IET Supplement

Cross-Country Comparison

February 2007

Contents

Page	
2	Output and Growth
6	Productivity
14	Labor Markets
20	Measures of Inflation
24	Government Finance
30	International Accounts
36	Foreign Exchange Reserves
38	Exchange Rates
40	Monetary Aggregates
43	Interest Rates
46	Stock Exchange Indices
48	Notes and Sources

Conventions used in this publication:

1. Charts and tables contain data that were current through January 2007. Unless otherwise indicated, data are quarterly.
2. The *percent change* refers to the percent change from the same period in the previous year. For example, the percent change in x between quarter $t-4$ and the current quarter t is: $[(x_t/x_{t-4})-1]\times 100$.
3. All data with significant seasonal patterns are adjusted accordingly.

Dear Reader,

Thank you for reading *IET Supplement*. Please assist us in providing you with the most useful international economic data by offering your comments and suggestions on the publication. Such feedback can be sent to one of the following addresses:

stlsIET@stls.frb.org or Editor, *IET Supplement*
Research Department
Federal Reserve Bank of St. Louis
411 Locust St.
St. Louis, MO 63102

Please keep in mind that technical limitations preclude us from adding more pages to the publication. So, we must make some difficult choices with respect to the material we include.

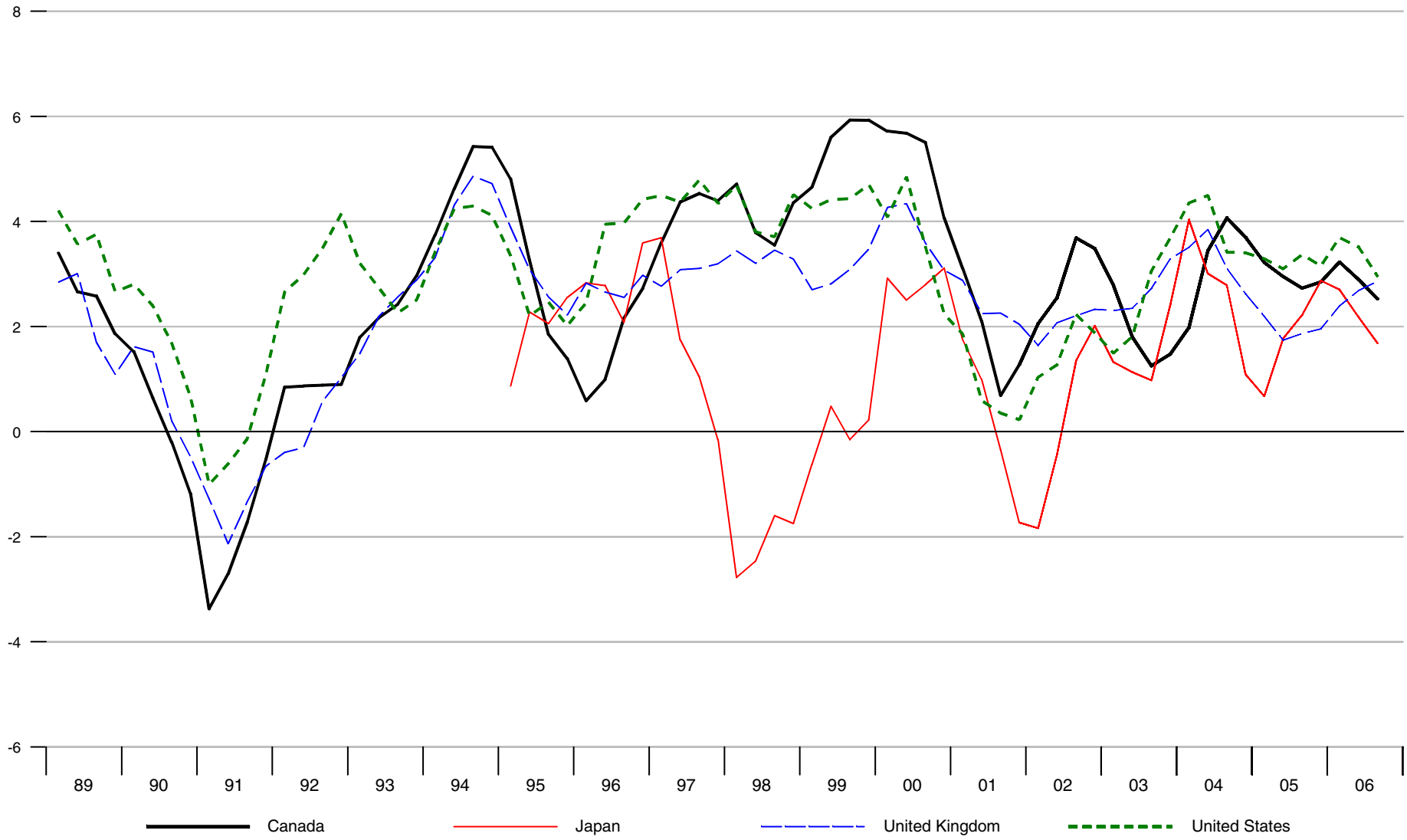
Thank you in advance for your help in making *IET Supplement* a great publication.

Sincerely,
Christopher J. Neely
Editor, *IET Supplement*

IET Supplement is published by the Research Division of the Federal Reserve Bank of St. Louis. Visit the Research Division's website at research.stlouisfed.org/publications/IETsupplement to download this publication or register for e-mail notification updates. For more information on data in this publication, please call (314) 444-8590.

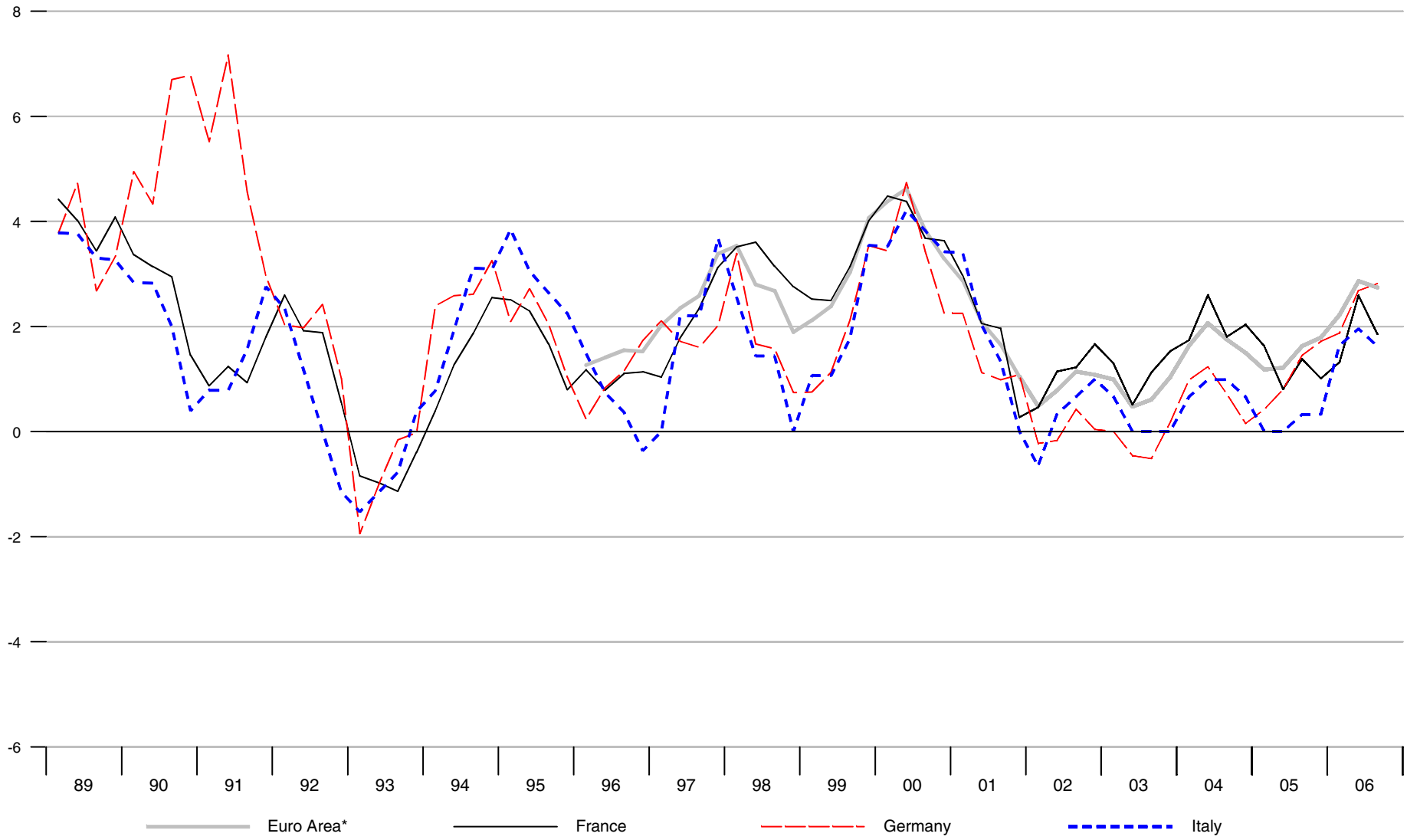
Real Gross Domestic Product for Canada, Japan, United Kingdom, and United States

