



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

## EUROPEAN MARKET COMMENTARY

### EUROPEAN LINKERS: GETTING INTERESTING?

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## European Linkers: Getting Interesting?

Bond yields across the globe have moved decidedly higher over the past few months, due in part to the perception that strong global growth, coupled with an economic revival in Europe, will offset any weakness in the U.S. economy (and perhaps even support U.S. growth), while deflationary forces emanating from the emerging world will continue to keep consumer price inflation in check. Thus, movements in the bond markets (so far) have been driven by rising real yields and not widening break-even inflation expectations. Some of the largest moves have occurred in Europe, as belief in the resilience of the Eurozone (and especially German) economy has strengthened, while real yields in the United Kingdom have climbed as well (Table A).

As of 30 June, U.K. and Eurozone real yields (as defined by the Barclays Inflation-Linked Bond Indices) have climbed 59 basis points (bps) and 84 bps, respectively, since November 2006, with 21 bps and 41 bps worth of up moves over the past two months alone. Real yields now stand at their highest level in the Eurozone since December 2002 (at 2.49%) and their highest level in the United Kingdom since October 2004 (at 1.74%). Meanwhile, break-even inflation has widened by only 5 bps since November in Eurozone bond markets, while in the United Kingdom, inflation expectations have risen by 26 bps, a more aggressive move, but still less than half the rise in real yields over the same period.

Given the recent market action, has value been restored to European inflation-linked bond markets, and are linkers attractively priced on both an absolute basis and relative to nominal bonds? In short, U.K. linkers remain overvalued, although perhaps not relative to nominal gilts as a whole, while a case can be made that Eurozone inflation-linked bonds are approaching fair value, although the markets may be underestimating the potential for a cyclical rise in inflation, making Eurozone linkers somewhat attractive relative to nominal bonds.

## How We Value Inflation-Linked Bonds

Valuations of inflation-linked bonds are based on inflation expectations and real yields. We compared inflation-linked bond yields to their own real yield history (both actual and estimated) and to what could be considered the structural trend growth rate of the underlying economy as, in its simplest form, a real yield is nothing more than a claim on underlying economic growth. In terms of relative valuation to nominal bonds, inflation-linked bonds offer attractive value to investors whose inflation expectations are greater than that implied by the break-even yield spread between inflation-linked and nominal bonds of the same maturity, as investors in inflation-linked bonds will be compensated for unanticipated rises in inflation, while holders of nominal bonds will not.<sup>1</sup>

Despite the recent back-up in real yields to 1.74%, U.K. linkers remain expensive relative to their own 26-year historical average yield of 3.07% and their 49-year historical proxy of 2.40%, based on nominal

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<sup>1</sup> This assumes, of course, that coupons are re-invested at a real yield equal to that of the inflation-linked bond paying the coupon.

ten-year gilt yields minus 12-month trailing inflation (Tables A and B). Furthermore, as Table C illustrates, current real yields do not reflect the long-term structural rate of economic growth; U.K. real GDP growth has averaged roughly 2.5% throughout the postwar period, whether measured from 1958, 1980, 1990, or 2000 through the present. While pension funds and life insurers pursuing liability-matching investing are often blamed for the low level of yields in the United Kingdom (both nominal and inflation-linked) as actuarial liabilities shrink in the face of rising interest rates, this process may unwind as these institutions begin to require fewer bonds to match their reduced liabilities. Regardless, real yields in the United Kingdom remain unjustifiably low and unattractive on an absolute basis.

Real yields in the Eurozone inflation-linked bond market at 2.49%, however, look more attractive, and are on par with their historical, albeit very limited, historical average (since 2000),<sup>2</sup> although yields today are far from the 3.5%+ level on offer back in 2000-01. Historical proxies based on nominal yields minus 12-month trailing inflation also show real yields are somewhat reasonably priced; Eurozone real yields have averaged 2.46% since 1970, while French, Italian, and German real yields have averaged 2.60%, 2.72%, and 3.91% since 1958, respectively<sup>3</sup> (Table B). From a more fundamental level, a real yield of roughly 2.5% is in line with what many consider the structural growth rate of most European economies and what historically has been the trend (Table C). Therefore, it can be argued that Eurozone real yields of 2.5% could represent fair value, although not necessarily an “attractive” value at such admittedly low levels. Indeed, some economists now argue that Europe’s potential growth rate is higher than that of the past.

