



C A M B R I D G E   A S S O C I A T E S   L L C

## GLOBAL MARKET COMMENTARY

### INFLATION: SHOULD INVESTORS BE CONCERNED?

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## Inflation: Should Investors Be Concerned?

When we last looked at this subject in May 2004 (U.S. Market Comment: *Whither Inflation*) a number of investors were greatly concerned about the possibility of a sharp rise in U.S. inflation. Now, in the wake of the Fed's indication in December that it would soon stop tightening, conventional wisdom is that inflationary pressures are in check. For example, despite 3.4% inflation in 2005 (Table A), the highest since 2000,<sup>1</sup> the average 12-month U.S. inflation forecast of 54 experts polled recently by *The Wall Street Journal* was 2.8%, with estimates ranging from 2.3% to 3.6%, with but one exception (1.1%).<sup>2</sup> More significant, perhaps, is that there seems to be a general consensus that central banks have definitively tamed the inflation beast that rampaged through the 1970s and that investors need not fear its return. For each quarter, the Federal Reserve Bank of Philadelphia surveys approximately 50 experts on their ten-year inflation expectations. The reported consensus has stayed within 5 basis points (bps) of 2.5% for almost seven years.<sup>3</sup> While neither the 12-month nor ten-year inflation projections is worth a plug nickel, the small range within which the estimates fall suggests the experts are not predicting substantially higher or lower inflation, let alone hyperinflation or deflation.

In other developed countries, meanwhile, inflation has also been low and expectations are muted (Table B). Continental Europe experienced 2.2% inflation in 2005 while Japan's CPI was negative (-0.1%). Japan's CPI *dropped* by an average 0.5% from 1999-2005. Even in emerging markets, long wracked by high inflation, single-digit levels now prevail (Table C).

Although the difference between 2% and 3% inflation is consequential for many (e.g., those dependent on COLAs and government budgeters), it is unlikely to affect the asset allocation decisions of long-term investors to any significant degree. For investors, therefore, the key questions are:

- Is 2% to 3% inflation plausible, not just for the next 12 months, but longer term? If so, what are the investment implications?
- What could go wrong? And is the probability of something going wrong large enough and/or the potential consequences severe enough that we should have some defense against such eventualities?

## Backdrop

Over the past 81 years, the United States has experienced an average annual inflation rate of 3.0%. Since 1973, the year of the first oil shock, the rate has been 4.8%. However, this period has two distinct segments: the first (1973-81) marked by higher inflation (9.3%) and the second (1982-05) marked by lower

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<sup>1</sup> The rate in 2000 was also 3.4% and has not exceeded this level since 1990 (6.1%).

<sup>2</sup> The forecast was for the 12 months ending November 30, 2006. "Growth May Weaken In 2006 as Housing Boom Cools," *The Wall Street Journal*, January 3, 2006, A2.

<sup>3</sup> Since the second quarter of 1999 (i.e., 27 reporting periods), the consensus in the Federal Reserve Bank of Philadelphia survey has been 2.50% every quarter, with three minor exceptions (2.55% once and 2.45% twice).

inflation equal to the long-term historical average of 3.1%. Moreover, the inflation rate dropped even further over the latter half of the second period (Table D).

The decline in the rate of inflation since the early 1980s was attributable principally to monetary austerity, inflicted most notably by the U.S. Federal Reserve under Paul Volcker's leadership. More recently, however, observers have cited the forces of globalization—and especially the emergence of China as the world's factory—which has driven down the price of goods and labor.

Despite persistent squabbling about how “inflation” is defined and computed, whether it is systematically understated, whether asset price inflation should be included, and so on, the inflation backdrop of the past decade has generally been remarkably benign, with inflation not only relatively low but also remarkably stable—conditions regarded by most economists as ideal for economic growth and investment planning.

### **Indicators of Higher Prices**

More recently, central banks have responded to more robust global economic growth either by raising interest rates or—in the case of Japan—signaling that they will probably do so soon (Table E). What inflationary threats are central bankers intent on meeting?

The first is rising commodity prices. Although in real terms these prices are still below their 1970s peaks (Table F), increasing demand from China and other developing countries suggest that at the very least energy and some metals prices will remain at a level substantially higher than in recent years. At some point this should flow through to higher finished goods prices, unless offset by lower labor costs or higher productivity. While gold is often thought of as a leading indicator of inflation, their correlation has been negative since the period of low inflation began in 1982 (Table G). Still, the sharp rise in the price of the “barbarous relic” suggests lower investor confidence in the US\$ and other paper currencies.

Wage pressures represent a second potential threat. The U.S. unemployment rate has declined, productivity gains are diminishing, and excess capacity is shrinking. In Japan the ratio of job offers to job seekers has risen and observers expect wage increases to come out of management-labor discussions this spring, following strong corporate profits over the last couple of years. German unions are also securing wage increases, albeit small ones to date. Finally—and perhaps most significantly—wages are also rising among workers in China's bustling coastal cities, where most of the manufacturing boom has been centered.

The record levels of spending in the United States are another source of concern for inflation watchers. There are two culprits here: the U.S. government and the American consumer. Federal spending has grown rapidly and the American consumer seems unwilling to cut spending even in the face of interest rate increases. In 2005, Americans apparently spent more than they earned for the first time since 1933.

Meanwhile, the government's fiscal and current account deficits mean the United States requires massive amounts of foreign capital to stay afloat (Table H). Should the foreigners who fund U.S. deficits be less willing to do so in the future, either because of a lack of confidence in the U.S. economy or, in the case of the large Asian central banks, because of a desire to diversify their dollar holdings, rates would have to rise, negatively impacting the value of the US\$. Chinese officials, for example, have recently suggested that they may diversify their foreign currency reserves. Nevertheless, foreign central banks are likely to tread carefully, given that a weaker dollar would reduce the value of their dollar holdings, and, in the case of China in particular, weaken the buying power of their most important customers.

Although the headlines tend to highlight the U.S. situation, other G-7 countries are also running large—and potentially inflationary—fiscal deficits (Table I). For example, Japan's budget deficit is a whopping 159% of GDP, making other developed countries seem prudent by comparison, although it is often pointed out that this debt is primarily held by Japanese institutions and investors, reducing the dangers of a sell-off.

### Indicators of Lower Prices

On the other hand, there are a number of indicators that inflation will remain in the low or moderate range. Core CPI in the United States (2.2% in 2005) remains low (Table J), and there is no indication yet that the price of goods will rise markedly as in past economic cycles given the increasing integration of the massive labor markets of the developing world into the global economy. China, of course, is the 900 pound gorilla in this equation. Moreover, it is unlikely that the U.S. economy has felt the full effect of the Fed's 13 rate increases yet.

Perhaps more importantly, investors apparently believe that inflation will remain in check. Long-term U.S. rates dropped while short rates rose in 2005,<sup>4</sup> creating a slightly inverted yield curve in December for the first time in five years (Table K). Whether this is due primarily to the technical factors cited by some observers, or signals an impending contraction, as it has in the past, it certainly suggests that there is no “inflation psychology” fueling a cycle of rising prices.

Likewise, the spread between TIPS and conventional Treasury yields has remained low (Table L), while inflation expectations in Continental Europe have also been stable, running at about 2% (Table M), which means that real rates remain close to zero.

Finally, some factors in the United States that may be viewed as potentially inflationary, such as the rise in housing prices and the consumer debt overhang—can also be seen as potentially deflationary if they constitute (as some commentators have suggested) asset bubbles that will inevitably pop. The budget and trade imbalances could also prove recessionary (i.e., a damper on inflation) should they lead to a major market correction.

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<sup>4</sup> According to Morgan Stanley Capital International, the yield on U.S. Treasuries with ten+ years to maturity dropped by 15 bps in 2005 while the yield on one- to three-year Treasuries rose by 137 bps.

## **Some Risks to the Status Quo**

Although the current system has successfully weathered such shocks as the 1997-98 Asian financial crisis, the popping of the Internet bubble, and the September 11 attack, it is impossible to predict how it would respond to an even more cataclysmic event, whether geopolitical (e.g., the use of a weapon of mass destruction), financial (e.g., another LTCM-type failure), health related (e.g., a pandemic), or a natural disaster. Such events would clearly alter the investment landscape, but whether they ultimately prove inflationary or deflationary depends on factors such as their root causes and governmental responses. These sorts of threats are tail risks, with uncertain effect from an investment perspective. While we advocate hedging portfolios against the risk of deflation and unexpected inflation in general, we do not advocate attempting to hedge further against the unknowable outcomes triggered by exogenous shocks because this risks undermining the normative asset allocations designed to enable investors to meet their financial goals over the long term.

