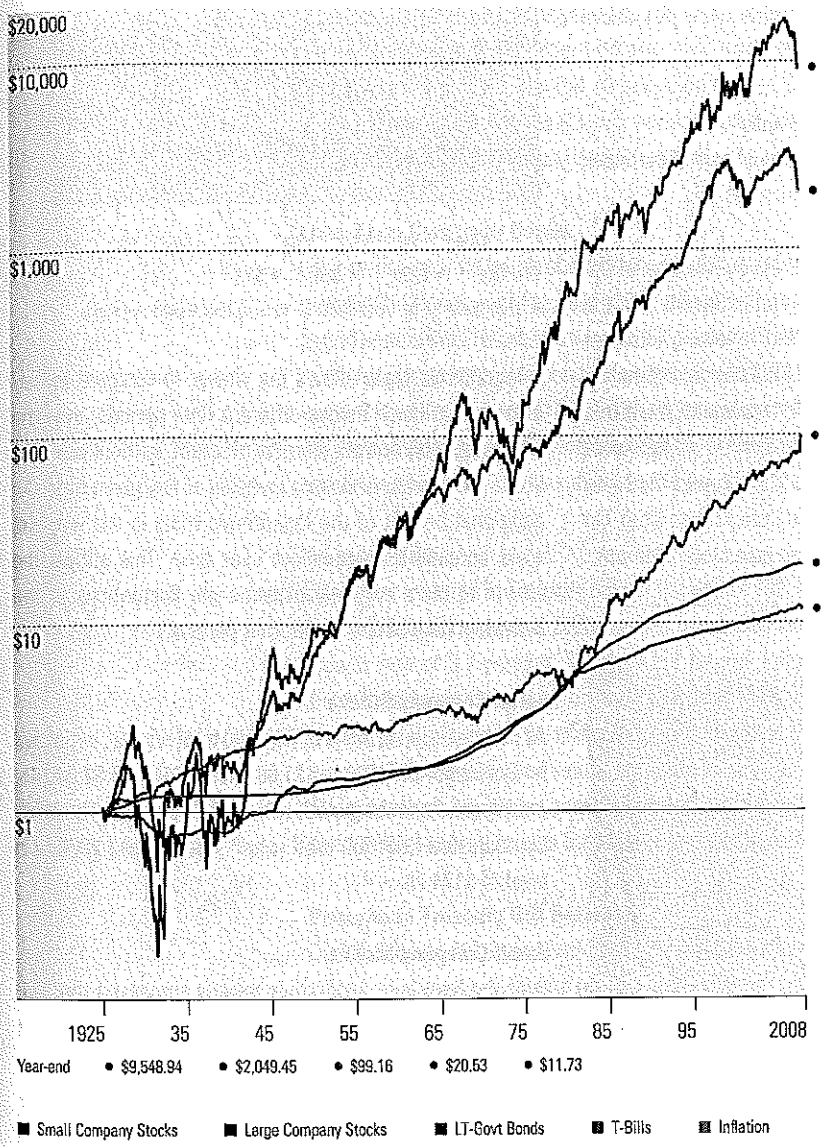
Chapter 2
The Long Run Perspective

Graph 2-1: Wealth Indices of Investments in the U.S. Capital Markets
Index (Year-End 1925 = $1.00)



Data from 1925–2008.

Motivation

A long view of capital market history, exemplified by the 83-year period (1926–2008) examined here, uncovers the basic relationships between risk and return among the different asset classes including alternative investments and between nominal and real (inflation-adjusted) returns. The goal of this study of asset returns is to provide a period long enough to include most or all of the major types of events that investors have experienced and may experience in the future. Such events include war and peace, growth and decline, bull and bear markets, inflation and deflation, and other less dramatic events that affect asset returns.

By studying the past, one can make inferences about the future. While the actual events that occurred during 1926–2008 will not be repeated, the event-types of that period can be expected to recur. It is sometimes said that only a few periods are unusual, such as the crash of 1929–1932 and World War II. This logic is suspicious because all periods are unusual. Some of the most unusual events of the century—the stock market crash of 1987, the equally remarkable inflation of the 1970s and early 1980s, the more recent events of September 11, 2001, and most recently, the 2008 financial crisis—took place over the last three decades. From the perspective that historical event-types tend to repeat themselves, an 83-year examination of past capital market returns reveals a great deal about what may be expected in the future.

Historical Returns on Stocks, Bonds, Bills, and Inflation

Graph 2-1 depicts the growth of $1.00 invested in large company stocks, small company stocks, long-term government bonds, Treasury bills, and a hypothetical asset returning the inflation rate over the period from the end of 1925 to the end of 2008. All results assume reinvestment of dividends on stocks or coupons on bonds and no taxes. Transaction costs are not included, except in the small stock index starting in 1982.

Each of the cumulative index values is initialized at $1.00 at year-end 1925. The graph vividly illustrates that large company stocks and small company stocks were the big winners over the entire 83-year period: investments of $1.00 in these assets would have grown to $2,049.45 and $9,548.94 respectively, by year-end 2008. This phenomenal

growth was earned by taking substantial risk. In contrast, long-term government bonds (with an approximate 20-year maturity), which exposed the holder to much less risk, grew to only $99.16.

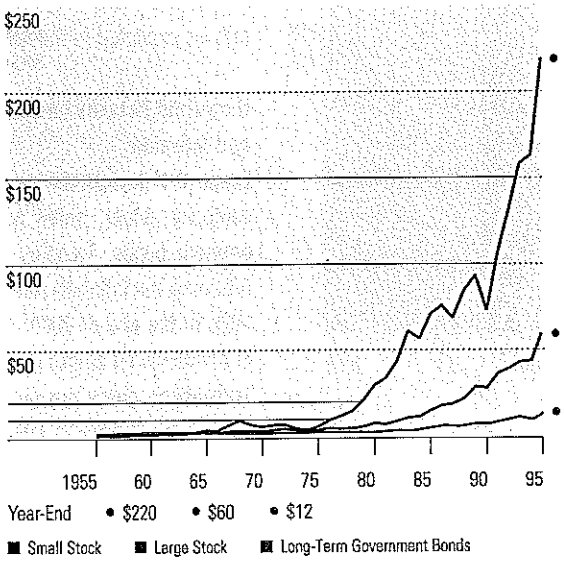
The lowest-risk strategy over the past 83 years (for those with short-term time horizons) was to buy U.S. Treasury bills. Since Treasury bills tended to track inflation, the resulting real (inflation-adjusted) returns were just above zero for the entire 1926–2008 period.