Percent change from year ago



Real Gross Domestic Product for Euro Area, France, Germany, and Italy

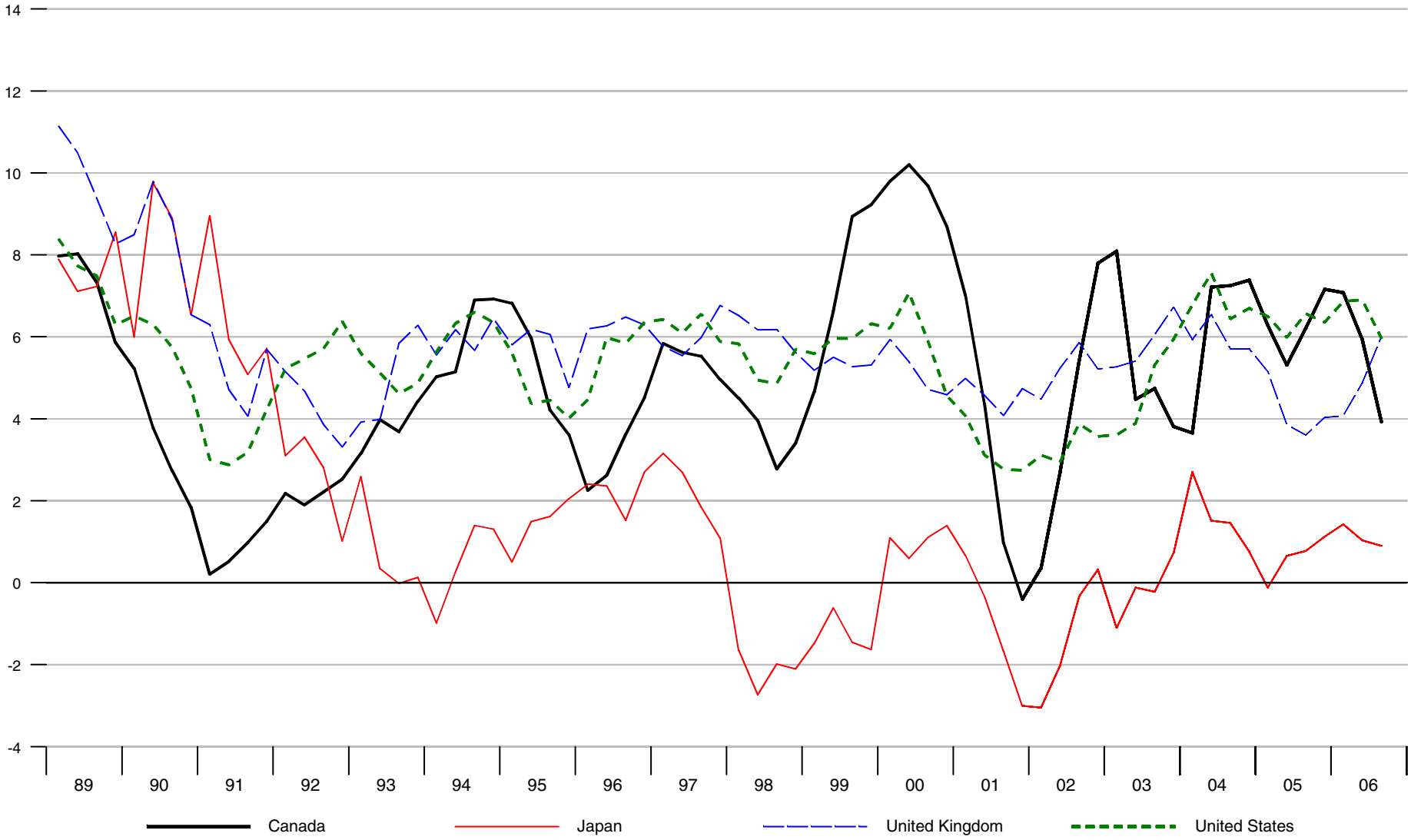
Percent change from year ago



* EUROSTAT has recently changed how it calculates GDP. Data are currently available back to 1995 but will soon be revised back to 1991.

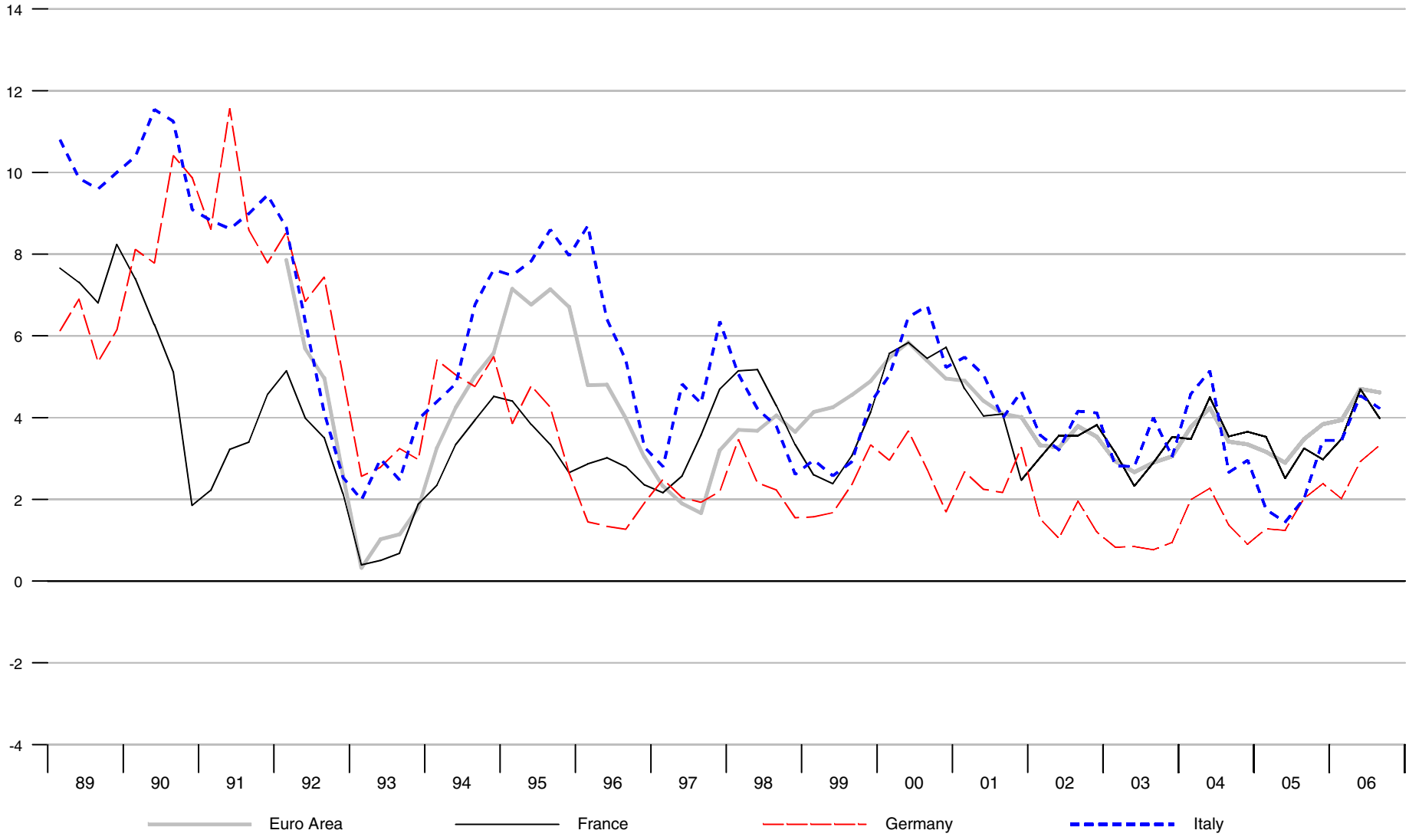
Nominal Gross Domestic Product for Canada, Japan, United Kingdom, and United States

