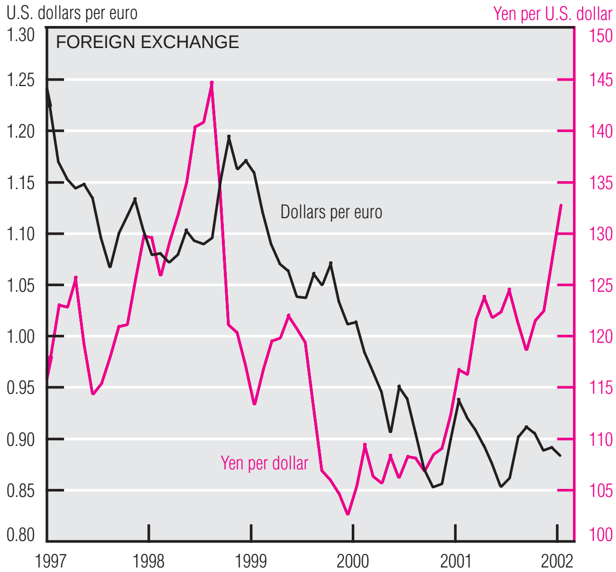
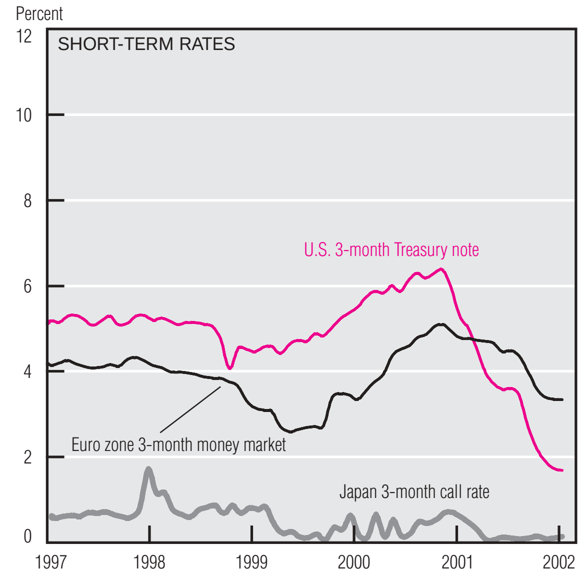
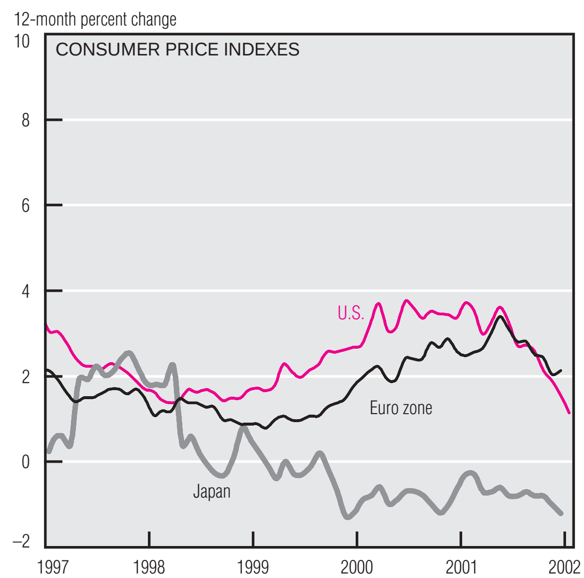
Foreign Exchange and Interest Rates







SOURCES: Board of Governors of the Federal Reserve System; European Central Bank; Statistical Office of the European Communities; Bank of Japan; Japan Ministry of Public Management, Home Affairs, Post, and Telecommunications; and Association of Call and Discount Companies/Nihon Keizai Shinbun.

Although the dollar has been weakening against the euro since early 1996, the euro/dollar exchange rate is currently near its level of a year ago. The dollar also has been strengthening against the yen since mid-1995; it dropped in the fall of 1999, only to begin strengthening again in December 2000. Three-month interest rates in the U.S. exceeded euro-zone 3-month rates from March 1996 until March 2001, implying that the market expected the euro would strengthen against the dollar three months into the future. Since U.S. short-term rates have fallen below euro-zone rates, the market must expect the euro to weaken.

Japanese short-term interest rates are well below those of the U.S., indicating that the yen is expected to strengthen. However, Japanese rates' inability to fall much further limits the difference—and thus the expected movement—in the yen's international value. U.S. short-term rate increases would be associated with an increase in the expected appreciation of the yen, but the immediate effect would be to pull funds out of Japan.

Monetary growth rates in the U.S., Japan, and euro zone have been increasing for more than a year, but the boost to consumer prices that would be expected from a straightforward application of the quantity theory has yet to be realized. In fact, consumer prices have been falling, which may concern policymakers: Given already low short-term nominal interest rates, the real interest rate (the nominal interest rate minus the expected inflation rate) cannot be lowered much except by returning to positive inflation rates.