Logarithmic Scale on the Index Graphs

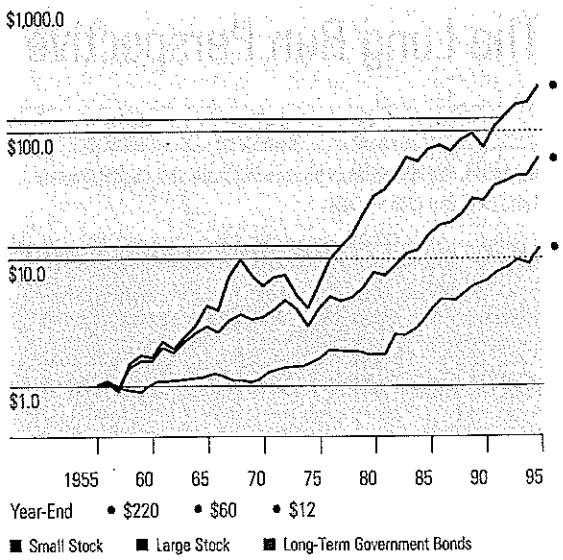
A logarithmic scale is used on the vertical axis of our index graphs. The date appears on the horizontal axis.

A logarithmic scale allows for the direct comparison of the series' behavior at different points in time. Specifically, the use of a logarithmic scale allows the following interpretation of the data: the same vertical distance, no matter where it is measured on the graph, represents the same percentage change in the series. On the log scale shown below, a 50 percent gain from $10 to $15 occupies the same vertical distance as a 50 percent gain from $100 to $150. On the linear scale, the same percentage gains look different.

Linear Scale



Logarithmic Scale



A logarithmic scale allows the viewer to compare investment performance across different time periods; thus the viewer can concentrate on rates of return, without worrying about the number of dollars invested at any given time. An additional benefit of the logarithmic scale is the way the scale spreads the action out over time. This allows the viewer to more carefully examine the fluctuations of the individual time series in different periods.

Large Company Stocks

As noted above, an index of S&P 500 total returns, initialized on December 31, 1925, at $1.00, closed 2008 at $2,049.45, a compound annual growth rate of 9.62 percent. The inflation-adjusted S&P 500 total return index closed 2008 at a level of $174.76.

Small Company Stocks

Over the long run, small stock returns surpassed the S&P 500, with the small stock total return index ending 2008 at a level of $9,548.94. This represents a compound annual growth rate of 11.67 percent, the highest rate among the asset classes studied here.

Long-Term Government Bonds

The long-term government bond total return index, constructed with an approximate 20-year maturity, closed 2008 at a level of $99.16 (based on year-end 1925 equaling $1.00). Based on the capital appreciation component alone, the $1.00 index closed at $1.30, a 30 percent capital gain over the period 1926–2008. This indicates that

more than all of the positive historical returns on long-term government bonds were due to income returns. The compound annual total return for long-term government bonds was 5.7 percent.

Intermediate-Term Government Bonds

One dollar invested in intermediate-term bonds at the end of 1925, with coupons reinvested, grew to $80.47 by year-end 2008, compared to $71.14 at year-end 2007. The compound annual total return for intermediate-term government bonds was 5.4 percent. Capital appreciation caused $1.00 to increase to $1.59 over the 83-year period, representing a compound annual growth rate of 0.6 percent.

Long-Term Corporate Bonds

Long-term corporate bonds outperformed both categories of government bonds over the 1926–2008 period with a compound annual total return of 5.9 percent. One dollar invested in the long-term corporate bond index at year-end 1925 was worth $115.15 by the end of 2008. This higher return reflected the risk premium that investors require for investing in corporate bonds, which are subject to the risk of default.

Treasury Bills

One dollar invested in Treasury bills at the end of 1925 was worth $20.51 by year-end 2008, with a compound annual growth rate of 3.7 percent. Treasury bill returns followed distinct patterns, described on the next page. Moreover, Treasury bills tended to track inflation; therefore, the average inflation-adjusted return on Treasury bills (or real riskless rate of return) was only 0.7 percent over the 83-year period. This real return also followed distinct patterns.

Patterns in Treasury Bill Returns

During the late 1920s and early 1930s, Treasury bill returns were just above zero. (These returns were observed during a largely deflationary period.) Beginning in late 1941, the yields on Treasury bills were pegged by the government at low rates while high inflation was experienced.

Treasury bills closely tracked inflation after March 1951, when Treasury bill yields were deregulated in the U.S. Treasury-Federal Reserve Accord. (Treasury bill returns after that date reflect free market rates.) This tracking relationship has weakened since 1973. From about 1974 to 1980, Treasury bill returns were consistently lower than inflation rates. From 1981 to 2008 , real returns on Treasury bills have been positive, with the exception of 2002–2005.

Federal Reserve Operating Procedure Changes

The disparity between performance and volatility for the periods prior to and after October 1979 can be attributed to the Federal Reserve's new operating procedures. Prior to this date, the Fed used the federal funds rate as an operating target. Subsequently, the Fed de-emphasized this rate as an operating target and, instead, began to focus on the manipulation of the money supply (through nonborrowed reserves). As a result, the federal funds rate underwent much greater volatility, thereby bringing about greater volatility in Treasury returns.

In the fall of 1982, however, the Federal Reserve again changed the policy procedures regarding its monetary policy. The Fed abandoned its new monetary controls and returned to a strategy of preventing excessive volatility in interest rates. Volatility in Treasury bill returns from the fall of 1979 through the fall of 1982 was significantly greater than that which has occurred since.