Percent change from year ago



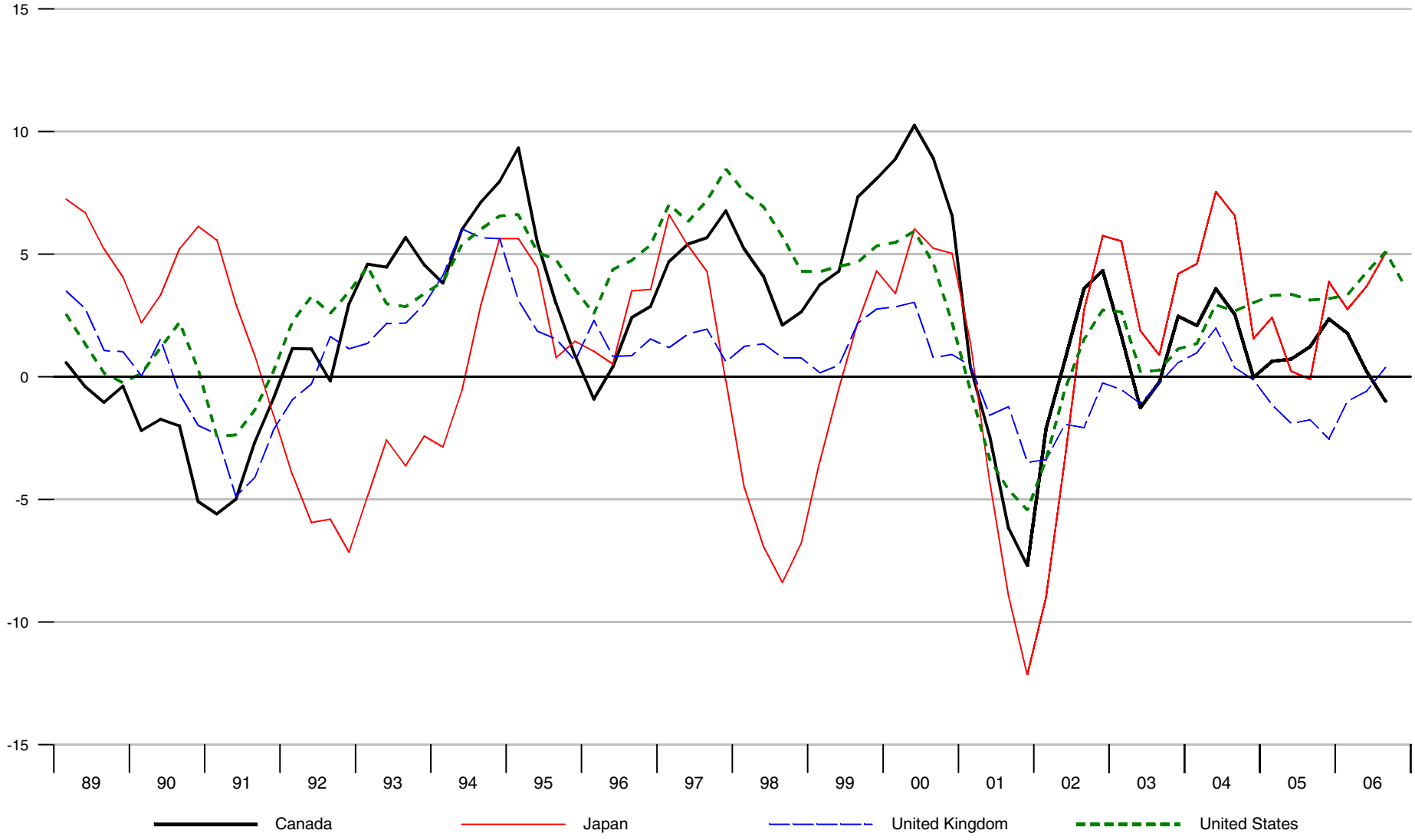
Nominal Gross Domestic Product for Euro Area, France, Germany, and Italy

Percent change from year ago



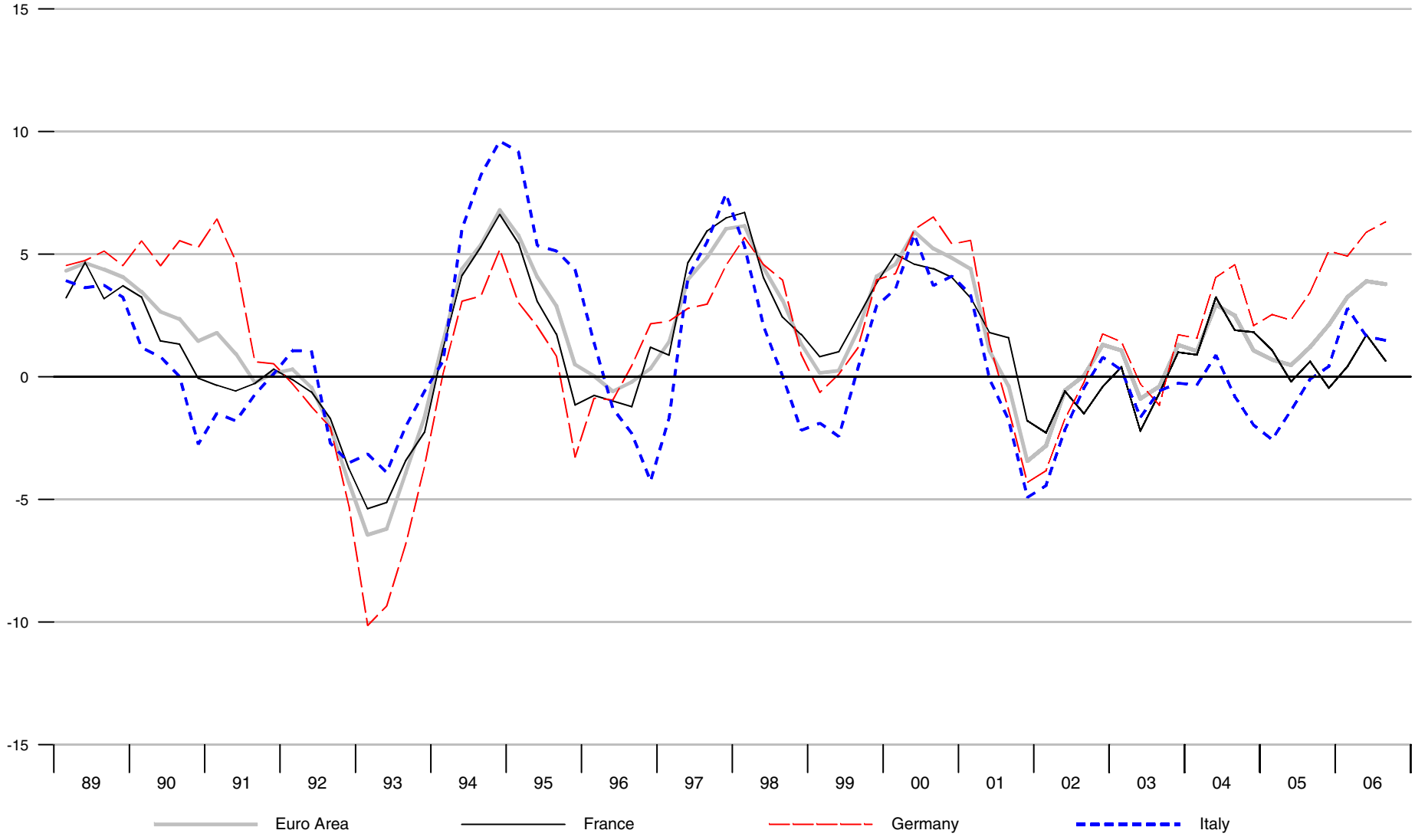
Industrial Production for Canada, Japan, United Kingdom, and United States