Turning to relative valuations, as of June, U.K. gilts were pricing in break-even inflation of 3.39%, the highest such level since 1997.<sup>4</sup> Linkers represent a better value than *nominal* gilts for investors who believe inflation over the next decade or so will exceed 3.39%, a rate close to historical norms, although high relative to the recent past. Since 1900, RPI inflation has averaged an annual 4.12%, while inflation has exceeded 3.39% in every rolling ten-year period since 1950 except 17 (the periods ending 1950-51, 1961-68, and 2000-06). While inflation compensation of 3.39% may seem generous compared to recent years, we would note that current RPI inflation is already running above historical norms at 4.4% (in the 12 months to 30 June).

Break-even inflation is much lower in the Eurozone at 2.19%, and has traded in the 2.0% to 2.25% range for the past few years. Yet it is hard to draw historical comparisons, given the variety of inflationary experiences across Europe. Since 1961 inflation has averaged an annual 5.0% for France, 7.2% for Italy, 2.9% for Germany, and 5.4% for a historical Eurozone composite. Average annual inflation rates are comparable for Germany, Italy, and France if the historical record is extended to 1924, although Italy and France still exhibit higher average inflation than Germany (Table D). Looking at rolling ten-year periods for

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<sup>2</sup> The Barclays Euro Government Inflation-Linked Bond Index begins in December 1999, although France began issuing inflation-linked bonds in 1998, with yields on French linkers averaging 2.55% since then.

<sup>3</sup> Historical ten-year government bond yields and inflation data are provided by Global Financial Data (GFD). GFD has created its own historical composite of Eurozone 12 data based on published member-country statistics. The higher level of German proxy real yields is due to the relative success of the Bundesbank in combating inflation over the period in question.

<sup>4</sup> U.K. inflation-linked gilts are tied to the older Retail Price Index (RPI), not the new harmonized Consumer Price Index (CPI) on which the Bank of England’s (BOE) 2.0% inflation target is based. The high level of RPI inflation relative to CPI inflation partly reflects that the RPI measure includes mortgage costs, while the CPI does not.

the historical Eurozone composite since 1961, inflation has exceed 2.19% in every period save six (the periods ending 2001-06).

Yet history may or may not be an accurate guide at this juncture, given both the formation of the European Monetary Union (EMU) in 1999 and the independence of the BOE in 1996. Indeed, some make the argument that information technology, globalization, and central bank transparency have caused a secular decline in inflation. Looking at the data since the dawn of the “low inflationary period” in the early 1990s and the beginning of the EMU in 1999, inflation has roughly averaged an annual 2.2% in the Eurozone and 2.7% in the United Kingdom. Therefore, the bond markets seem to be pricing in inflation expectations that are only consistent with the recent past, and are not discounting the prospects of a cyclical rise in inflation, particularly in the Eurozone. As a result, both U.K. and Eurozone linkers are relatively attractive to nominal bonds, although breakevens in the United Kingdom do offer a reasonable level of inflation compensation, and seem only marginally attractive relative to nominal gilts.

### **Time to Buy?**

While recent moves in real yields have helped to unwind some of the overvaluation seen across most bond markets, inflation-linked bonds are still far from the screaming buy they were in 2000-01. In short, real yields are “getting interesting” but not yet outright attractive. However, should real yields continue to rise, European and U.K. linkers could become compelling for investors looking to build inflation-hedging portfolios. Indeed, we continue to recommend that investors protect their portfolios from the threat of unexpected cyclical inflation, a situation the United Kingdom is in the midst of now, and one the Eurozone could quite possibly develop should the economy continue to accelerate. Indeed, if the Eurozone economy really is undergoing a structural growth shift instead of simply a cyclical rebound (with the latter probably more the case), then real yields should have further to rise.