Inflation

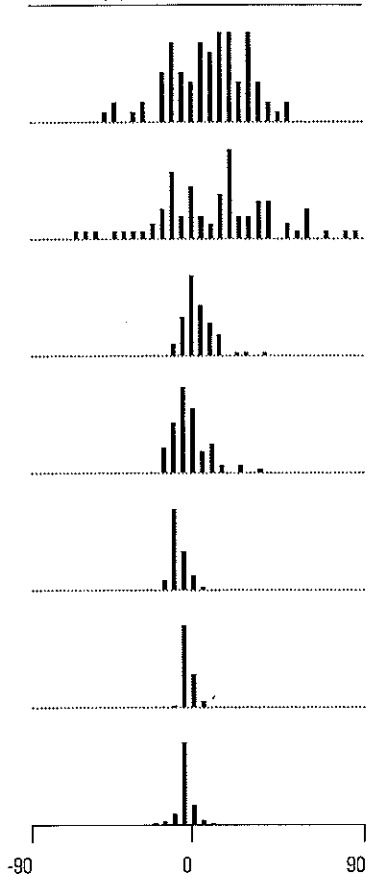
The compound annual inflation rate over 1926–2008 was 3.0 percent. The inflation index, initiated at $1.00 at year-end 1925, grew to $11.73 by year-end 2008. The entire increase occurred during the postwar period. The years 1926–1933 were marked by deflation; inflation then raised consumer prices to their 1926 levels by the middle of 1945. After a brief postwar spurt of inflation, prices rose slowly over most of the 1950s and 1960s. Then, in the 1970s, inflation reached a pace unprecedented in peacetime, peaking at 13.3 percent in 1979. The 1980s saw a reversion to more moderate, though still substantial, inflation rates averaging about 5 percent. Inflation rates continued to decline in the 1990s with a compound annual rate of 2.9 percent.

Summary Statistics of Total Returns

Table 2-1 presents summary statistics of the annual total returns on each asset class over the entire 83-year period of 1926–2008. The data presented in these exhibits are described in detail in Chapters 3 and 6.

Table 2-1: Basic Series: Summary Statistics of Annual Total Returns

Series	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)	Distribution (%)
Large Company Stocks	9.6	11.7	20.6	
Small Company Stocks*	11.7	16.4	33.0	
Long-Term Corporate Bonds	5.9	6.2	8.4	
Long-Term Government Bonds	5.7	6.1	9.4	
Intermediare-Term Government Bonds	5.4	5.6	5.7	
U.S. Treasury Bills	3.7	3.8	3.1	
Inflation	3.0	3.1	4.2	



Data from 1926–2008. * The 1933 Small Company Stocks Total Return was 142.9 percent.

Note that in Table 2-1, the arithmetic mean returns are always higher than the geometric mean returns. The difference between these two means is related to the standard deviation, or variability, of the series. [See Chapter 6.]

The "skylines" or histograms to the right in Table 2-1 show the frequency distribution of returns on each asset class. The height of the common stock skyline in the range between +10 and +20 percent, for example, shows the number of years in 1926–2008 that large company stocks had a return in that range. The histograms are shown in 5 percent increments to fully display the spectrum of returns as seen over the last 83 years, especially in stocks.

Riskier assets, such as large company stocks and small company stocks, have low, spread-out skylines, reflecting the broad distribution of returns from very poor to very good. Less risky assets, such as bonds, have narrow skylines that resemble a single tall building, indicating the tightness of the distribution around the mean of the series. The histogram for Treasury bills is one-sided, lying almost entirely to the right of the vertical line representing a zero return; that is, Treasury bills rarely experienced negative returns on a yearly basis over the 1926–2008 period. The inflation skyline shows both positive and negative annual rates. Although a few deflationary months and quarters have occurred recently, the last negative annual inflation rate occurred in 1954.

The histograms in Tables 2-2 through 2-4 show the total return distributions on the basic series over the past 83 years. These histograms are useful in determining the years with similar returns. The stock histograms are shown in 10 percent increments while the bond, bill, and inflation histograms are in 2 percent increments. The increments are smaller for the assets with less widely distributed returns. Treasury bills are the most tightly clustered of any of the asset classes, confirming that this asset bears little risk; the annual return usually fell near zero.

Annual Total Returns

Table 2-5 shows annual total returns for the six basic asset classes and inflation for the full 83-year time period. This table can be used to compare the performance of each asset class for the same annual period. Monthly total returns for large company stocks, small company stocks, long-term corporate bonds, long-term government bonds, intermediate-term government bonds, Treasury bills, and inflation rates are presented in Appendix A: Tables A-1, A-4, A-5, A-6, A-10, A-14, and A-15, respectively.

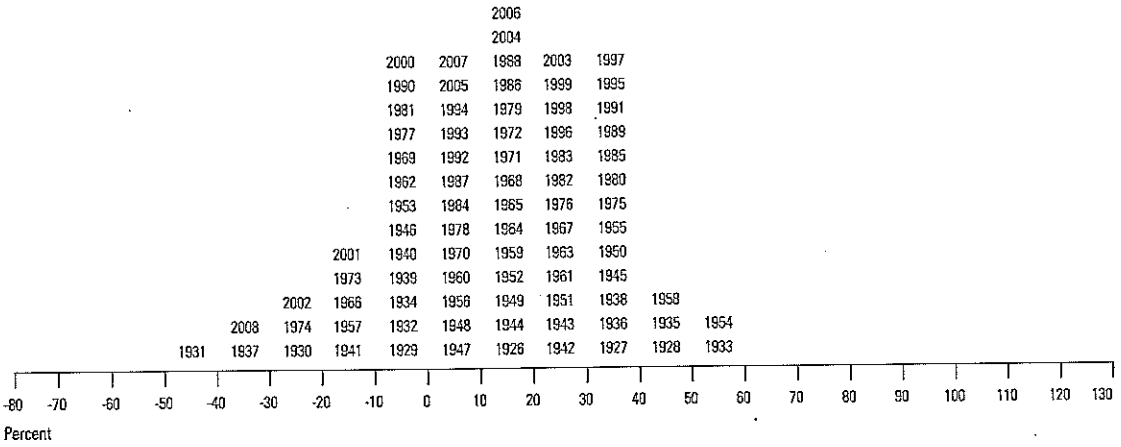
Capital Appreciation, Income, and Reinvestment Returns

Table 2-6 provides further detail on the returns of large company stocks, long-term government bonds, and intermediate-term government bonds. Total annual returns are shown as the sum of three components: capital appreciation returns, income returns, and reinvestment returns. The capital appreciation and income components are explained in Chapter 3. The third component, reinvestment return, reflects monthly income reinvested in the total return index in subsequent months in the year. Thus, for a single month the reinvestment return is zero, but over a longer period of time it is non-zero. Since the returns in Table 2-6 are annual, reinvestment return is relevant.