Percent change from year ago



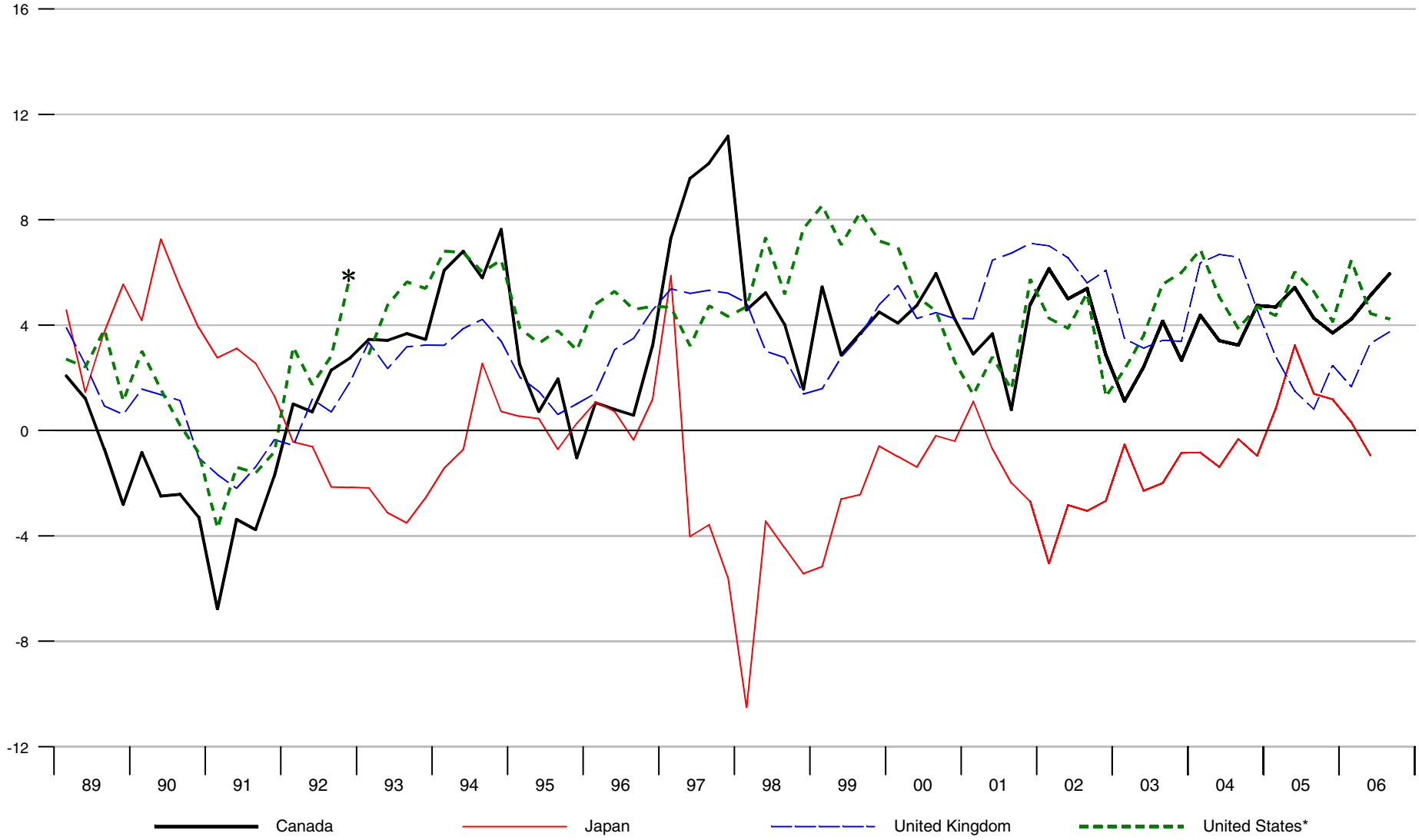
Industrial Production for Euro Area, France, Germany, and Italy