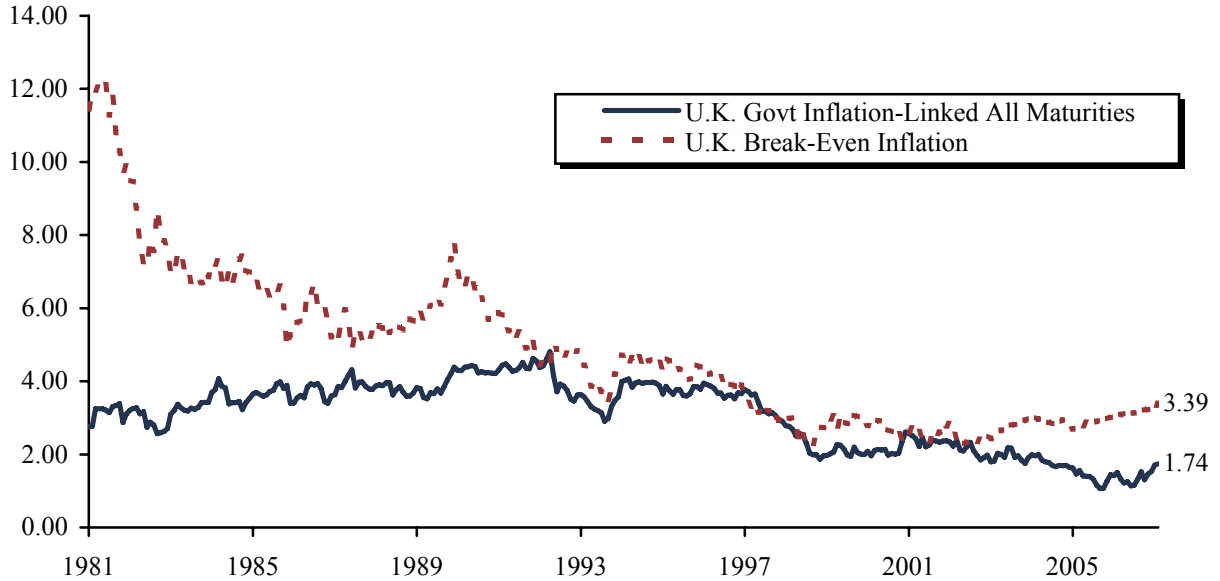
However, compared to nominal bonds, both U.K. and Eurozone inflation-linked bonds are relatively attractive, with Eurozone linkers holding more relative attractiveness. However, since we continue to recommend investors protect their portfolios from the ravages of outright deflation, in which inflation-linked bonds would underperform nominals, we would only recommend holding inflation-linked bonds for their relative attractiveness if you have sufficient deflation protection in your nominal bond portfolio.

It is important to note that no one can predict the direction of interest rates and inflation with certainty or consistency (and we certainly never try). Real yields remain low by historical standards, while bond markets have anchored inflation expectations (as they always do) to only the most recent past. Absent the onset of a deflationary slump (something that cannot be ruled out given current global credit excesses), continued “above-trend” growth in the global (and U.K. and Eurozone) economy after five years of steady expansion may result in a less disinflationary environment than investors have become accustomed to over the past decade or so. Should real yields continue to rise, it may signal that it is time to begin thinking in earnest about buying inflation protection.