## **Conclusion**

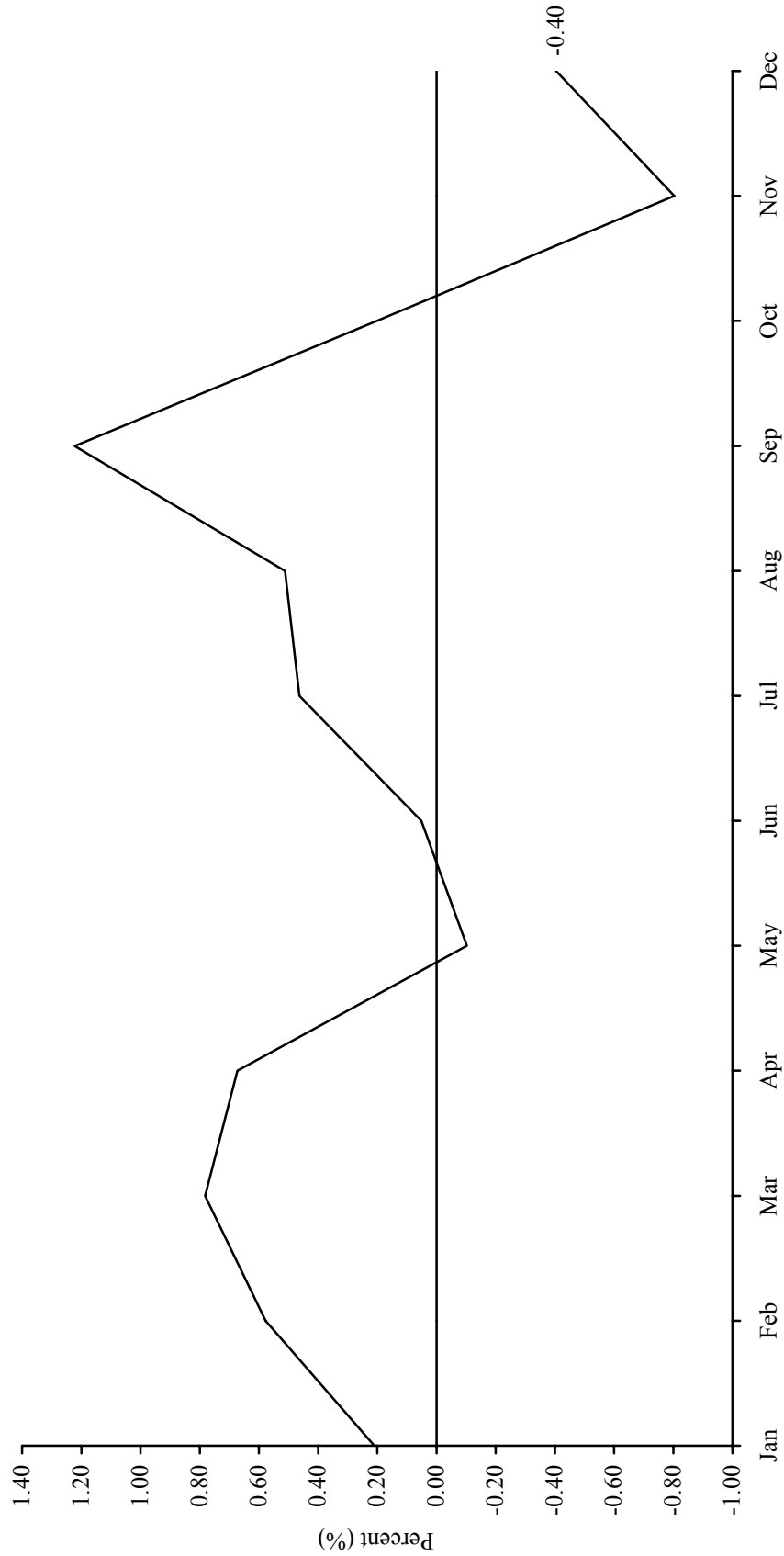
The combination of forces restraining a large increase in prices seems ascendant at this point in time. Moreover, the Fed is likely to react quickly to signals that the economy is overheating, given Mr. Bernanke's likely desire under such circumstances to establish his anti-inflation credentials. Continued growth in the United States and accelerating growth in Europe and Japan suggest, meanwhile, that we are unlikely to experience any price deflation.

While inflationary and deflationary pressures co-exist and seem to be offsetting each other to some degree, our best guess is that central bankers will not readily cede the ground they fought so hard to gain and will do what is required to keep secular inflation in check, regardless of the pressures they are likely to face from politicians for doing so. However, this does not preclude cyclical inflationary spikes, for which investors should be prepared, nor should investors think of "inflation" in monolithic terms. For example, increased global demand will likely push basic commodity prices higher for years to come; in other words, the secular bull market in commodities/natural resources has room to run. However, we recommend caution in building positions since many commodities, particularly energy and metals, have become expensive. Likewise, high-quality, intermediate- to long-duration, noncallable bonds remain the best defense against deflation, and an adequate level should be held, even with relatively low yields. While we are not sold on the notion that bonds are on the cusp of a major bear market, we do not regard this asset class as providing much value at current prices. Meanwhile, any equity market declines attributed primarily to inflationary spikes should be regarded as buying opportunities, especially in those regions, like Japan, Asia ex Japan, and emerging markets, where valuations are most attractive and the economic tailwinds likely to blow the hardest.

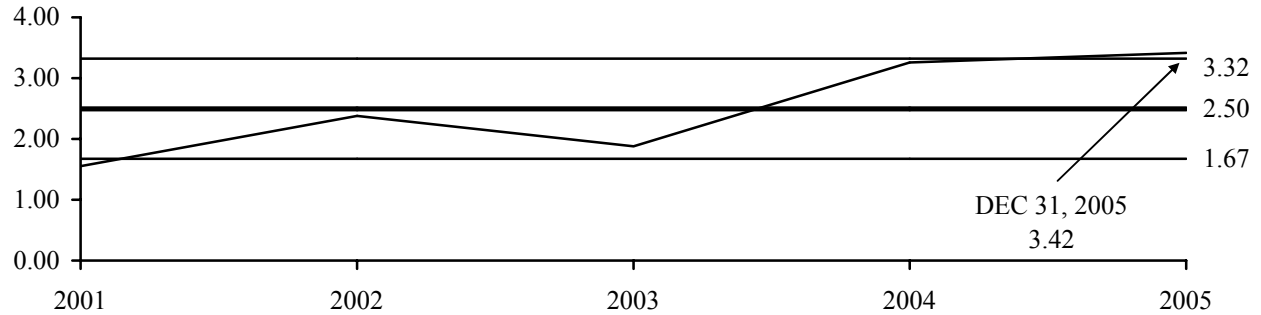
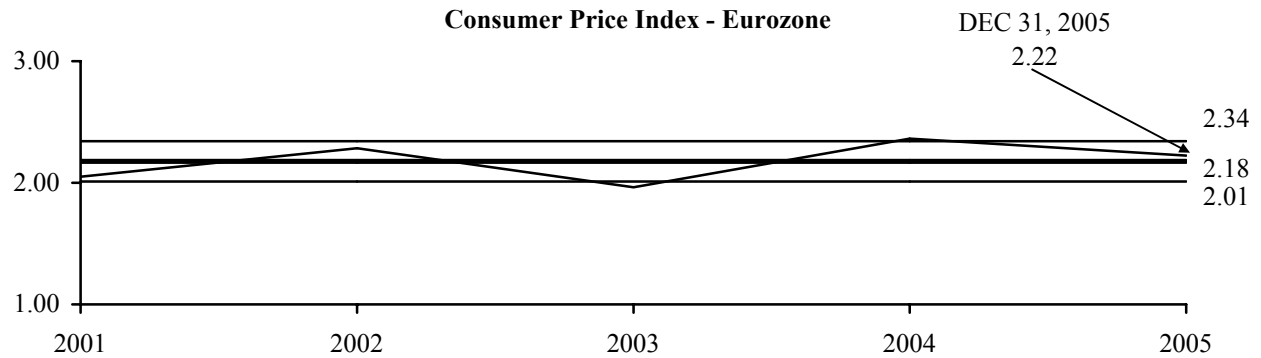
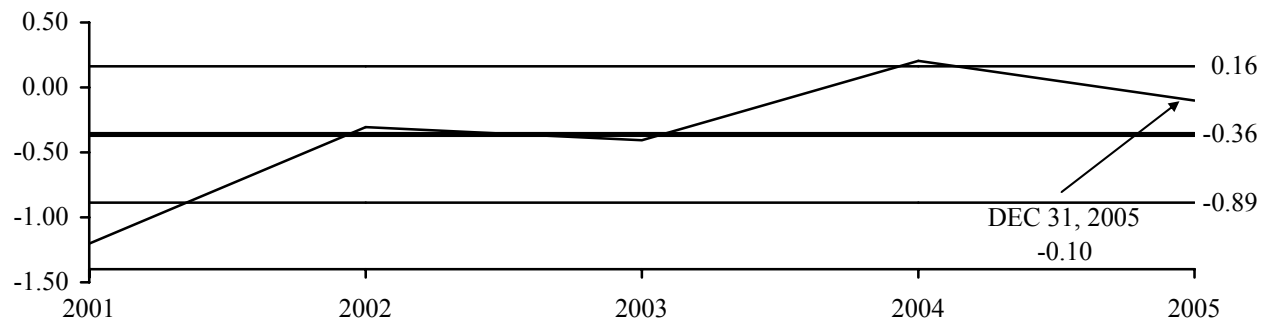
Table A