Percent change from year ago



Retail Sales for Canada, Japan, United Kingdom, and United States

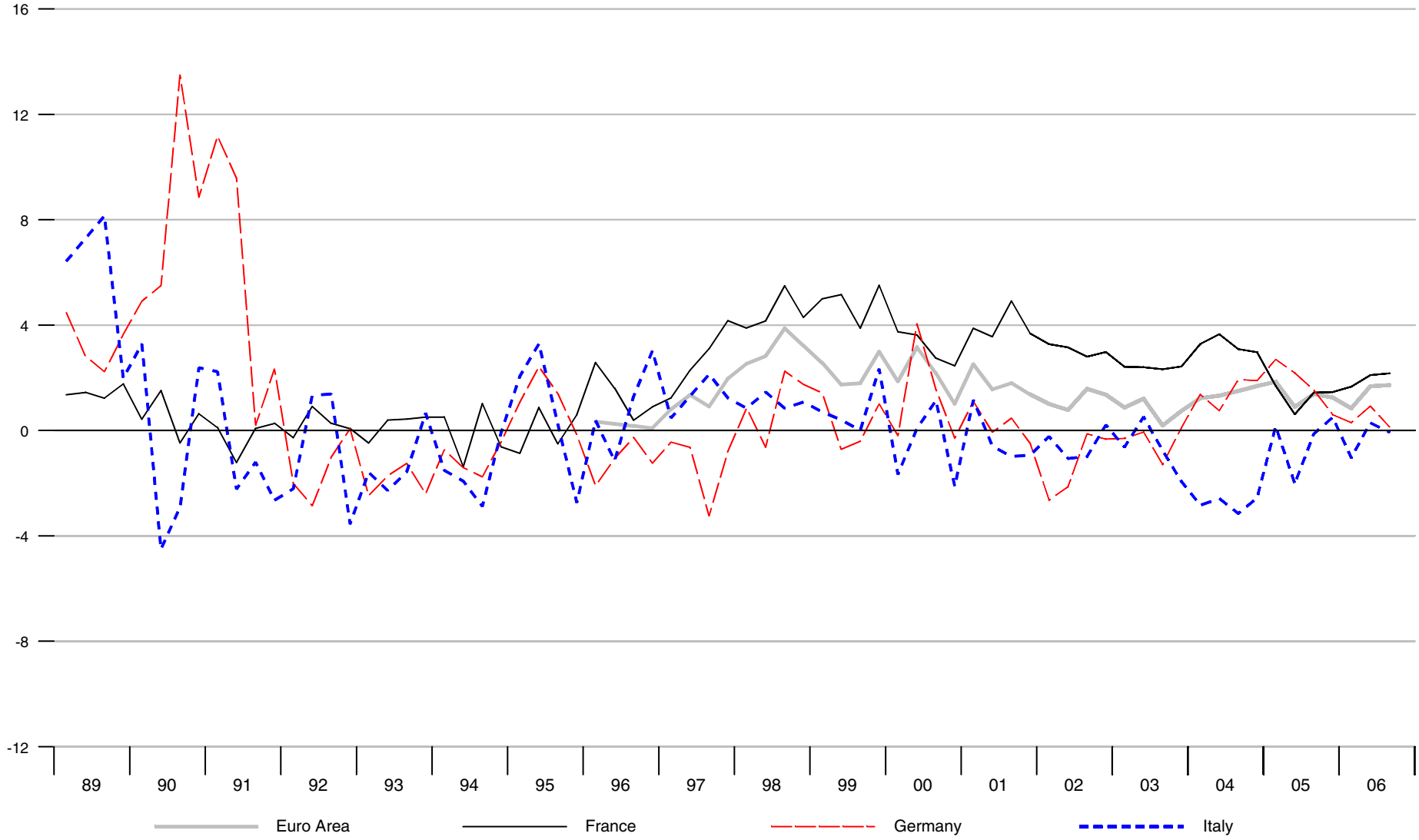
Percent change from year ago



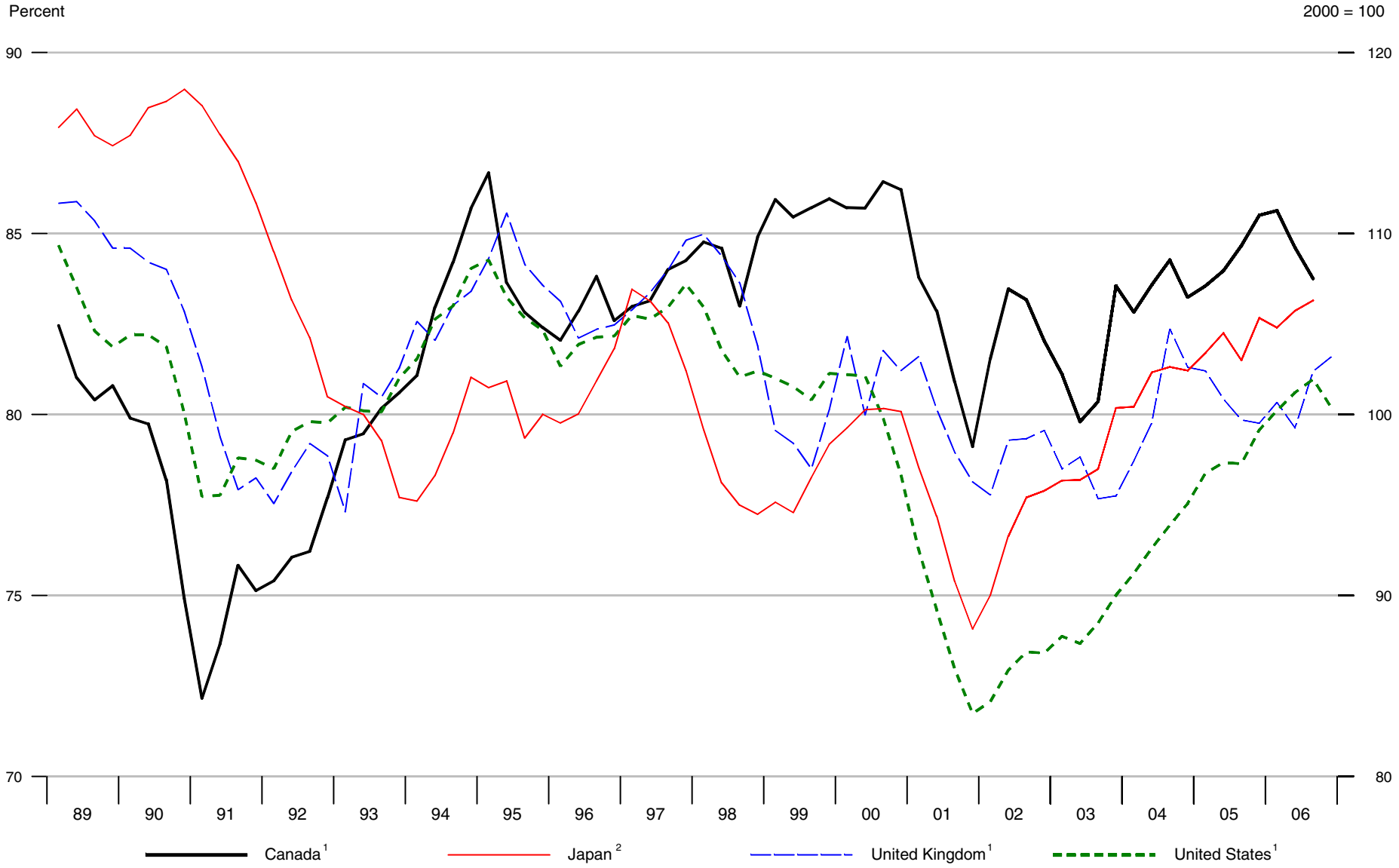
*Data prior to 1993 may not be strictly comparable with later figures (see Notes).