**Table A**

**EUROPEAN REAL YIELDS AND BREAK-EVEN INFLATION**

**United Kingdom**  
31 May 1981 - 30 June 2007



**Eurozone**  
31 December 1999 - 30 June 2007

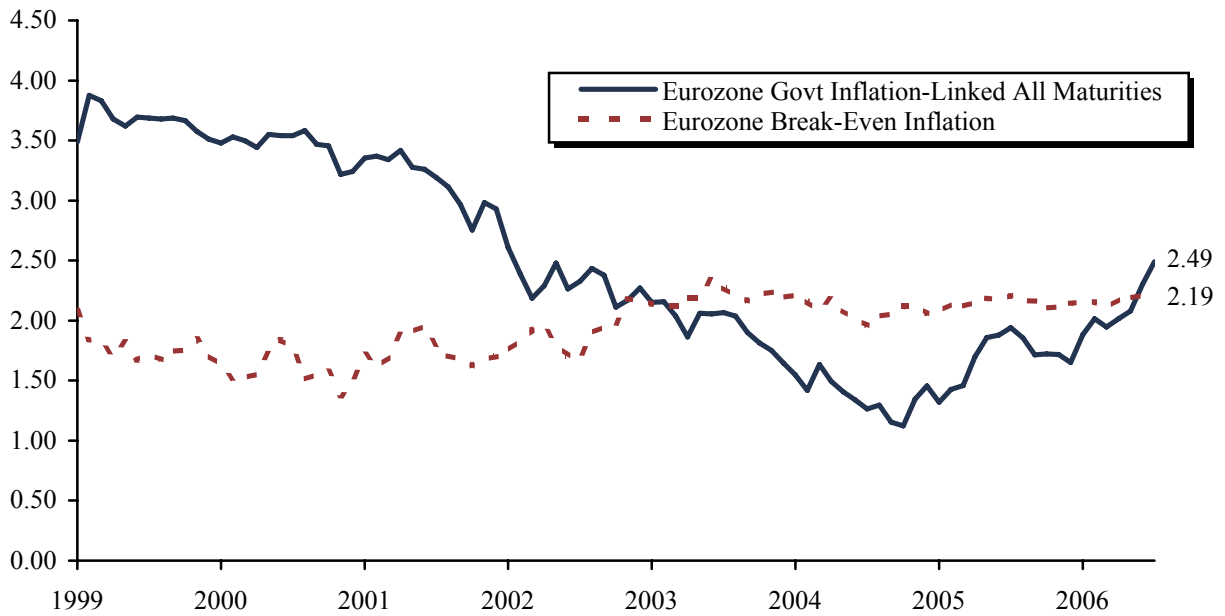
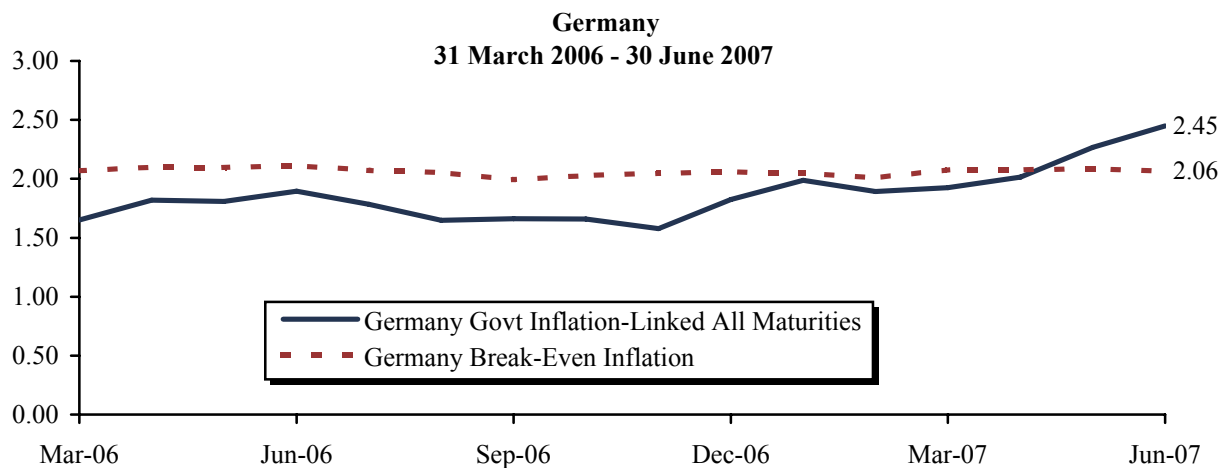
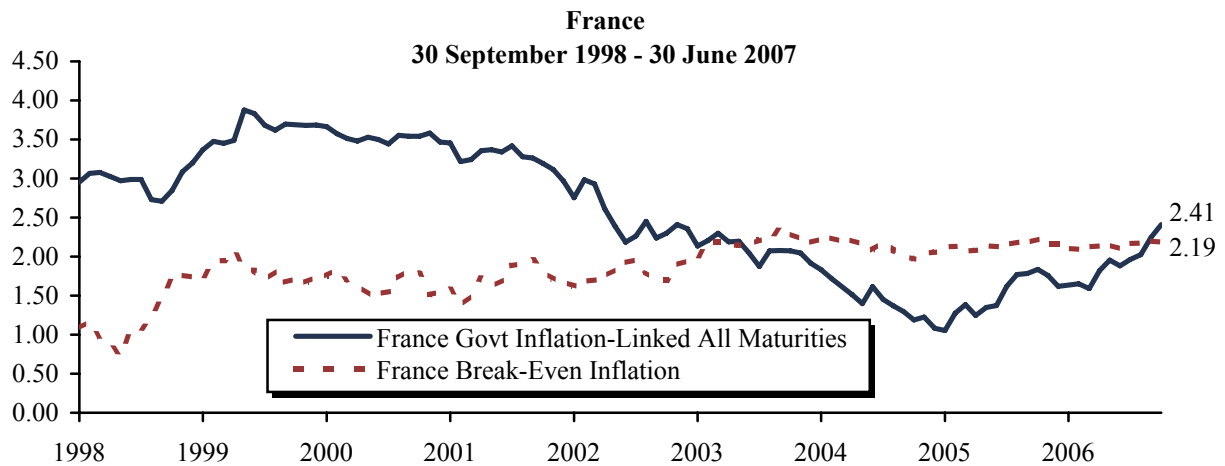
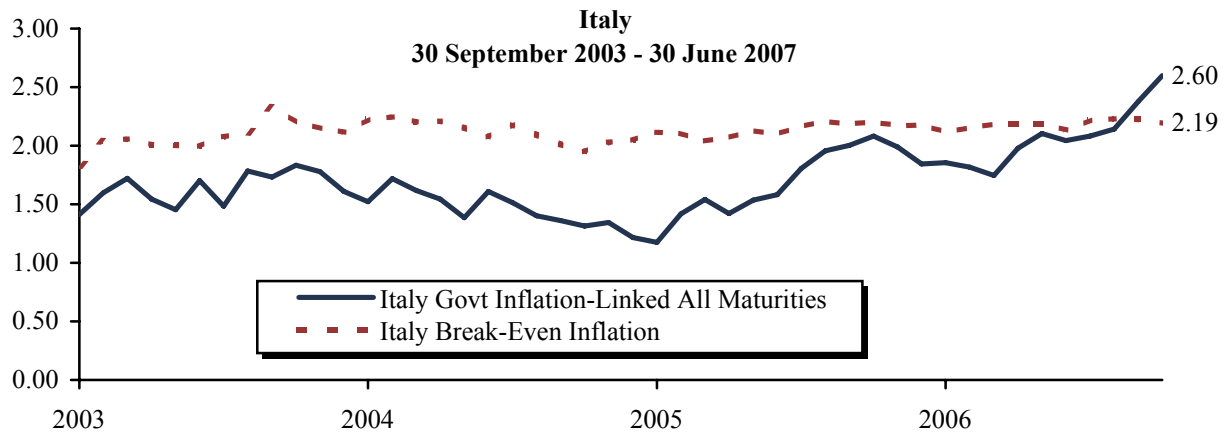