## CONSUMER PRICE INDEX - ALL URBAN CONSUMERS MONTHLY PRICE RETURNS

January 1, 2005 - December 31, 2005



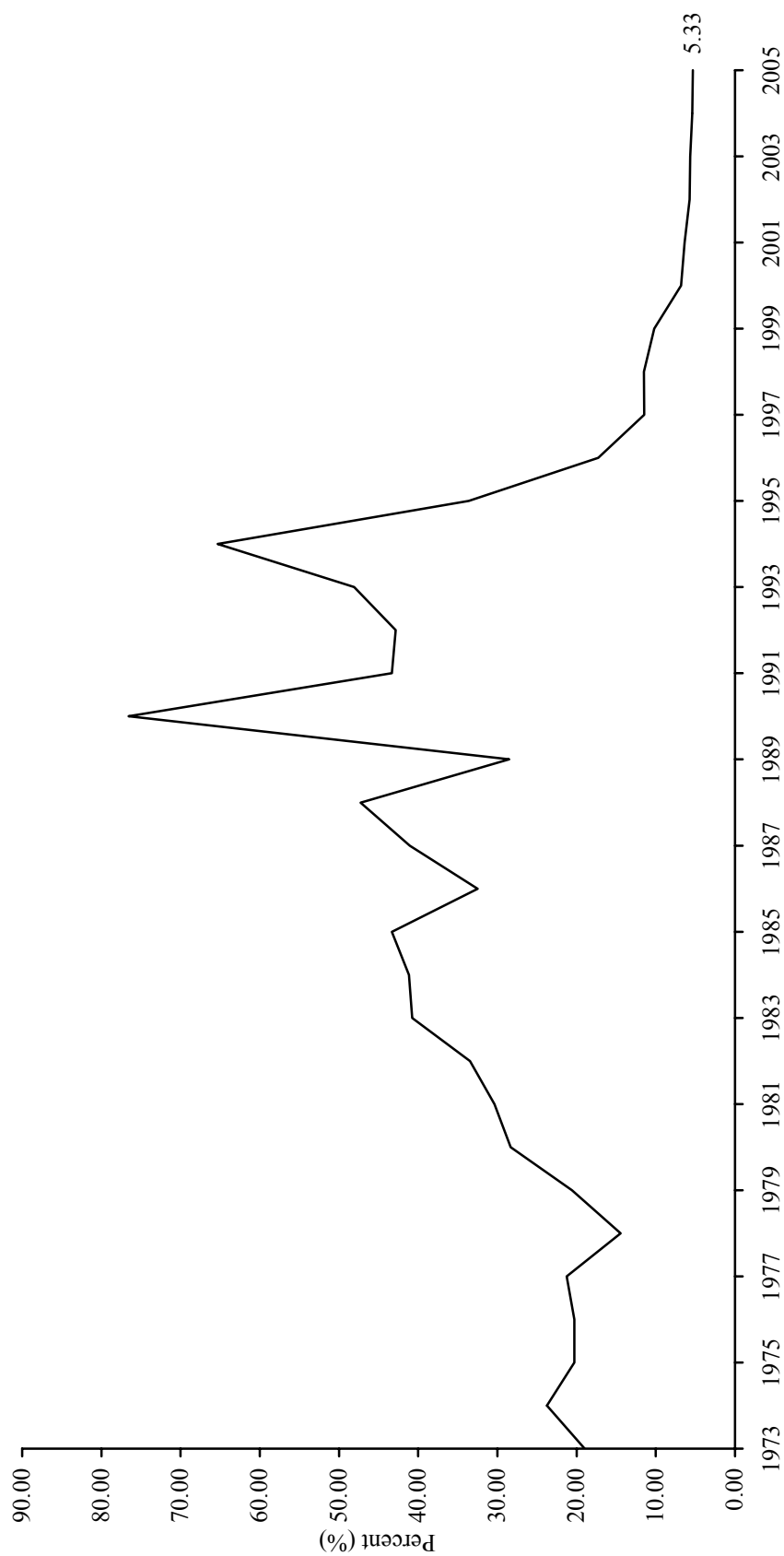
Source: U.S. Department of Labor - Bureau of Labor Statistics.

**Table B****INFLATION FOR U.S., EUROZONE AND JAPAN****January 1, 2001 - December 31, 2005****U.S. Consumer Price Index - All Urban Consumers****Consumer Price Index - Eurozone****Consumer Price Index - Japan**

Sources: Thomson Datastream and U.S. Department of Labor - Bureau of Labor Statistics.

Note: This European CPI series includes the following countries: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and Greece.

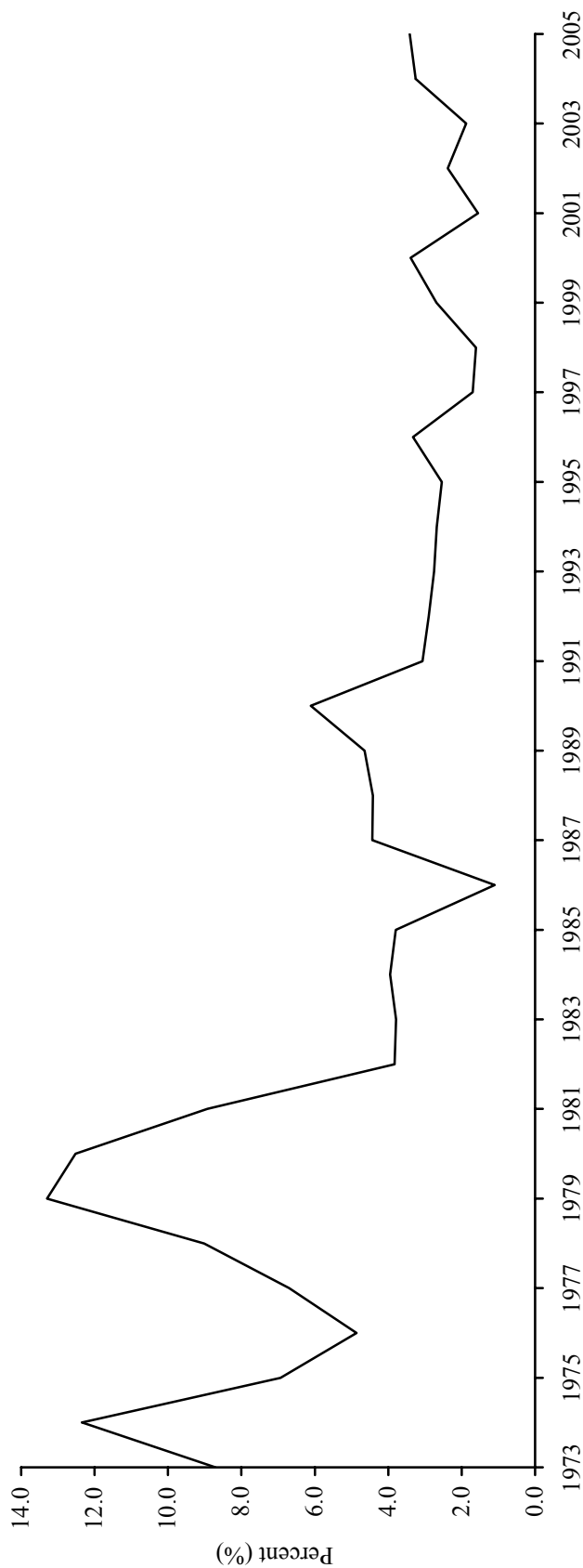
**Table C**  
**EMERGING MARKETS INFLATION**  
**1973-2005**



Source: Thomson Datastream.

Notes: Data for 2005 are through October 31, 2005. Graph is based on annual data.