Table 2-2
Histogram
Large Company Stock and Small Company Stock Total Returns (%)

1926–2008

Large Company Stocks



Small Company Stocks

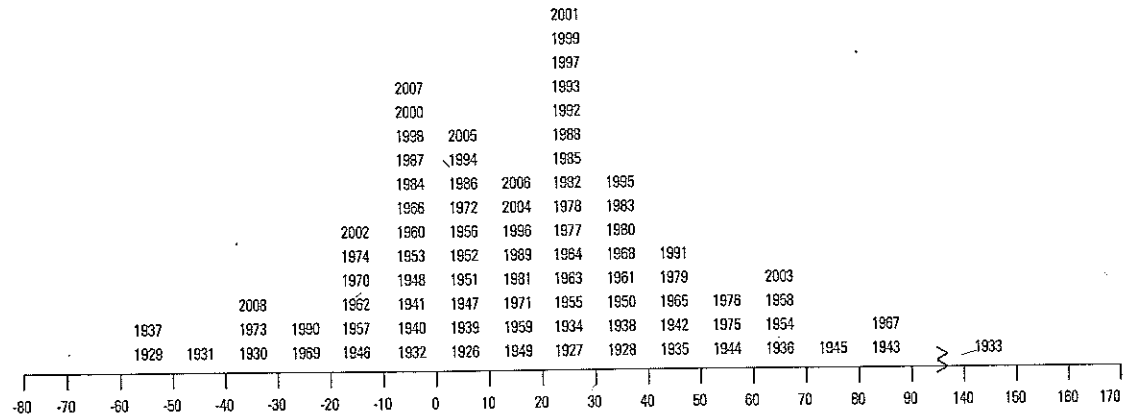
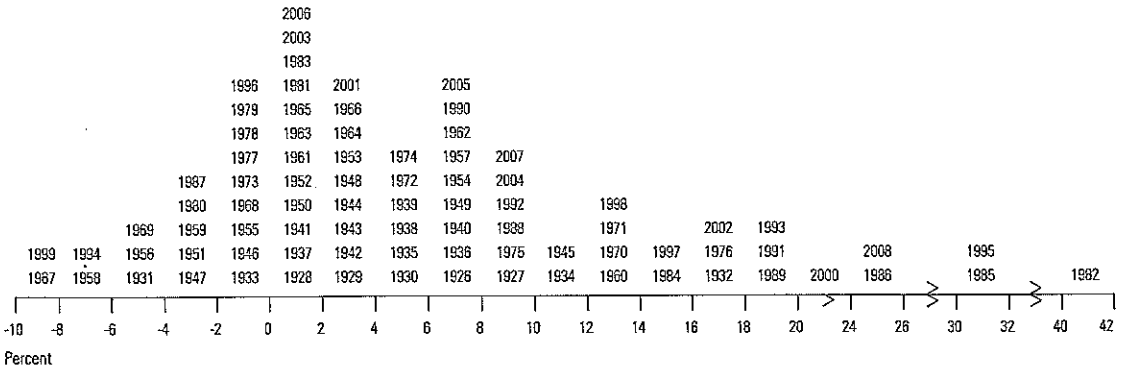


Table 2-3
Histogram
Long-Term Government Bond and Intermediate-Term Government Bond Total Returns (%)

1926–2008

Long-Term Government Bonds



Intermediate-Term Government Bonds

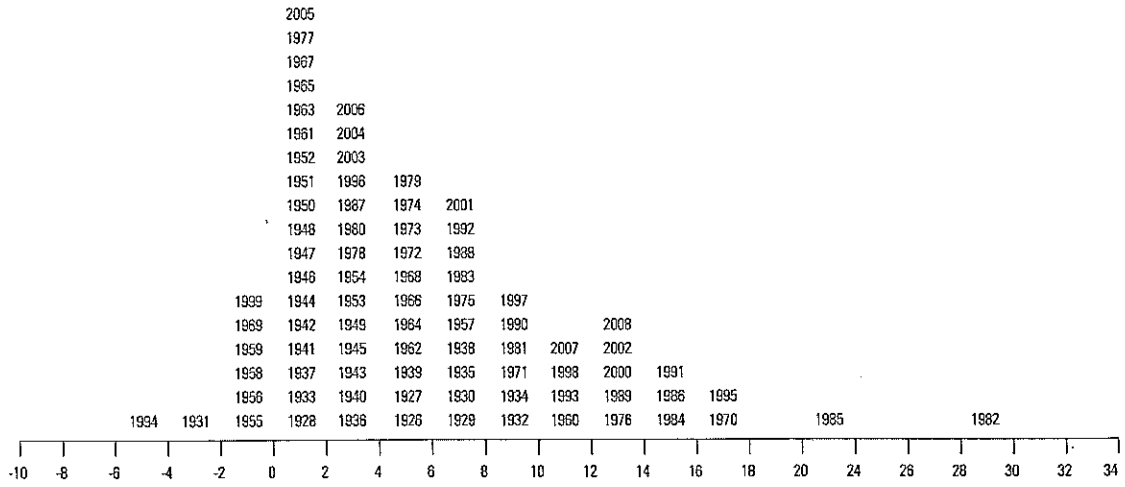
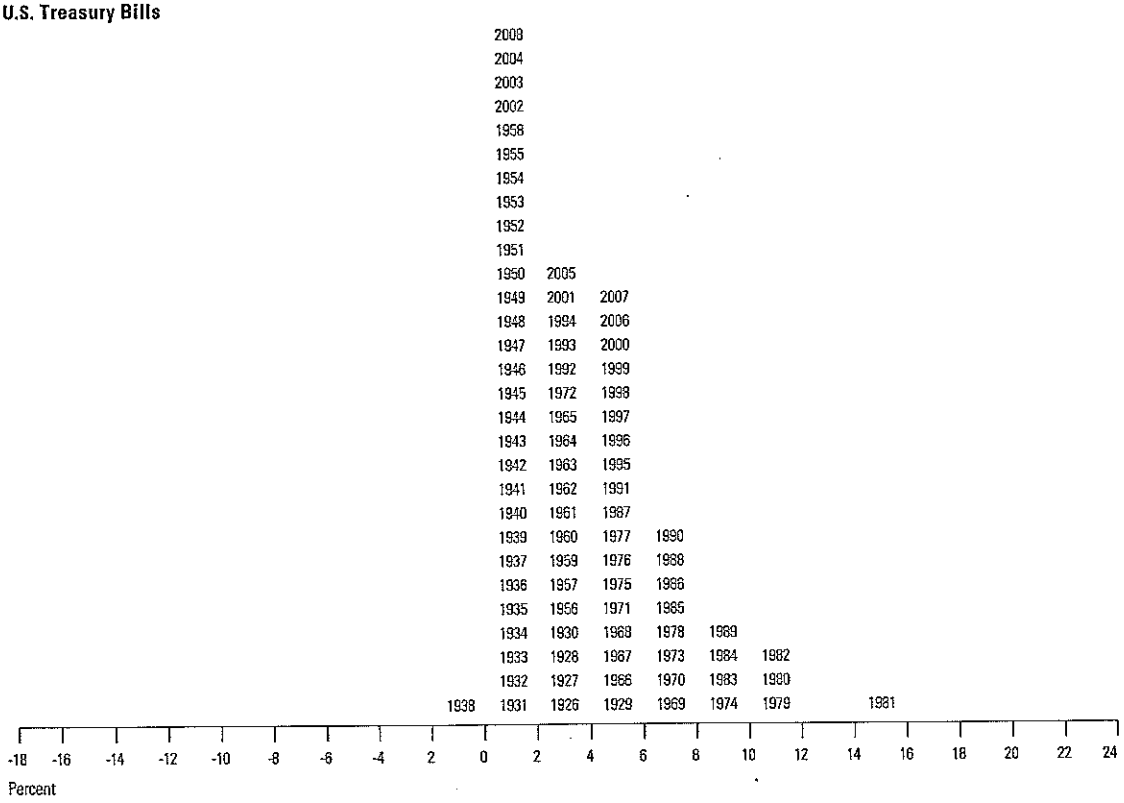