Table A (continued)

## EUROPEAN REAL YIELDS AND BREAK-EVEN INFLATION



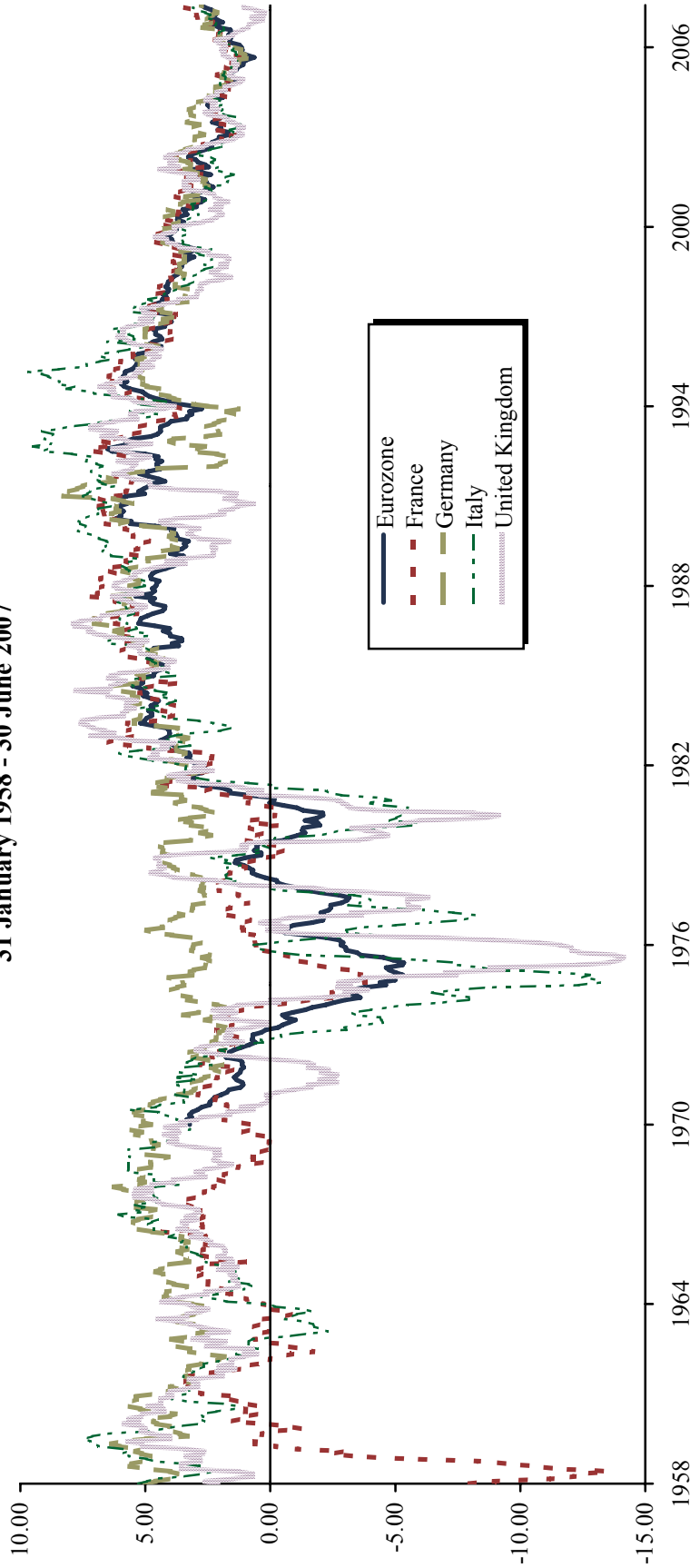
Source: Barclays Capital.