**Table D**  
**U.S. INFLATION**  
**1973-2005**



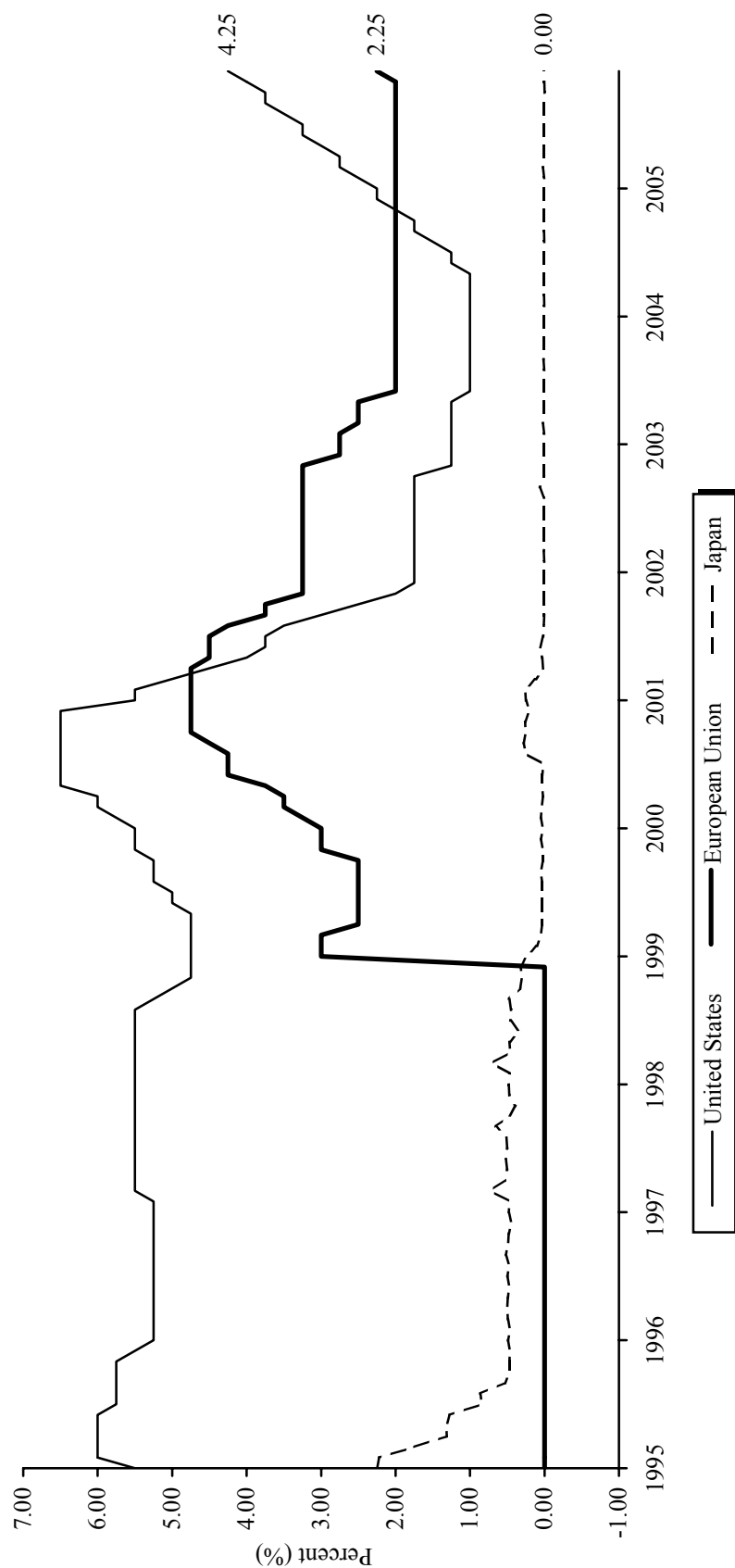
	1973-2005	1973-81	1982-2005	1982-96	1997-2005
Average (%)	4.80	9.26	3.13	3.55	2.43
Standard Deviation	3.28	2.92	1.16	1.16	0.78

Source: U.S. Department of Labor - Bureau of Labor Statistics.

Table E

## KEY INTEREST RATES

January 31, 1995 - December 31, 2005



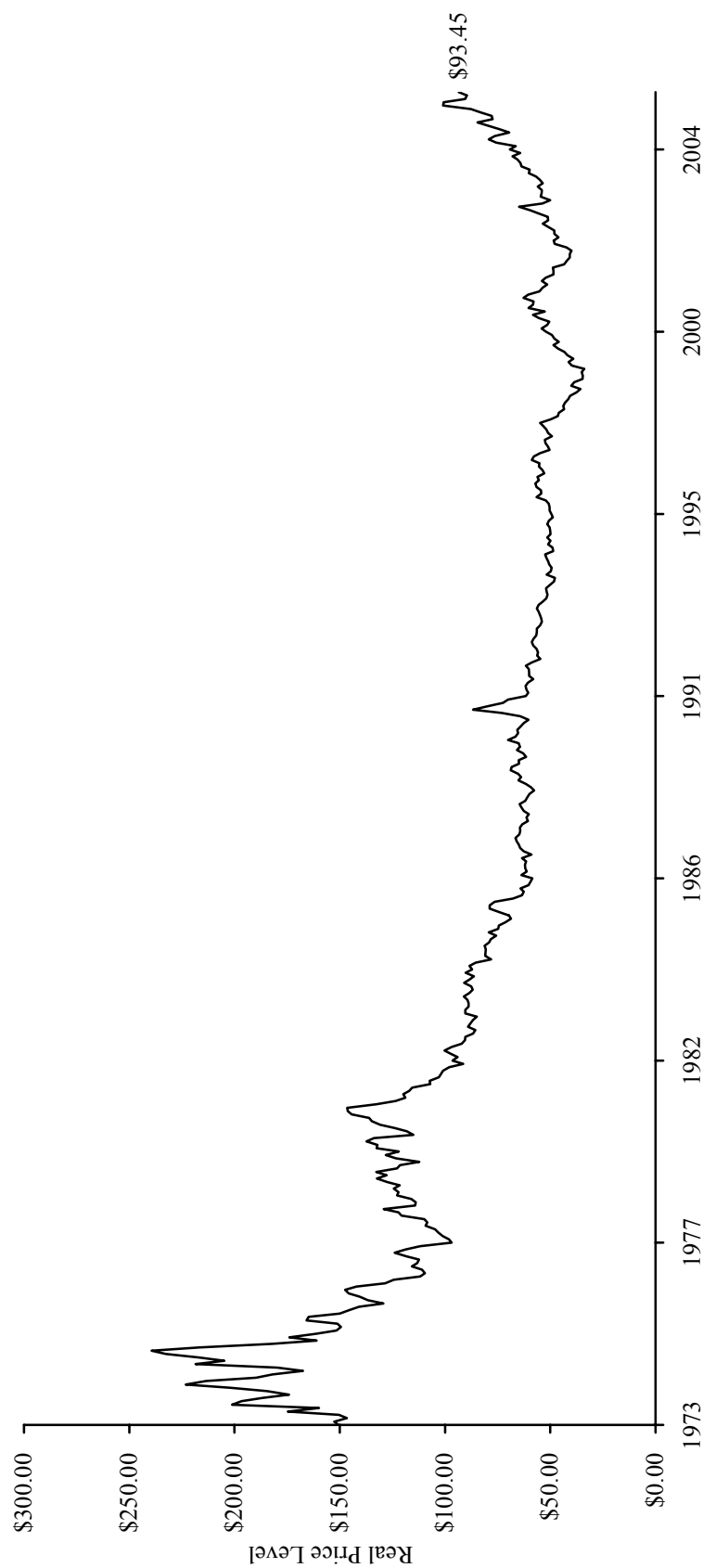
Source: Thomson Datastream.

Notes: The U.S. Federal Funds Target Rate was used for the United States, the Euro Short-Term Repo (ECB) was used for the European Union, and the Japan Uncollateral Overnight was used for Japan. Data for European Union start on January 31, 1999.