Table 2-4
Histogram
U.S. Treasury Bill Total Returns and Inflation (%)

1926–2008

U.S. Treasury Bills



Inflation

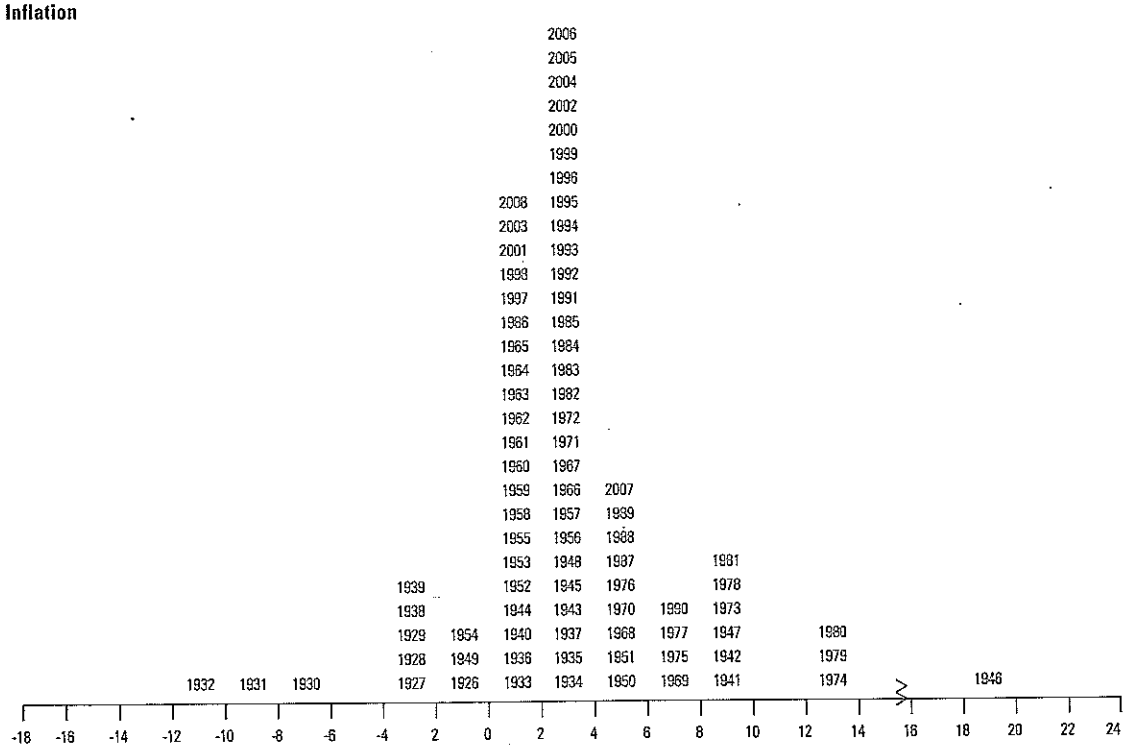


Table 2-5
Basic Series:
Annual Total Returns (%)