Retail Sales for Euro Area, France, Germany, and Italy

Percent change from year ago

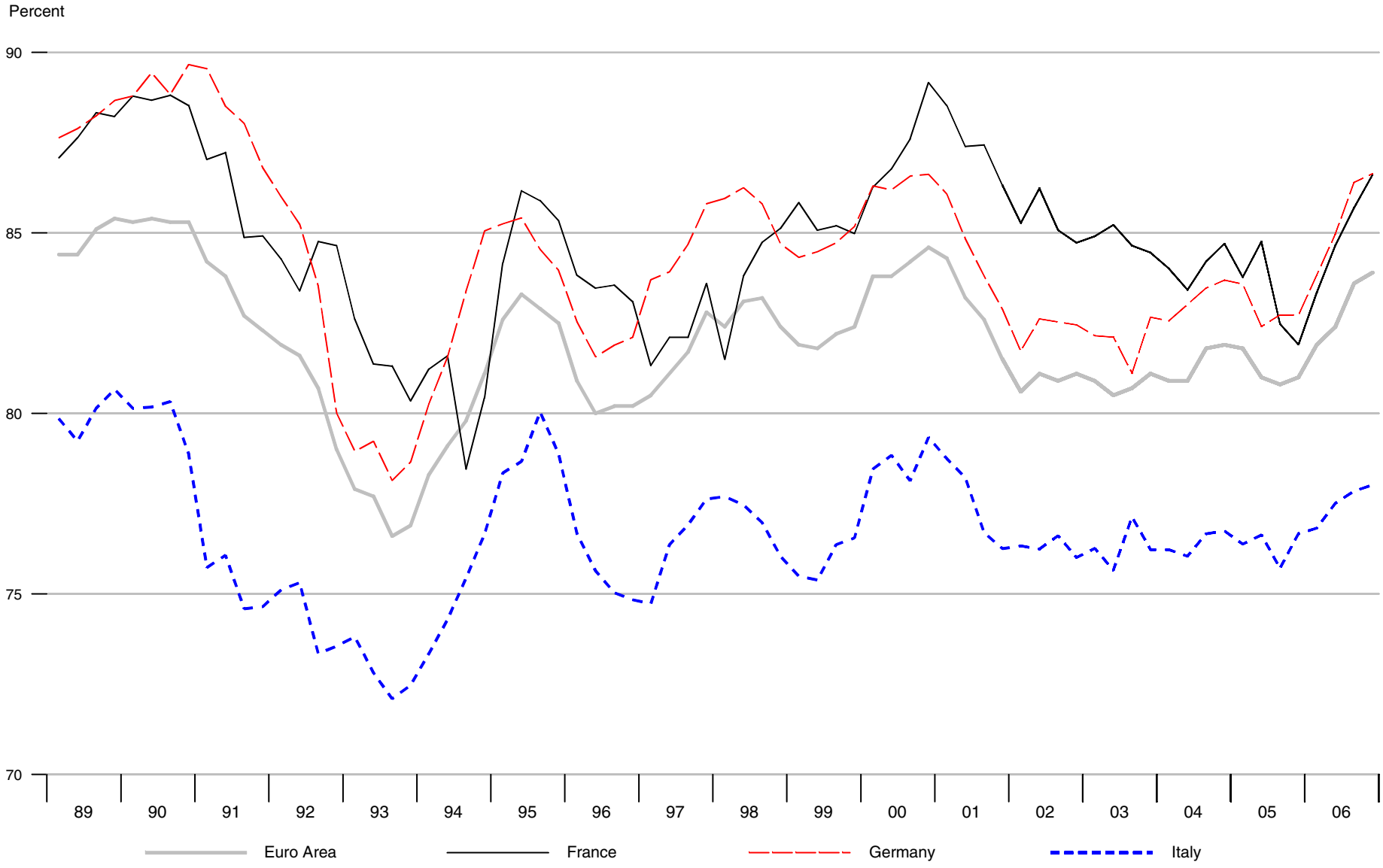


Capacity Utilization for Canada, Japan, United Kingdom, and United States



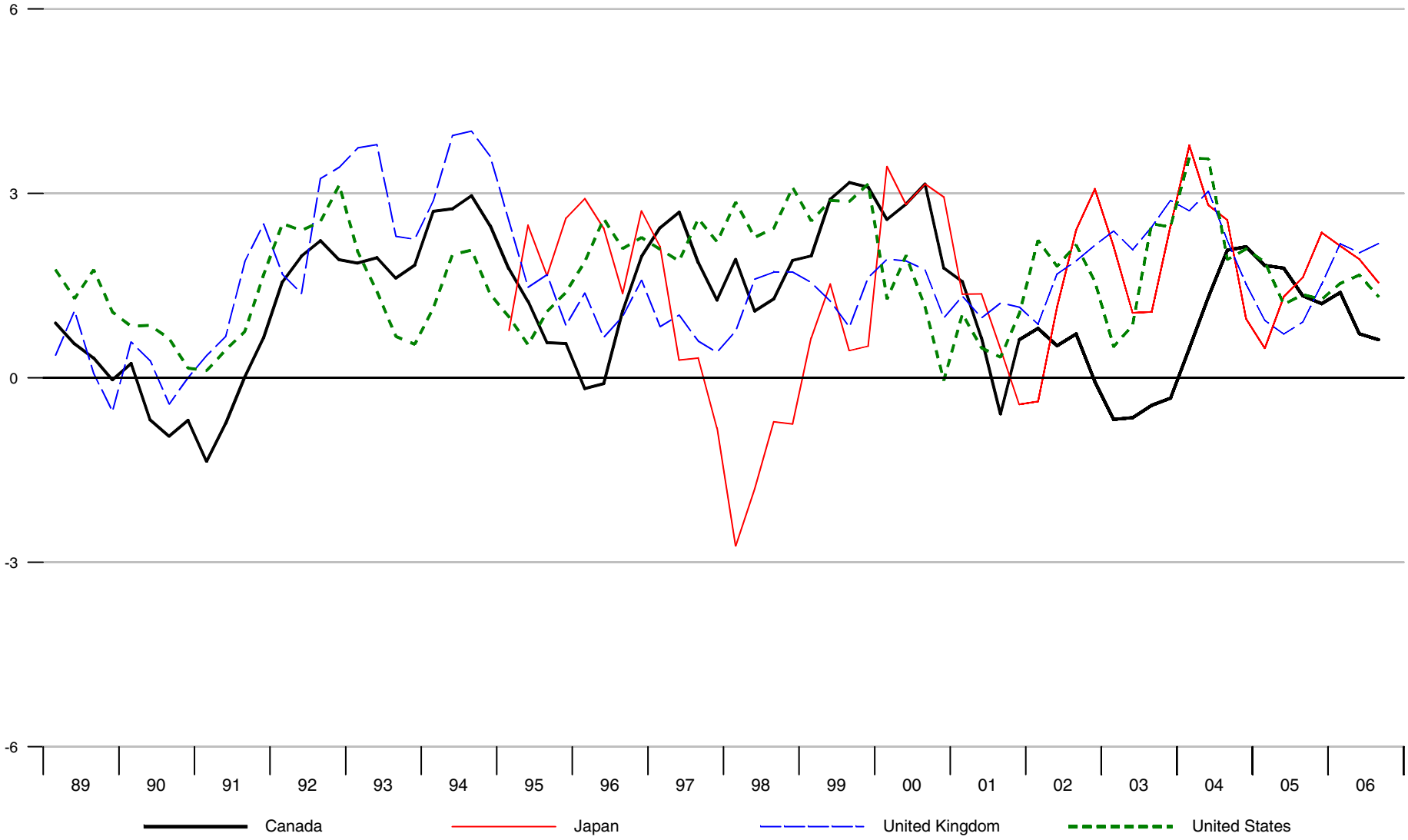
1 Left Scale, 2 Right Scale

Capacity Utilization for Euro Area, France, Germany, and Italy



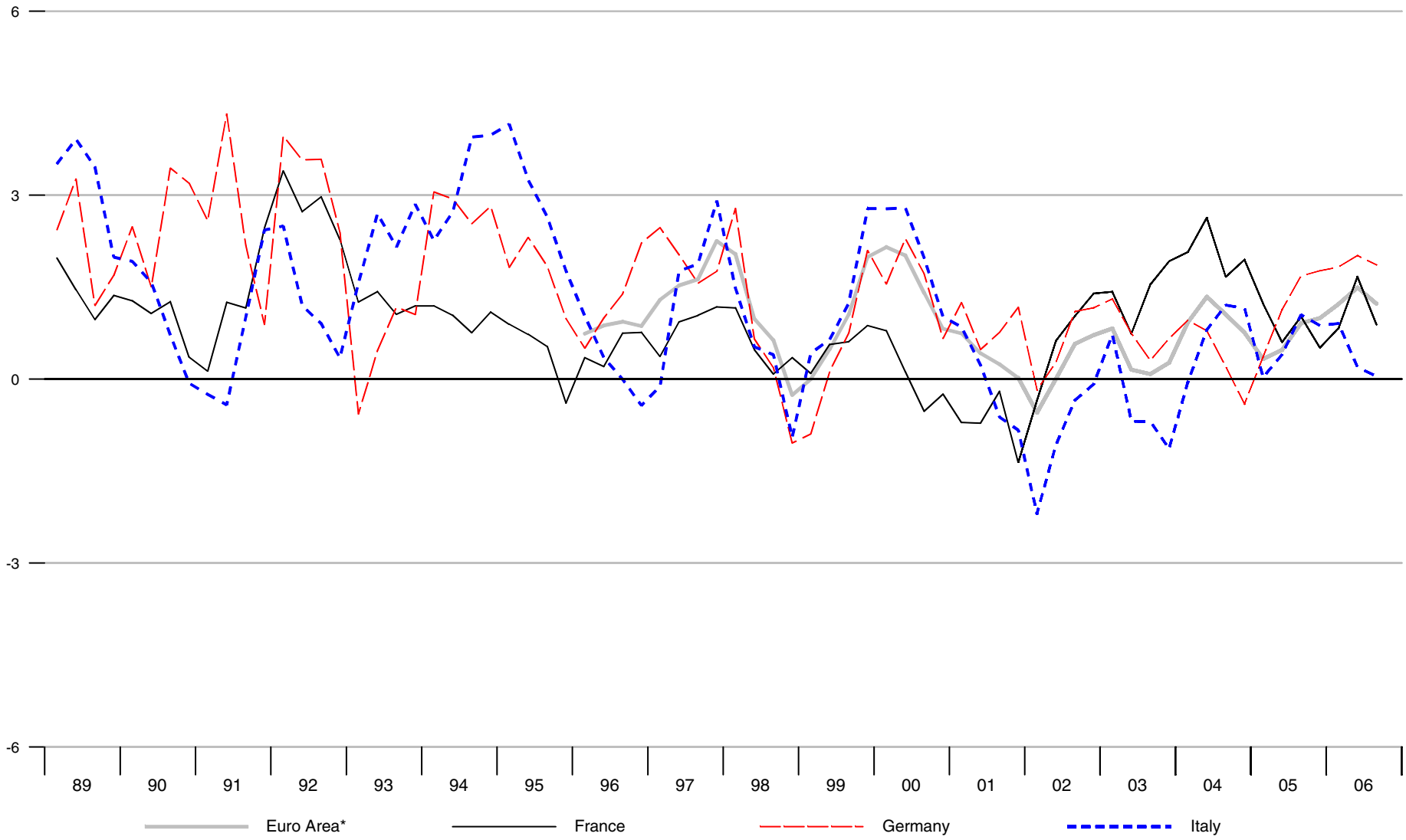
Output per Worker for Canada, Japan, United Kingdom, and United States