Table F

## HISTORICAL REAL GOLDMAN SACHS COMMODITY INDEX PRICES

January 31, 1973 - December 31, 2005

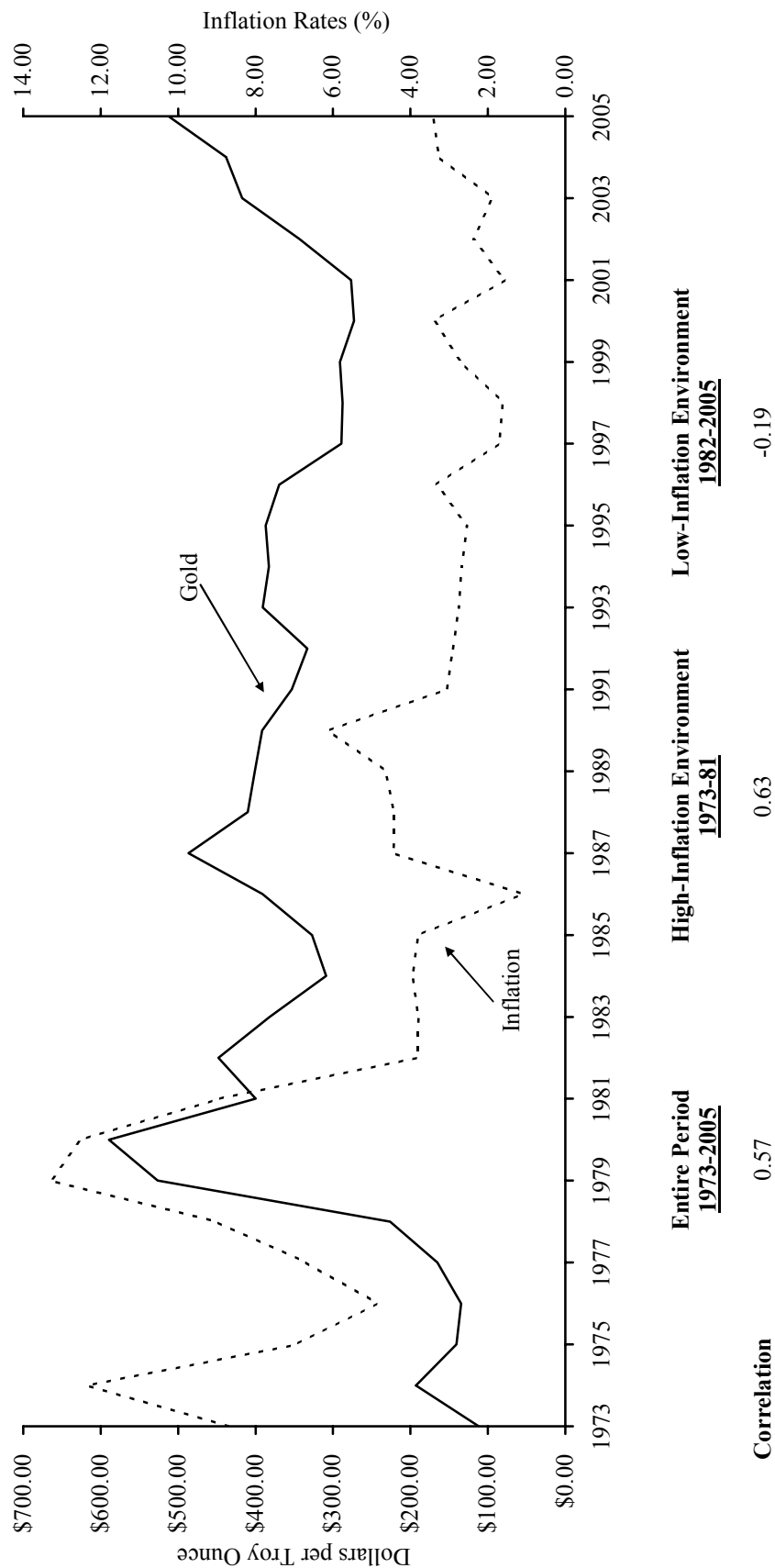
Real GSCI Price  
(Constant 1973 Dollar Basis)

Sources: Goldman, Sachs &amp; Co., Thomson Datastream, and U.S. Department of Labor - Bureau of Labor Statistics.

Table G

## GOLD PRICES AND INFLATION

1973-2005



Sources: Thomson Datastream and U.S. Department of Labor - Bureau of Labor Statistics.

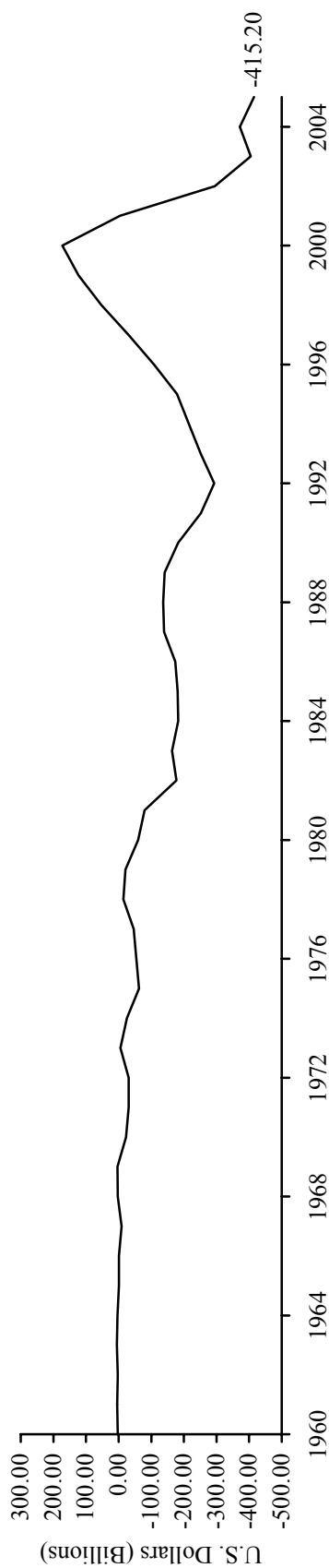
Notes: Inflation is measured by the percentage change in the Consumer Price Index. Gold prices are nominal.