Note: Real yields and break-even inflation based on Barclays Global Inflation-Linked Bond indices.

Table B

**HISTORICAL EUROPEAN REAL YIELDS**

31 January 1958 - 30 June 2007

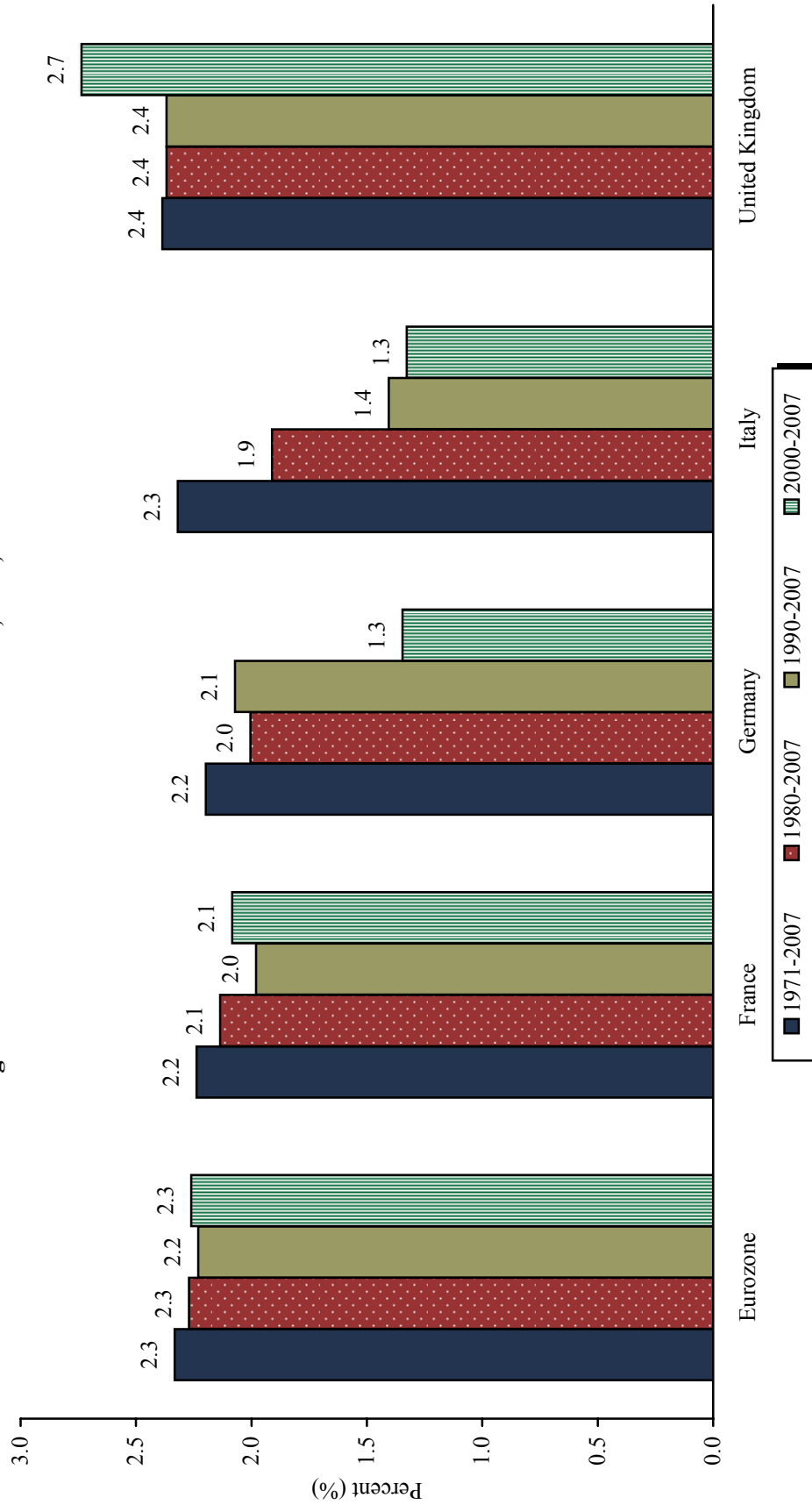


	Average Real Yields				
	Eurozone	France	Germany	Italy	United Kingdom
1958-2007	---	2.60	3.91	2.72	2.40
1970-2007	2.46	3.29	3.79	2.57	2.19
1980-2007	3.60	4.22	3.99	4.07	3.60
1990-2007	3.61	4.03	3.59	4.30	3.42
2000-2007	2.25	2.56	2.68	2.12	2.09

Source: Global Financial Data.

Notes: Historical real yields based upon historical nominal ten-year government bond yields