Percent change from year ago



Output per Worker for Euro Area, France, Germany, and Italy

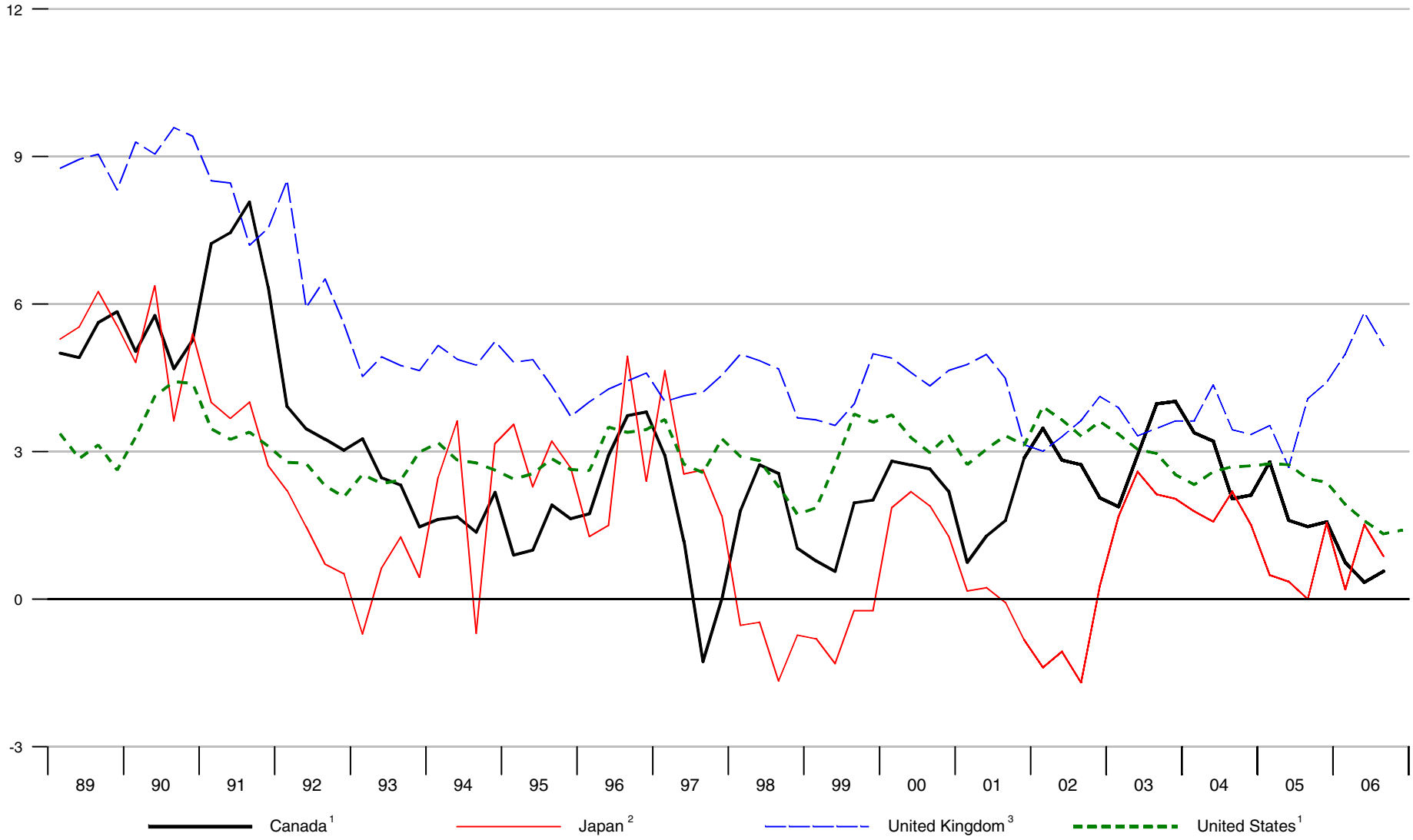
Percent change from year ago



* EUROSTAT is currently revising output data. Output per worker data are available only back to 1995.

Real Earnings for Canada, Japan, United Kingdom, and United States

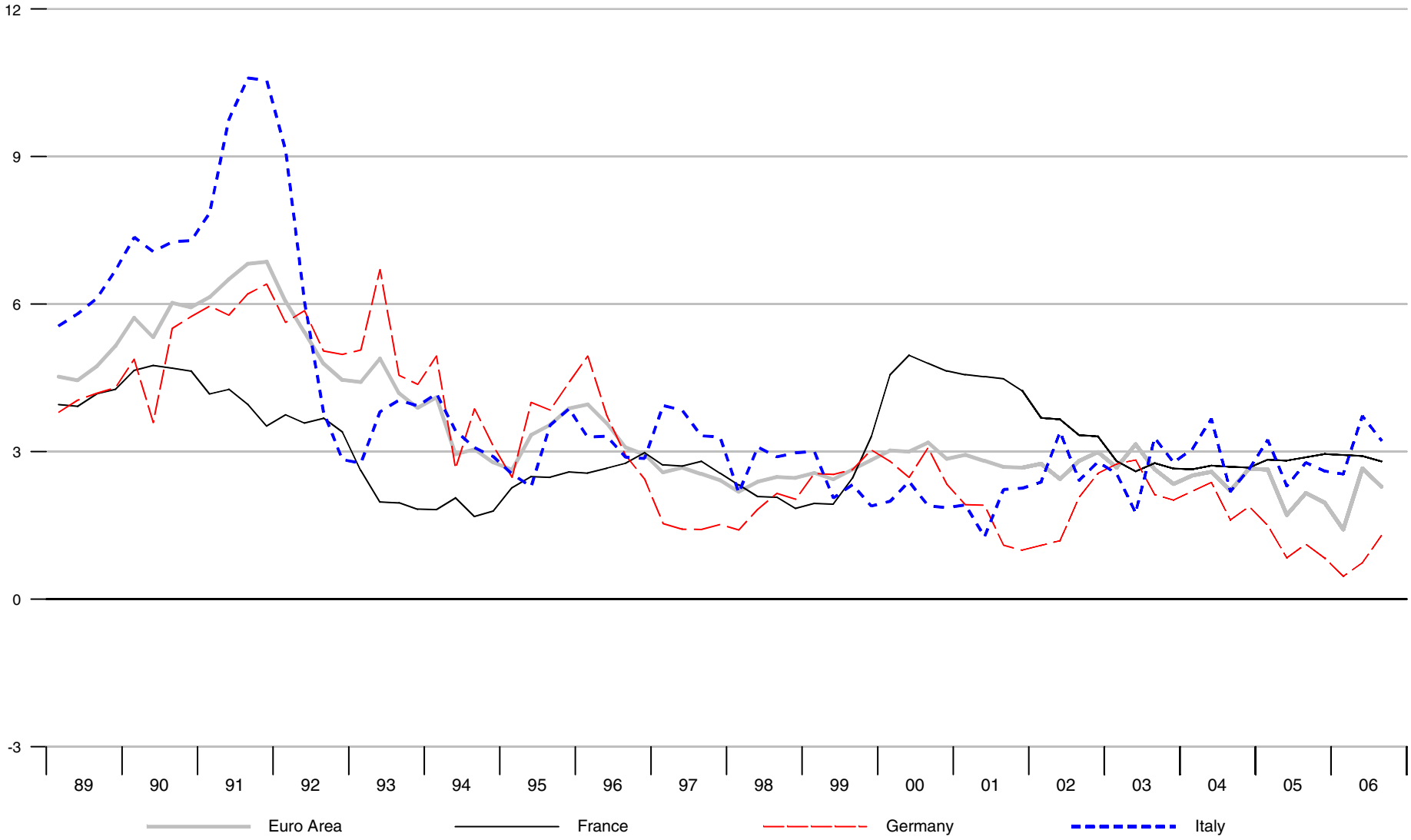
Percent change from year ago



[1] Hourly Earnings, [2] Monthly Earnings, [3] Weekly Earnings

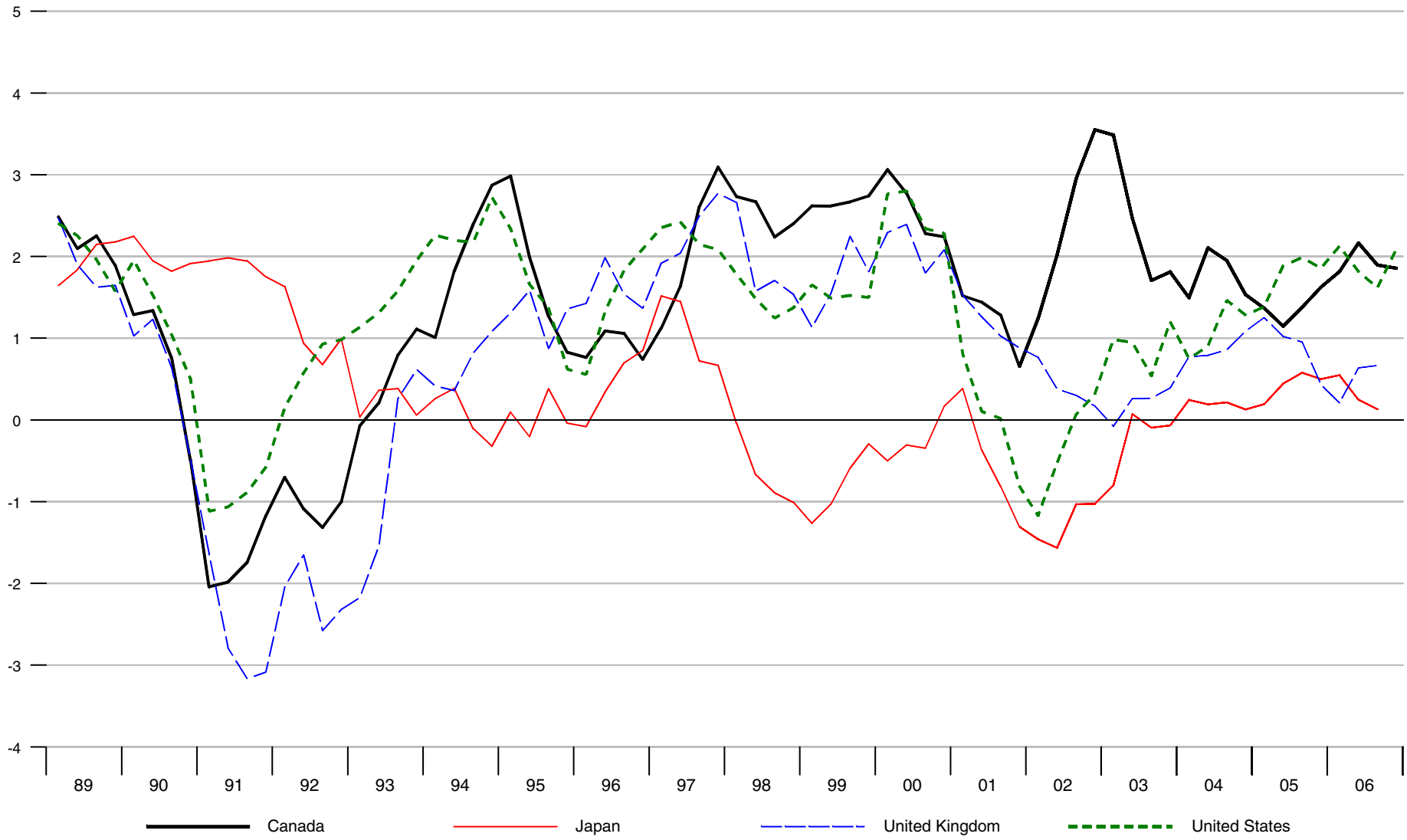
Real Hourly Earnings for Euro Area, France, Germany, and Italy