Table H

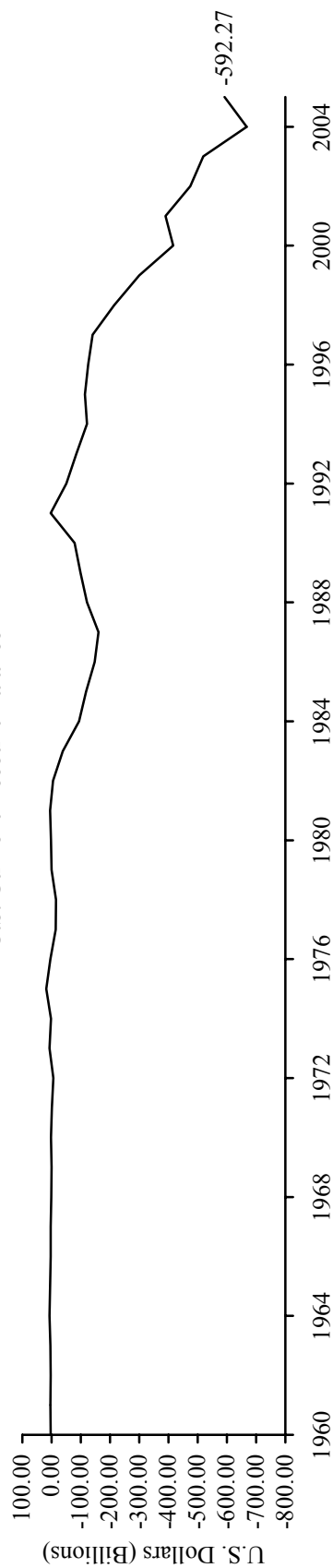
## U.S. DEFICITS

1960-2005

## U.S. Federal Government Deficit



## U.S. Current Account Balance



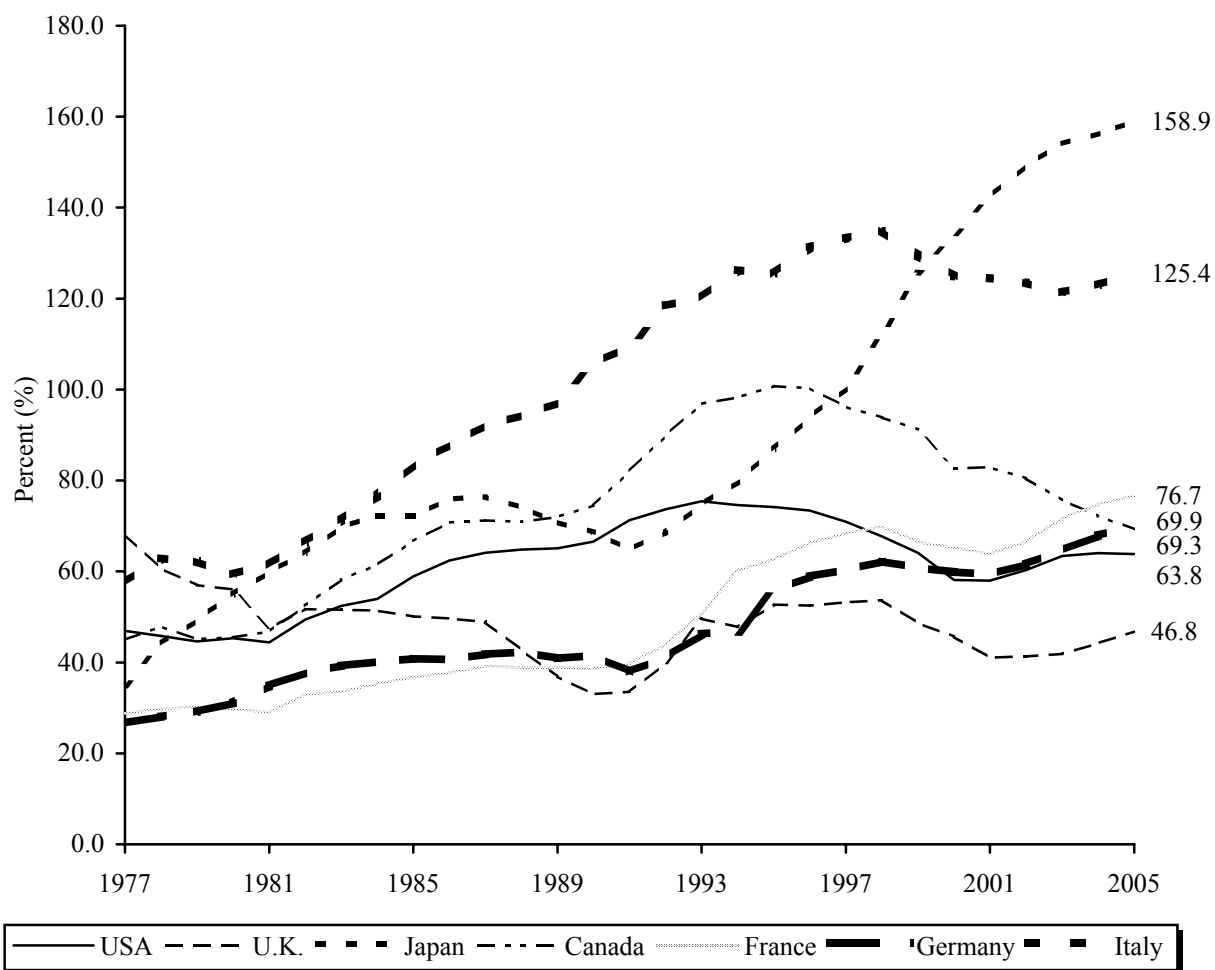
Source: Thomson Datastream.

Notes: Data are nominal and seasonally adjusted. Data are through the third quarter of 2005.

Table I

## COMPARATIVE GOVERNMENT DEBT OF G-7 COUNTRIES

As of December 31, 2005



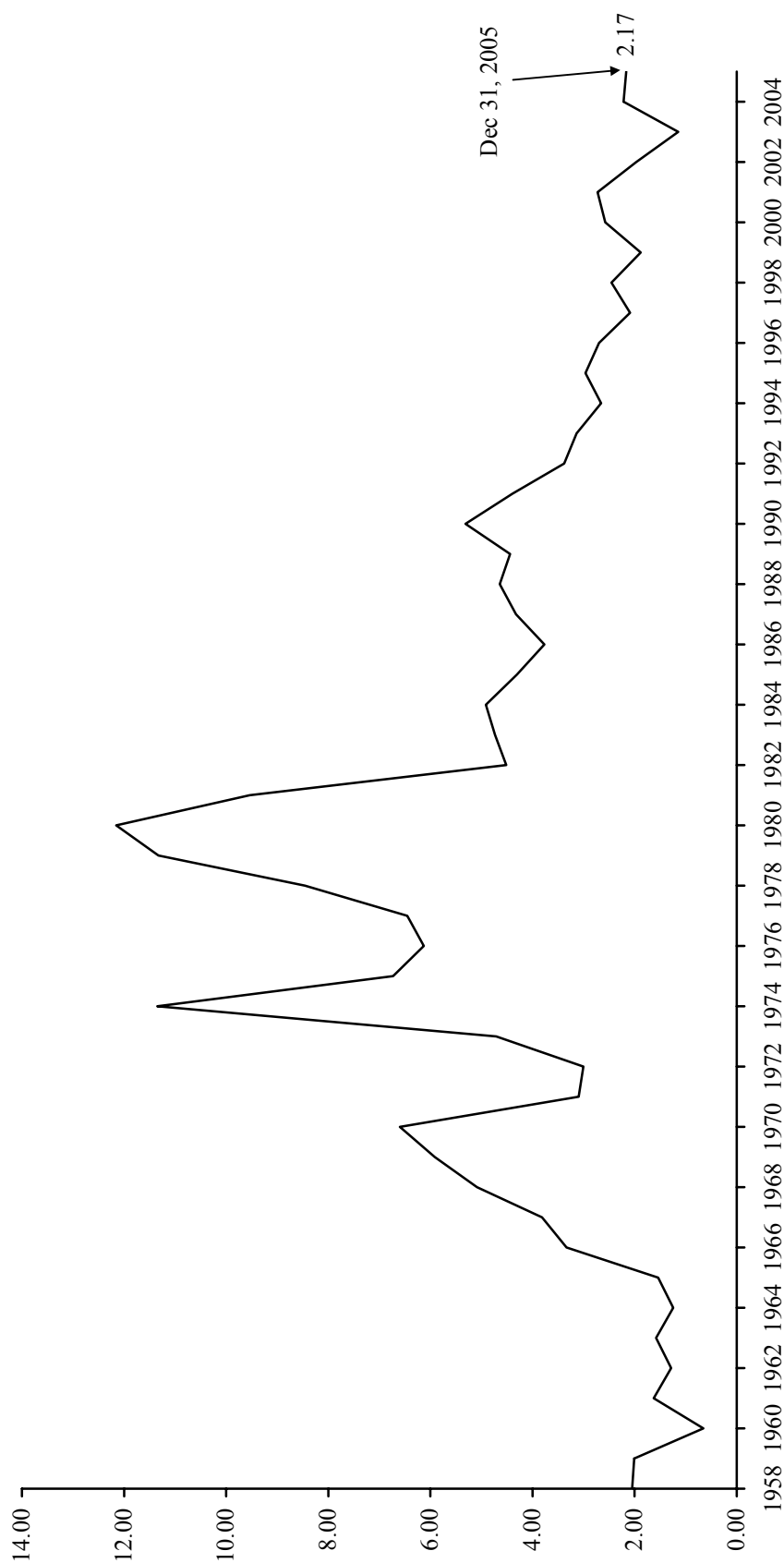
<u>Country</u>	<u>Government Gross Financial Liabilities as % of Nominal GDP</u>
Japan	158.9
Italy	125.4
France	76.7
Germany	69.9
Canada	69.3
United States	63.8
United Kingdom	46.8

Source: Thomson Datastream.