1926–1970

Year	Large Company Stocks	Small Company Stocks	Long-Term Corporate Bonds	Long-Term Government Bonds	Intermediate-Term Government Bonds	U.S. Treasury Bills	Inflation
1926	11.62	0.28	7.37	7.77	5.38	3.27	-1.49
1927	37.49	22.10	7.44	8.93	4.52	3.12	-2.08
1928	43.61	39.69	2.84	0.10	0.92	3.56	-0.97
1929	-8.42	-51.36	3.27	3.42	6.01	4.75	0.20
1930	-24.90	-38.15	7.98	4.66	6.72	2.41	-6.03
1931	-43.34	-49.75	-1.85	-5.31	-2.32	1.07	-9.52
1932	-8.19	-5.39	10.82	16.84	8.81	0.96	-10.30
1933	53.99	142.87	10.38	-0.07	1.83	0.30	0.51
1934	-1.44	24.22	13.84	10.03	9.00	0.16	2.03
1935	47.67	40.19	9.61	4.98	7.01	0.17	2.99
1936	33.92	64.80	6.74	7.52	3.06	0.18	1.21
1937	-35.03	-58.01	2.75	0.23	1.56	0.31	3.10
1938	31.12	32.80	6.13	5.53	6.23	-0.02	-2.78
1939	-0.41	0.35	3.97	5.94	4.52	0.02	-0.48
1940	-9.78	-5.16	3.39	6.09	2.96	0.00	0.96
1941	-11.59	-9.00	2.73	0.93	0.50	0.06	9.72
1942	20.34	44.51	2.60	3.22	1.94	0.27	9.29
1943	25.90	88.37	2.83	2.08	2.81	0.35	3.16
1944	19.75	53.72	4.73	2.81	1.80	0.33	2.11
1945	36.44	73.61	4.08	10.73	2.22	0.33	2.25
1946	-8.07	-11.63	1.72	-0.10	1.00	0.35	18.16
1947	5.71	0.92	-2.34	-2.62	0.91	0.50	9.01
1948	5.50	-2.11	4.14	3.40	1.85	0.81	2.71
1949	18.79	19.75	3.31	6.45	2.32	1.10	-1.80
1950	31.71	38.75	2.12	0.06	0.70	1.20	5.79
1951	24.02	7.80	-2.69	-3.93	0.36	1.49	5.87
1952	18.37	3.03	3.52	1.16	1.63	1.66	0.88
1953	-0.99	-6.49	3.41	3.64	3.23	1.82	0.62
1954	52.62	60.58	5.39	7.19	2.68	0.86	-0.50
1955	31.56	20.44	0.48	-1.29	-0.65	1.57	0.37
1956	6.56	4.28	-6.81	-5.59	-0.42	2.46	2.86
1957	-10.78	-14.57	8.71	7.46	7.84	3.14	3.02
1958	43.36	64.89	-2.22	-6.09	-1.29	1.54	1.76
1959	11.96	16.40	-0.97	-2.26	-0.39	2.95	1.50
1960	0.47	-3.29	9.07	13.78	11.76	2.66	1.48
1961	26.89	32.09	4.82	0.97	1.85	2.13	0.67
1962	-8.73	-11.90	7.95	6.89	5.56	2.73	1.22
1963	22.80	23.57	2.19	1.21	1.64	3.12	1.65
1964	16.48	23.52	4.77	3.51	4.04	3.54	1.19
1965	12.45	41.75	-0.46	0.71	1.02	3.93	1.92
1966	-10.06	-7.01	0.20	3.65	4.69	4.76	3.35
1967	23.98	83.57	-4.95	-9.18	1.01	4.21	3.04
1968	11.06	35.97	2.57	-0.26	4.54	5.21	4.72
1969	-8.50	-25.05	-8.09	-5.07	-0.74	6.58	6.11
1970	3.86	-17.43	18.37	12.11	16.86	6.52	5.49

Table 2-5 (Continued)
Basic Series:
Annual Total Returns (%)

1971–2008

Year	Large Company Stocks	Small Company Stocks	Long-Term Corporate Bonds	Long-Term Government Bonds	Intermediate-Term Government Bonds	U.S. Treasury Bills	Inflation
1971	14.30	16.50	11.01	13.23	8.72	4.39	3.36
1972	18.99	4.43	7.26	5.69	5.16	3.84	3.41
1973	-14.69	-30.90	1.14	-1.11	4.61	6.93	8.80
1974	-26.47	-19.95	-3.06	4.35	5.69	8.00	12.20
1975	37.23	52.82	14.64	9.20	7.83	5.80	7.01
1976	23.93	57.38	18.65	16.75	12.87	5.08	4.81
1977	-7.16	25.38	1.71	-0.69	1.41	5.12	6.77
1978	6.57	23.46	-0.07	-1.18	3.49	7.18	9.03
1979	18.61	43.46	-4.18	-1.23	4.09	10.38	13.31
1980	32.50	39.88	-2.76	-3.95	3.91	11.24	12.40
1981	-4.92	13.88	-1.24	1.86	9.45	14.71	8.94
1982	21.55	28.01	42.56	40.36	29.10	10.54	3.87
1983	22.56	39.67	6.26	0.65	7.41	8.80	3.80
1984	6.27	-6.67	16.86	15.48	14.02	9.85	3.95
1985	31.73	24.66	30.09	30.97	20.33	7.72	3.77
1986	18.67	6.85	19.85	24.53	15.14	6.16	1.13
1987	5.25	-9.30	-0.27	-2.71	2.90	5.47	4.41
1988	16.61	22.87	10.70	9.67	6.10	6.35	4.42
1989	31.69	10.18	16.23	18.11	13.29	8.37	4.65
1990	-3.10	-21.56	6.78	6.18	9.73	7.81	6.11
1991	30.47	44.63	19.89	19.30	15.46	5.60	3.06
1992	7.62	23.35	9.39	8.05	7.19	3.51	2.90
1993	10.08	20.98	13.19	18.24	11.24	2.90	2.75
1994	1.32	3.11	-5.76	-7.77	-5.14	3.90	2.67
1995	37.58	34.46	27.20	31.67	16.80	5.60	2.54
1996	22.96	17.62	1.40	-0.93	2.10	5.21	3.32
1997	33.36	22.78	12.95	15.85	8.38	5.26	1.70
1998	28.58	-7.31	10.76	13.06	10.21	4.86	1.61
1999	21.04	29.79	-7.45	-8.96	-1.77	4.68	2.68
2000	-9.10	-3.59	12.87	21.48	12.59	5.89	3.39
2001	-11.89	22.77	10.65	3.70	7.62	3.83	1.55
2002	-22.10	-13.28	16.33	17.84	12.93	1.65	2.38
2003	28.68	60.70	5.27	1.45	2.40	1.02	1.88
2004	10.88	18.39	8.72	8.51	2.25	1.20	3.26
2005	4.91	5.69	5.87	7.81	1.36	2.98	3.42
2006	15.79	16.17	3.24	1.19	3.14	4.80	2.54
2007	5.49	-5.22	2.60	9.88	10.05	4.66	4.08
2008	-37.00	-36.72	8.78	25.87	13.11	1.60	0.09

Table 2-6

Large Company Stocks, Long-Term Government Bonds, and Intermediate-Term Government Bonds
Annual Total, Income, Capital Appreciation, and Reinvestment Returns (%)