minus inflation. Eurozone composite provided by Global Financial Data and is based upon published data for individual member countries. Data for Eurozone composite begin 31 January 1970.

**Table C**  
**EUROPEAN REAL GDP GROWTH**  
**Average Annual Real GDP Growth Since 1971, 1980, 1990 and 2000**



Source: Global Financial Data.

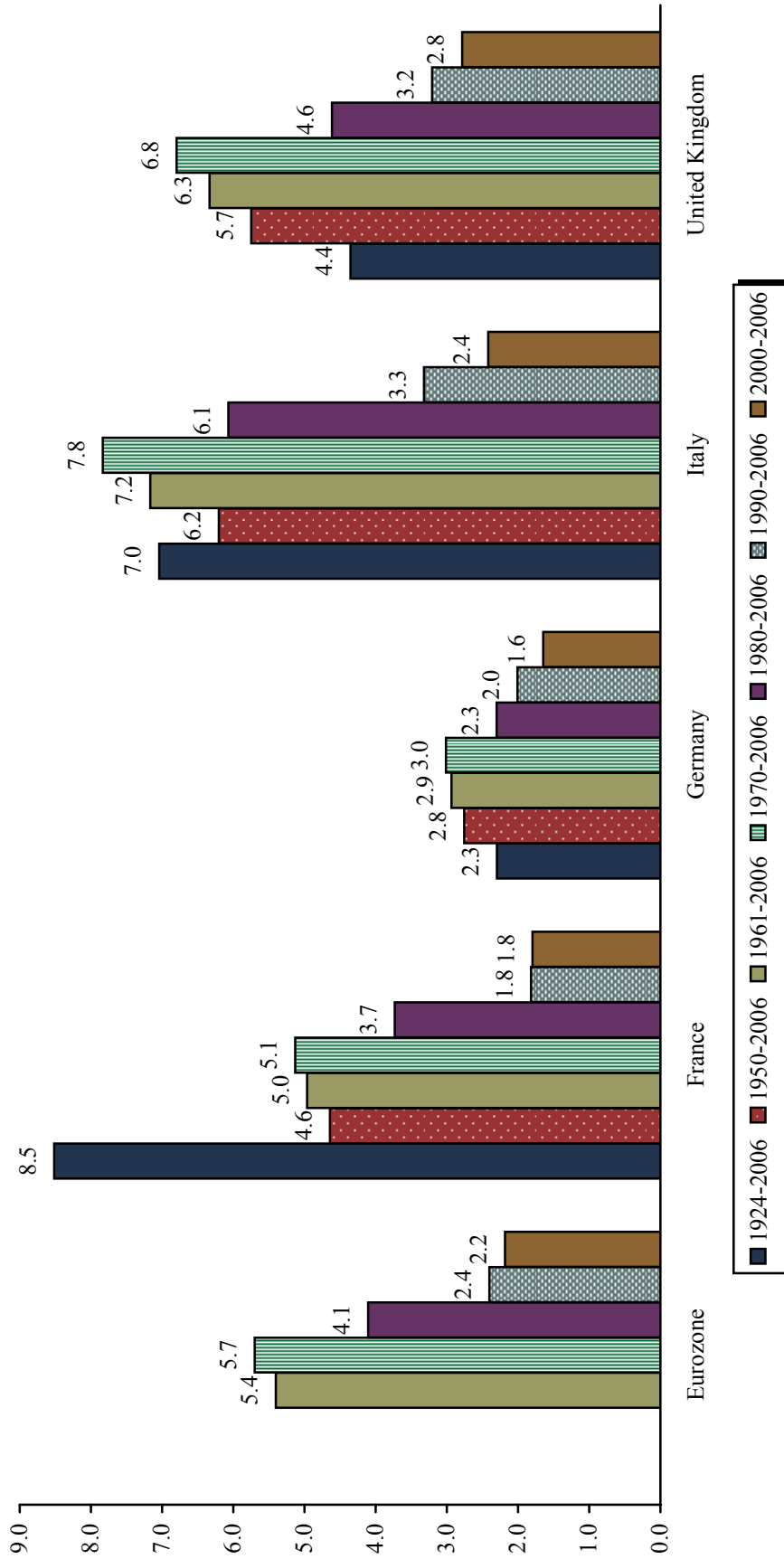
Notes: GDP data are through 31 March 2007. GDP data before 1980 based on annual figures. Eurozone composite provided by Global Financial Data and is based on published GDP data for individual member countries.