Table J

## CORE CONSUMER PRICE INDEX - U.S.

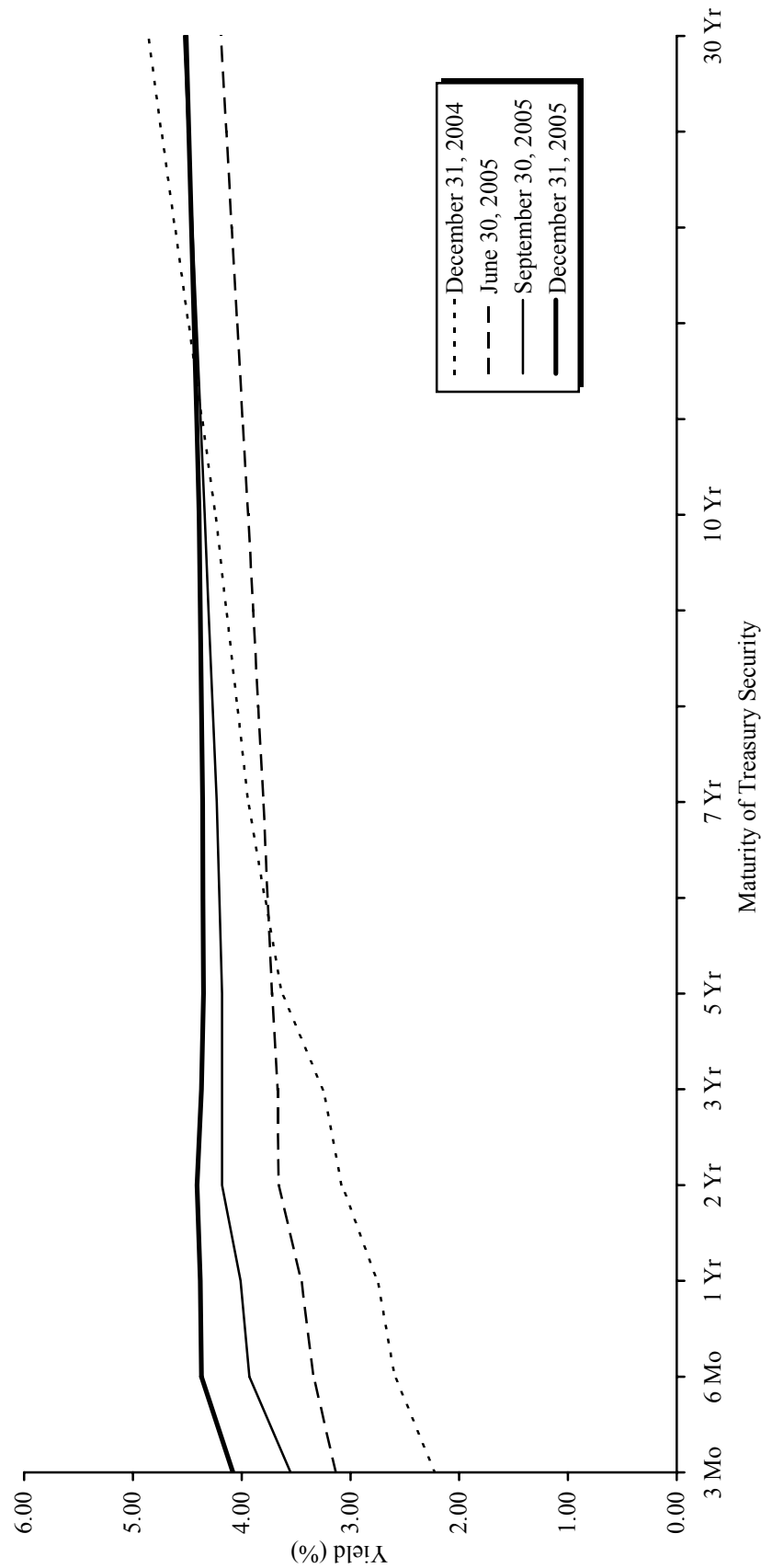
1958-2005



Source: Thomson Datastream.

Table K

## U.S. TREASURY YIELD CURVE



Sources: Thomson Datastream and U.S. Treasury.

Note: The 30-year Treasury yield is an extrapolation of the Long-Term Average Rate series calculated by the Treasury following 2/18/02, when the Treasury ceased publication of the 30-year constant maturity series.

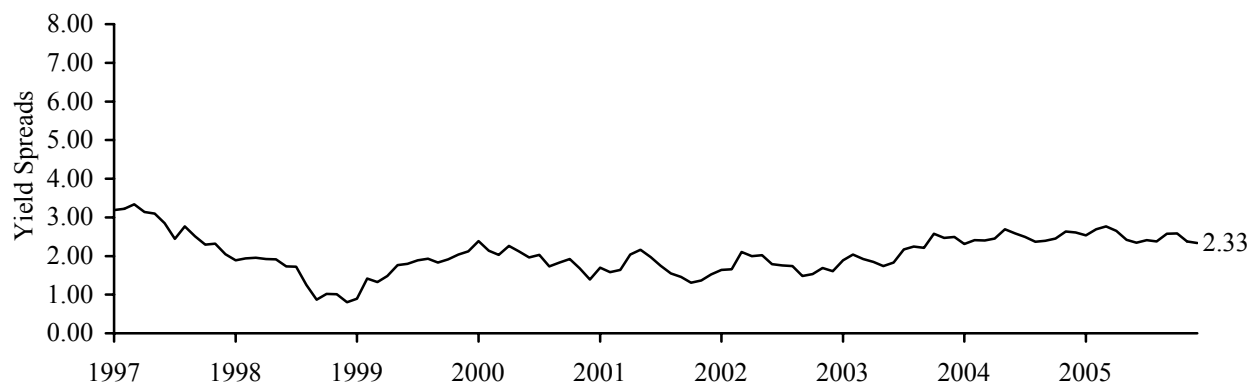
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Table L

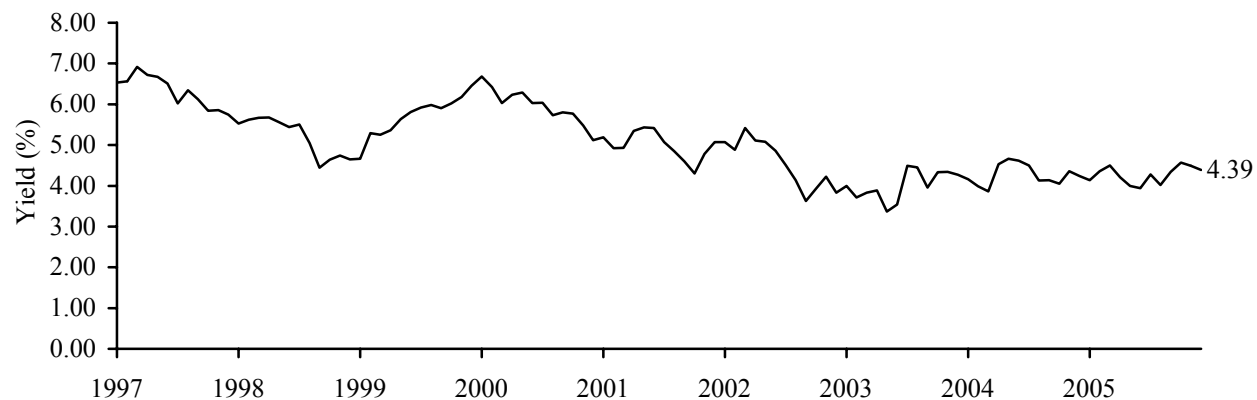
## U.S. INFLATION EXPECTATIONS AND TEN-YEAR TREASURY YIELDS