1926–1970

	Large Company Stocks				Long-Term Government Bonds					Intermediate-Term Government Bonds				
Year	Capital Apprec. Return	Income Return	Reinvest-ment Return	Total Return	Capital Apprec. Return	Income Return	Reinvest-ment Return	Total Return	Year-end Yield	Capital Apprec. Return	Income Return	Reinvest-ment Return	Total Return	Year-end Yield
1926	5.72	5.41	0.50	11.62	3.91	3.73	0.13	7.77	3.54	1.51	3.78	0.10	5.38	3.61
1927	30.91	5.71	0.87	37.49	5.40	3.41	0.12	8.93	3.16	0.96	3.49	0.07	4.52	3.40
1928	37.88	4.81	0.91	43.61	-3.12	3.22	0.01	0.10	3.40	-2.73	3.64	0.01	0.92	4.01
1929	-11.91	3.98	-0.49	-8.42	-0.20	3.47	0.15	3.42	3.40	1.77	4.07	0.18	6.01	3.62
1930	-28.48	4.57	-0.98	-24.90	1.28	3.32	0.05	4.66	3.30	3.30	3.30	0.11	6.72	2.91
1931	-47.07	5.35	-1.62	-43.34	-8.46	3.33	-0.17	-5.31	4.07	-5.40	3.16	-0.08	-2.32	4.12
1932	-15.15	6.16	0.80	-8.19	12.94	3.69	0.22	16.84	3.15	5.02	3.63	0.16	8.81	3.04
1933	46.59	6.39	1.01	53.99	-3.14	3.12	-0.05	-0.07	3.36	-0.99	2.83	-0.02	1.83	3.25
1934	-5.94	4.46	0.04	-1.44	6.76	3.18	0.09	10.03	2.93	5.97	2.93	0.09	9.00	2.49
1935	41.37	4.95	1.35	47.67	2.14	2.81	0.03	4.98	2.76	4.94	2.02	0.05	7.01	1.63
1936	27.92	5.36	0.64	33.92	4.64	2.77	0.10	7.52	2.55	1.60	1.44	0.02	3.06	1.29
1937	-38.59	4.66	-1.09	-35.03	-2.48	2.66	0.05	0.23	2.73	0.05	1.48	0.03	1.56	1.14
1938	25.21	4.83	1.07	31.12	2.83	2.64	0.06	5.53	2.52	4.37	1.82	0.04	6.23	1.52
1939	-5.45	4.69	0.35	-0.41	3.48	2.40	0.06	5.94	2.26	3.18	1.31	0.03	4.52	0.98
1940	-15.29	5.36	0.14	-9.78	3.77	2.23	0.09	6.09	1.94	2.04	0.90	0.02	2.96	0.57
1941	-17.86	6.71	-0.44	-11.59	-1.01	1.94	0.00	0.93	2.04	-0.17	0.67	0.00	0.50	0.82
1942	12.43	6.79	1.12	20.34	0.74	2.46	0.02	3.22	2.46	1.17	0.76	0.00	1.94	0.72
1943	19.45	6.24	0.21	25.90	-0.37	2.44	0.02	2.08	2.48	1.23	1.56	0.02	2.81	1.45
1944	13.80	5.48	0.47	19.75	0.32	2.46	0.03	2.81	2.46	0.35	1.44	0.01	1.80	1.40
1945	30.72	4.97	0.74	36.44	8.27	2.34	0.12	10.73	1.99	1.02	1.19	0.01	2.22	1.03
1946	-11.87	4.09	-0.29	-8.07	-2.15	2.04	0.01	-0.10	2.12	-0.08	1.08	0.00	1.00	1.12
1947	0.00	5.49	0.22	5.71	-4.70	2.13	-0.06	-2.62	2.43	-0.30	1.21	0.00	0.91	1.34
1948	-0.65	6.08	0.08	5.50	0.96	2.40	0.04	3.40	2.37	0.27	1.56	0.01	1.85	1.51
1949	10.26	7.50	1.03	18.79	4.15	2.25	0.06	6.45	2.09	0.95	1.36	0.01	2.32	1.23
1950	21.78	8.77	1.16	31.71	-2.06	2.12	0.00	0.06	2.24	-0.69	1.39	0.00	0.70	1.62
1951	16.46	6.91	0.65	24.02	-6.27	2.38	-0.04	-3.93	2.69	-1.63	1.98	0.01	0.36	2.17
1952	11.78	5.93	0.66	18.37	-1.48	2.66	-0.02	1.16	2.79	-0.57	2.19	0.01	1.63	2.35
1953	-6.62	5.46	0.18	-0.99	0.67	2.84	0.12	3.64	2.74	0.61	2.55	0.07	3.23	2.18
1954	45.02	6.21	1.39	52.62	4.35	2.79	0.05	7.19	2.72	1.08	1.60	0.01	2.68	1.72
1955	26.40	4.56	0.60	31.56	-4.07	2.75	0.03	-1.29	2.95	-3.10	2.45	0.00	-0.65	2.80
1956	2.62	3.83	0.11	6.56	-8.46	2.99	-0.12	-5.59	3.45	-3.45	3.05	-0.02	-0.42	3.63
1957	-14.31	3.84	-0.30	-10.78	3.82	3.44	0.20	7.46	3.23	4.05	3.59	0.20	7.84	2.84
1958	38.06	4.38	0.93	43.36	-9.23	3.27	-0.14	-6.09	3.82	-4.17	2.93	-0.05	-1.29	3.81
1959	8.48	3.31	0.16	11.96	-6.20	4.01	-0.07	-2.26	4.47	-4.56	4.18	-0.01	-0.39	4.98
1960	-2.97	3.26	0.19	0.47	9.29	4.26	0.23	13.78	3.80	7.42	4.15	0.19	11.76	3.31
1961	23.13	3.48	0.28	26.89	-2.86	3.83	0.00	0.97	4.15	-1.72	3.54	0.03	1.85	3.84
1962	-11.81	2.98	0.10	-8.73	2.78	4.00	0.11	6.89	3.95	1.73	3.73	0.10	5.56	3.50
1963	18.89	3.61	0.30	22.80	-2.70	3.89	0.02	1.21	4.17	-2.10	3.71	0.03	1.64	4.04
1964	12.97	3.33	0.18	16.48	-0.72	4.15	0.07	3.51	4.23	-0.03	4.00	0.07	4.04	4.03
1965	9.06	3.21	0.18	12.45	-3.45	4.19	-0.04	0.71	4.50	-3.10	4.15	-0.03	1.02	4.90
1966	-13.09	3.11	-0.08	-10.06	-1.06	4.49	0.22	3.65	4.55	-0.41	4.93	0.17	4.69	4.79
1967	20.09	3.64	0.25	23.98	-13.55	4.59	-0.23	-9.18	5.56	-3.85	4.88	-0.02	1.01	5.77
1968	7.66	3.18	0.22	11.06	-5.51	5.50	-0.25	-0.26	5.98	-0.99	5.49	0.03	4.54	5.96
1969	-11.36	2.98	-0.13	-8.50	-10.83	5.95	-0.19	-5.07	6.87	-7.27	6.65	-0.11	-0.74	8.29
1970	0.10	3.33	0.43	3.86	4.84	6.74	0.52	12.11	6.48	8.71	7.49	0.66	16.86	5.90