Table D

EUROPEAN AVERAGE ANNUAL INFLATION

Average Annual Inflation Trends Since 1924, 1950, 1961, 1970, 1980, 1990 and 2000

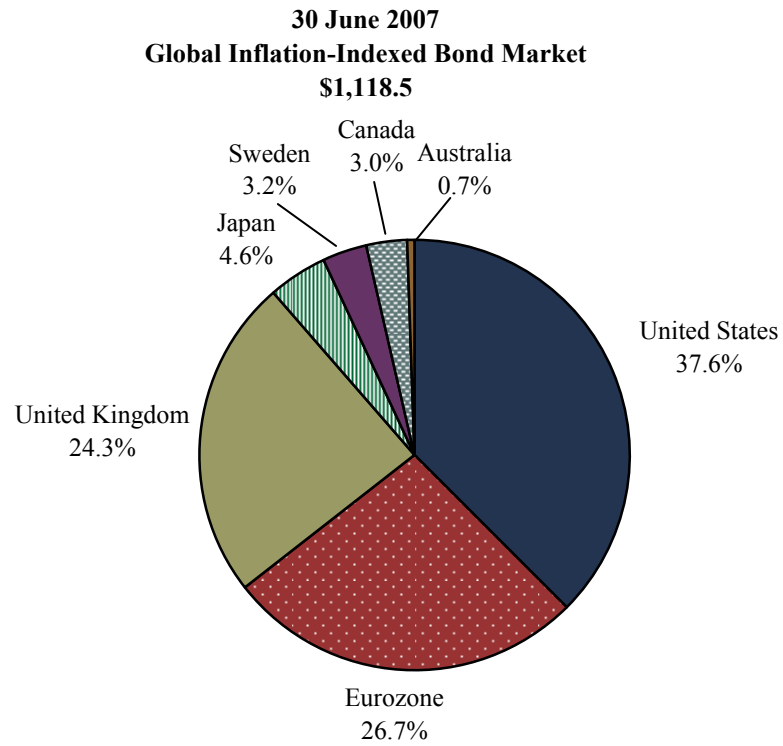


Source: Global Financial Data.

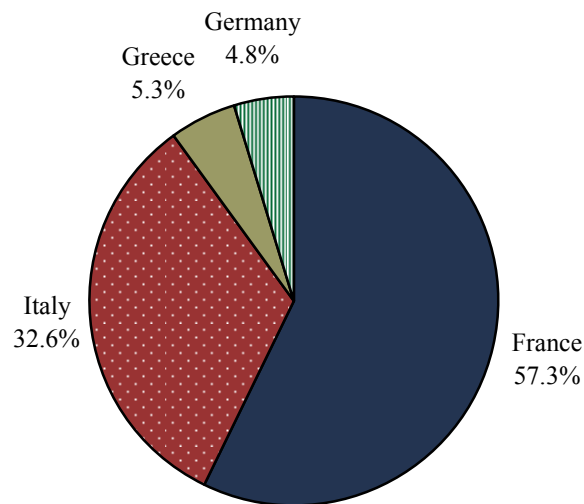
Notes: Data as of 31 December 2006. Eurozone composite provided by Global Financial Data and is based on published figures for individual member countries. Inflation data for the Eurozone composite begin in 1961. Italian inflation excludes 1944 and 1945.

**Table E**  
**GLOBAL INFLATION-INDEXED BOND MARKET**

(US\$ billions)



**30 June 2007**  
**Eurozone Inflation-Indexed Bond Market**  
**\$299.1**



Source: Barclays Capital.

Note: Figures may not total due to rounding.