January 31, 1997 - December 31, 2005

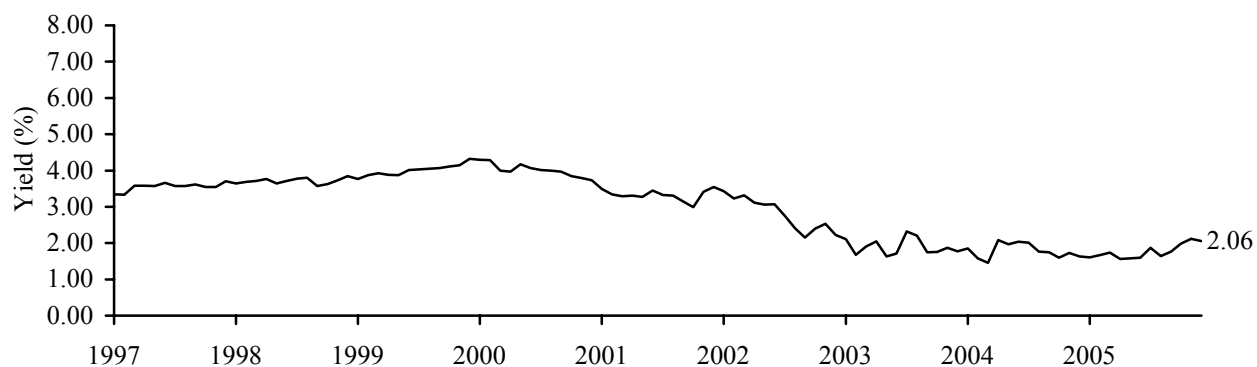
## Inflation Expectations



## Ten-Year Treasuries



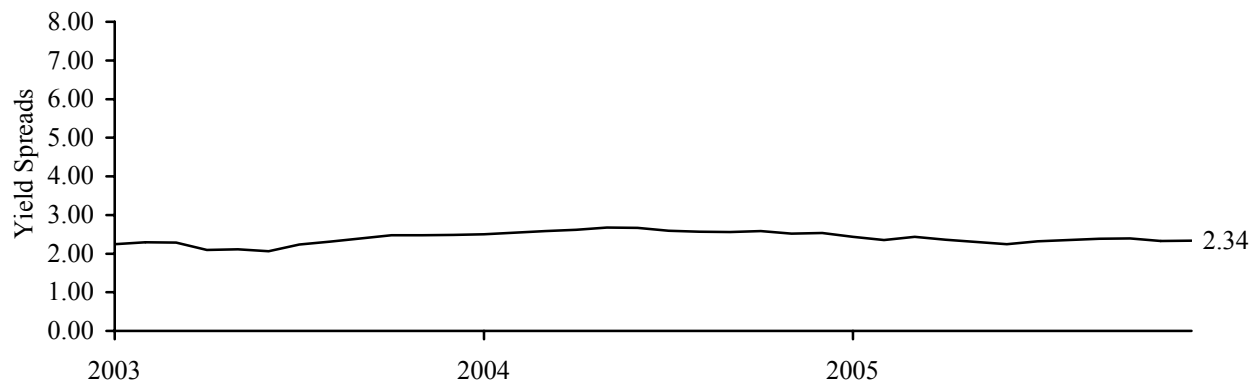
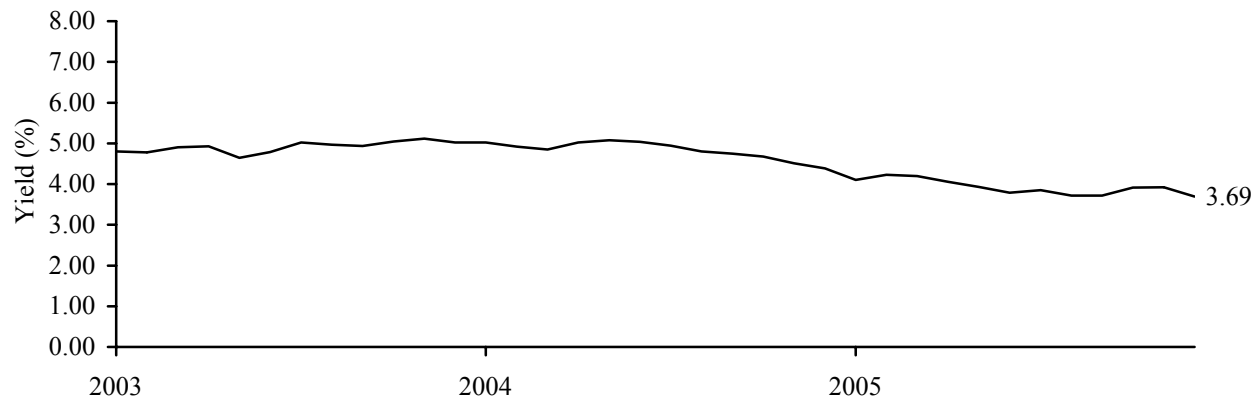
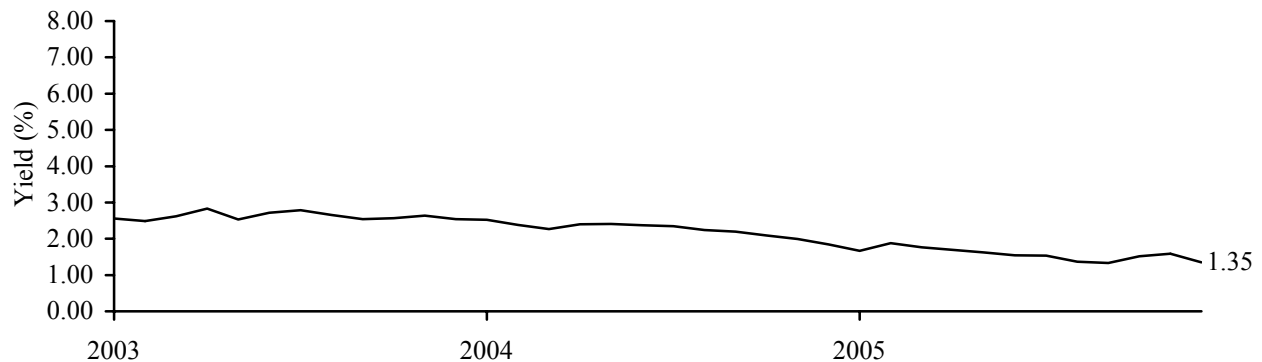
## Ten-Year Treasury Inflation-Protection Securities (TIPS)



Sources: The Bloomberg and Thomson Datastream.

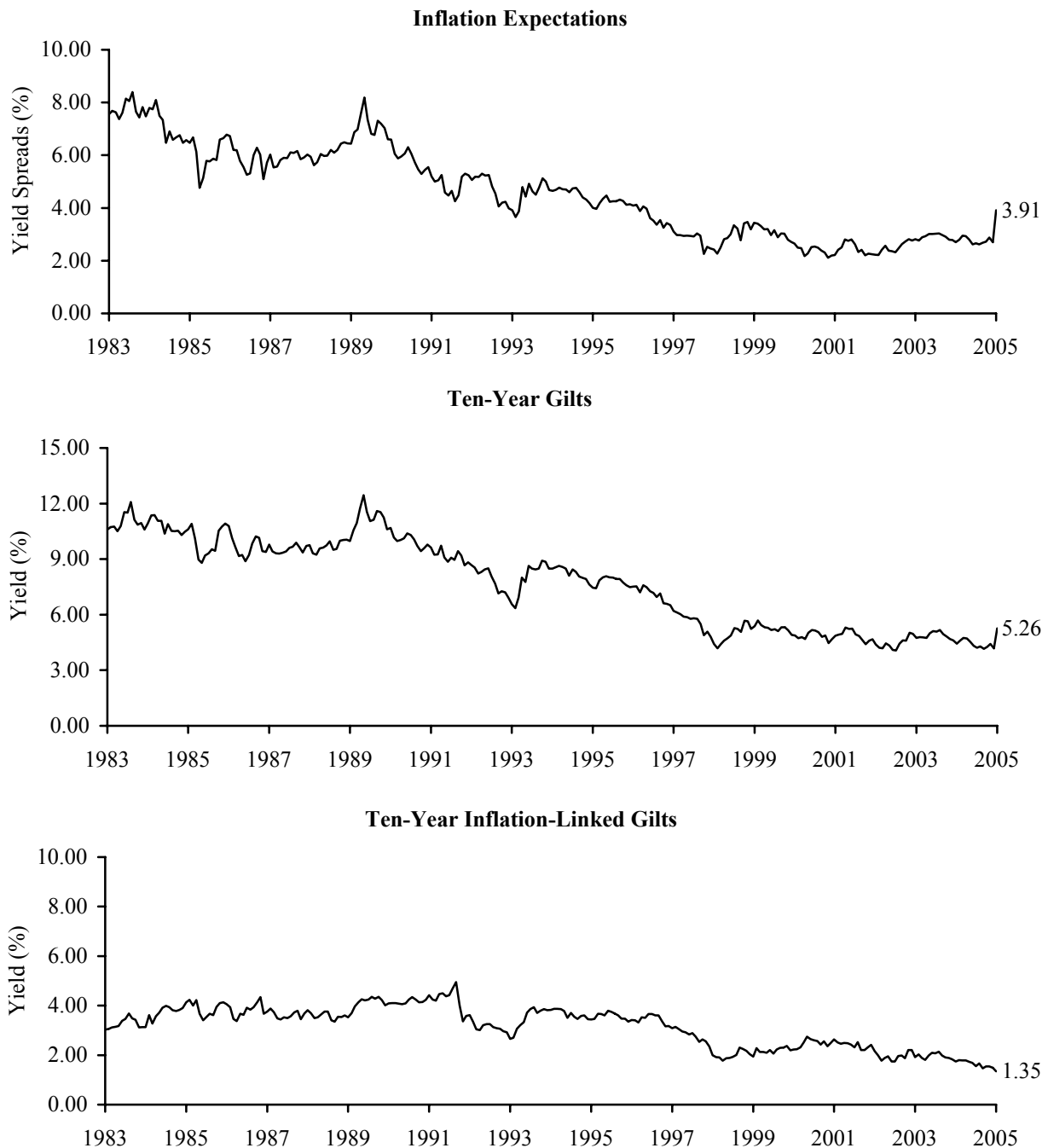
Note: Inflation expectations are based on the yield spreads between ten-year Treasuries and TIPS.

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**Table M****EUROZONE INFLATION EXPECTATIONS AND 30-YEAR GOVERNMENT BOND YIELDS****January 31, 2003 - December 31, 2005****Inflation Expectations****Eurozone 30-Year Government Bond****Eurozone 30-Year Inflation-Indexed Bond**

Source: Global Financial Data, Inc.

Notes: Inflation expectations are based on the yield spreads between Eurozone 30-year Government Bonds and Eurozone 30-year Inflation-Indexed Bonds. This European CPI series includes the following countries: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and Greece.

**Table N****INFLATION EXPECTATIONS AND TEN-YEAR U.K. GILT YIELDS****December 1, 1983 - December 31, 2005**

Sources: Global Financial Data, Inc. and Thomson Datastream.

Note: Inflation expectations are based on the yield spreads between ten-year U.K. Government Bonds and ten-year Inflation-Linked Gilts.

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