Table 2-6 (Continued)
Large Company Stocks, Long-Term Government Bonds, and Intermediate-Term Government Bonds
Annual Total, Income, Capital Appreciation, and Reinvestment Returns (%)

1971–2008

	Large Company Stocks				Long-Term Government Bonds					Intermediate-Term Government Bonds				
Year	Capital Apprec. Return	Income Return	Reinvest-ment Return	Total Return	Capital Apprec. Return	Income Return	Reinvest-ment Return	Total Return	Year-end Yield	Capital Apprec. Return	Income Return	Reinvest-ment Return	Total Return	Year-end Yield
1971	10.63	3.49	0.18	14.30	6.61	6.32	0.31	13.23	5.97	2.72	5.75	0.25	8.72	5.25
1972	15.79	2.95	0.25	18.99	-0.35	5.87	0.17	5.69	5.99	-0.75	5.75	0.16	5.16	5.85
1973	-17.37	2.86	-0.19	-14.69	-7.70	6.51	0.08	-1.11	7.26	-2.19	6.58	0.22	4.61	6.79
1974	-29.72	3.69	-0.44	-26.47	-3.45	7.27	0.54	4.35	7.60	-1.99	7.24	0.44	5.69	7.12
1975	31.55	5.37	0.31	37.23	0.73	7.99	0.47	9.20	8.05	0.12	7.35	0.36	7.83	7.19
1976	19.15	4.49	0.29	23.93	8.07	7.89	0.80	16.75	7.21	5.25	7.10	0.51	12.87	6.00
1977	-11.50	4.35	0.00	-7.16	-7.86	7.14	0.04	-0.69	8.03	-5.15	6.49	0.06	1.41	7.51
1978	1.06	5.33	0.18	6.57	-9.05	7.90	-0.03	-1.18	8.98	-4.49	7.83	0.14	3.49	8.83
1979	12.31/	5.89	0.41	18.61	-9.84	8.86	-0.25	-1.23	10.12	-5.07	9.04	0.12	4.09	10.33
1980	25.77	5.74	0.99	32.50	-14.00	9.97	0.08	-3.95	11.99	-6.81	10.55	0.17	3.91	12.45
1981	-9.73	4.88	-0.08	-4.92	-10.33	11.55	0.64	1.86	13.34	-4.55	12.97	1.03	9.45	13.96
1982	14.76	5.61	1.18	21.55	23.95	13.50	2.91	40.36	10.95	14.23	12.81	2.06	29.10	9.90
1983	17.27	5.04	0.24	22.56	-9.82	10.38	0.09	0.65	11.97	-3.30	10.35	0.35	7.41	11.41
1984	1.40	4.57	0.31	6.27	2.32	11.74	1.42	15.48	11.70	1.22	11.68	1.12	14.02	11.04
1985	26.33	4.72	0.67	31.73	17.84	11.25	1.88	30.97	9.56	9.01	10.29	1.04	20.33	8.55
1986	14.62	3.92	0.13	18.67	14.99	8.98	0.56	24.53	7.89	6.99	7.72	0.43	15.14	6.85
1987	2.03	3.64	-0.41	5.25	-10.69	7.92	0.06	-2.71	9.20	-4.75	7.47	0.19	2.90	8.32
1988	12.40	3.99	0.22	16.61	0.36	8.97	0.34	9.67	9.18	-2.26	8.24	0.13	6.10	9.17
1989	27.25	4.03	0.40	31.69	8.62	8.81	0.68	18.11	8.16	4.34	8.46	0.49	13.29	7.94
1990	-6.56	3.43	0.03	-3.10	-2.61	8.19	0.61	6.18	8.44	1.02	8.15	0.56	9.73	7.70
1991	26.31	3.76	0.40	30.47	10.10	8.22	0.98	19.30	7.30	7.36	7.43	0.67	15.46	5.97
1992	4.46	2.98	0.17	7.62	0.34	7.26	0.45	8.05	7.26	0.64	6.27	0.28	7.19	6.11
1993	7.06	2.91	0.12	10.08	10.71	7.17	0.35	18.24	6.54	5.56	5.53	0.15	11.24	5.22
1994	-1.54	2.83	0.03	1.32	-14.29	6.59	-0.08	-7.77	7.99	-11.14	6.07	-0.08	-5.14	7.80
1995	34.11	3.04	0.43	37.58	23.04	7.60	1.03	31.67	6.03	9.66	6.69	0.45	16.80	5.38
1996	20.26	2.43	0.26	22.96	-7.37	6.18	0.26	-0.93	6.73	-3.90	5.82	0.18	2.10	6.16
1997	31.01	2.10	0.25	33.36	8.51	6.64	0.71	15.85	6.02	1.95	6.14	0.30	8.38	5.73
1998	26.67	1.67	0.24	28.58	6.89	5.83	0.34	13.06	5.42	4.66	5.29	0.25	10.21	4.68
1999	19.53	1.36	0.15	21.04	-14.35	5.57	-0.19	-8.96	6.82	-7.06	5.30	-0.01	-1.77	6.45
2000	-10.14	1.11	-0.07	-9.10	14.36	6.50	0.62	21.48	5.58	5.94	6.19	0.46	12.59	5.07
2001	-13.04	1.18	-0.03	-11.89	-1.89	5.53	0.06	3.70	5.75	3.23	4.27	0.12	7.62	4.42
2002	-23.37	1.39	-0.13	-22.10	11.69	5.59	0.56	17.84	4.84	8.65	3.98	0.30	12.93	2.61
2003	26.38	1.99	0.31	28.68	-3.36	4.80	0.01	1.45	5.11	-0.48	2.85	0.03	2.40	2.97
2004	8.99	1.76	0.13	10.88	3.26	5.02	0.23	8.51	4.84	-1.07	3.28	0.04	2.25	3.47
2005	3.00	1.84	0.07	4.91	3.02	4.69	0.10	7.81	4.61	-2.58	3.92	0.03	1.36	4.34
2006	13.62	2.01	0.17	15.79	-3.64	4.68	0.15	1.19	4.91	-1.51	4.54	0.11	3.14	4.65
2007	3.53	1.96	0.00	5.49	4.69	4.86	0.33	9.68	4.50	5.33	4.44	0.28	10.05	3.28
2008	-38.49	1.92	-0.43	-37.00	20.50	4.45	0.93	25.87	3.03	9.92	2.96	0.23	13.11	1.26