Percent change from year ago



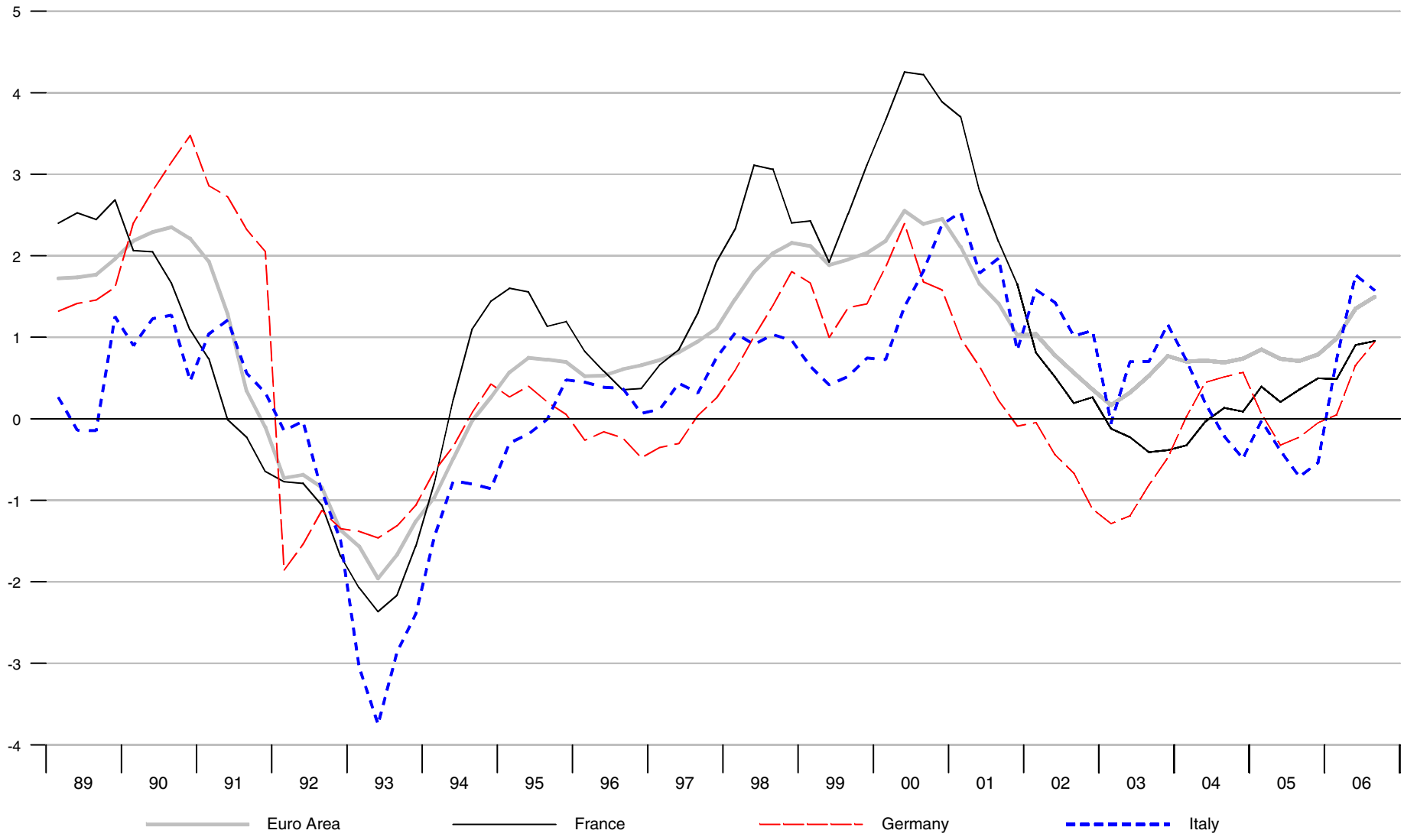
Employment for Canada, Japan, United Kingdom, and United States

Percent change from year ago

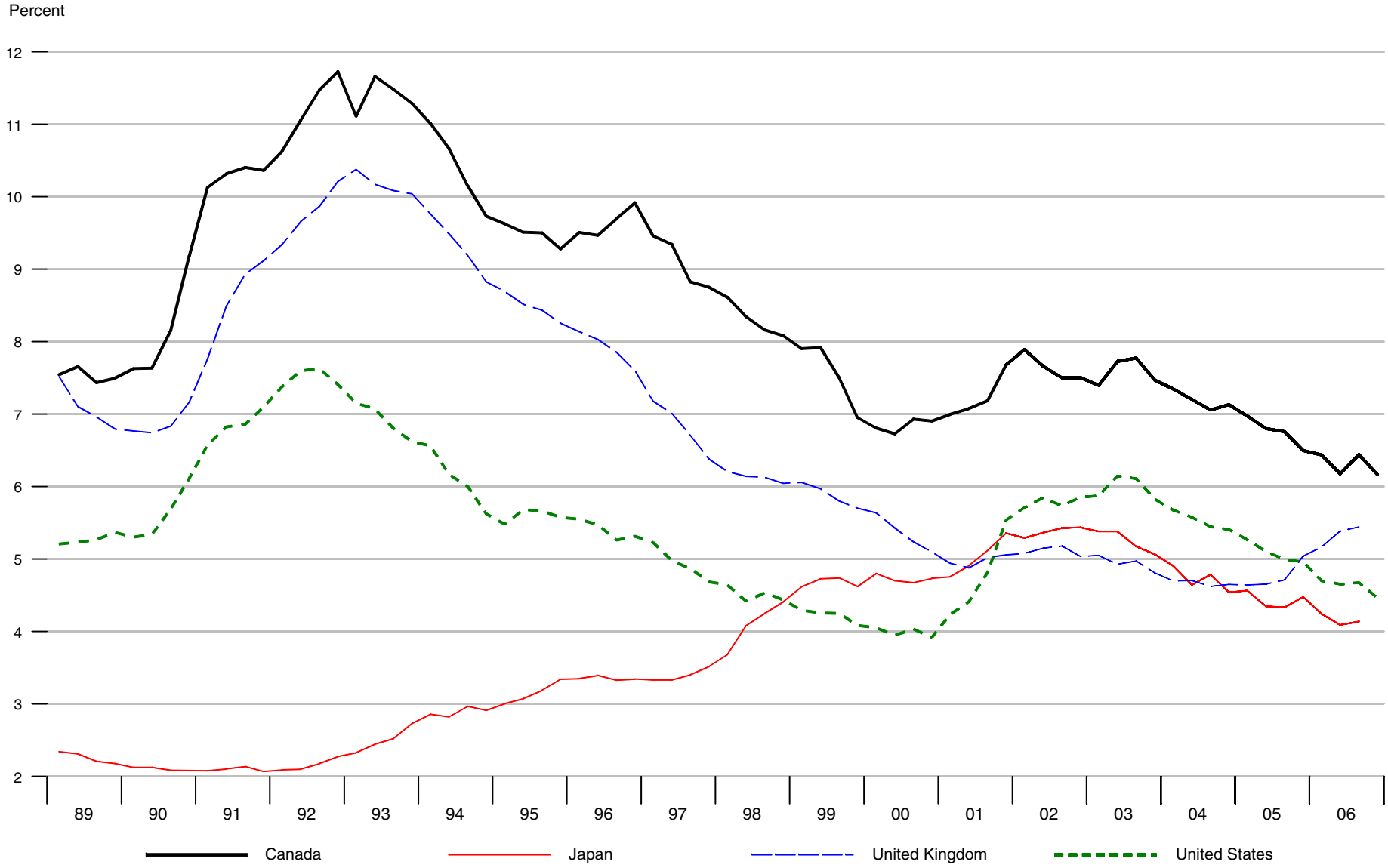


Employment for Euro Area, France, Germany, and Italy

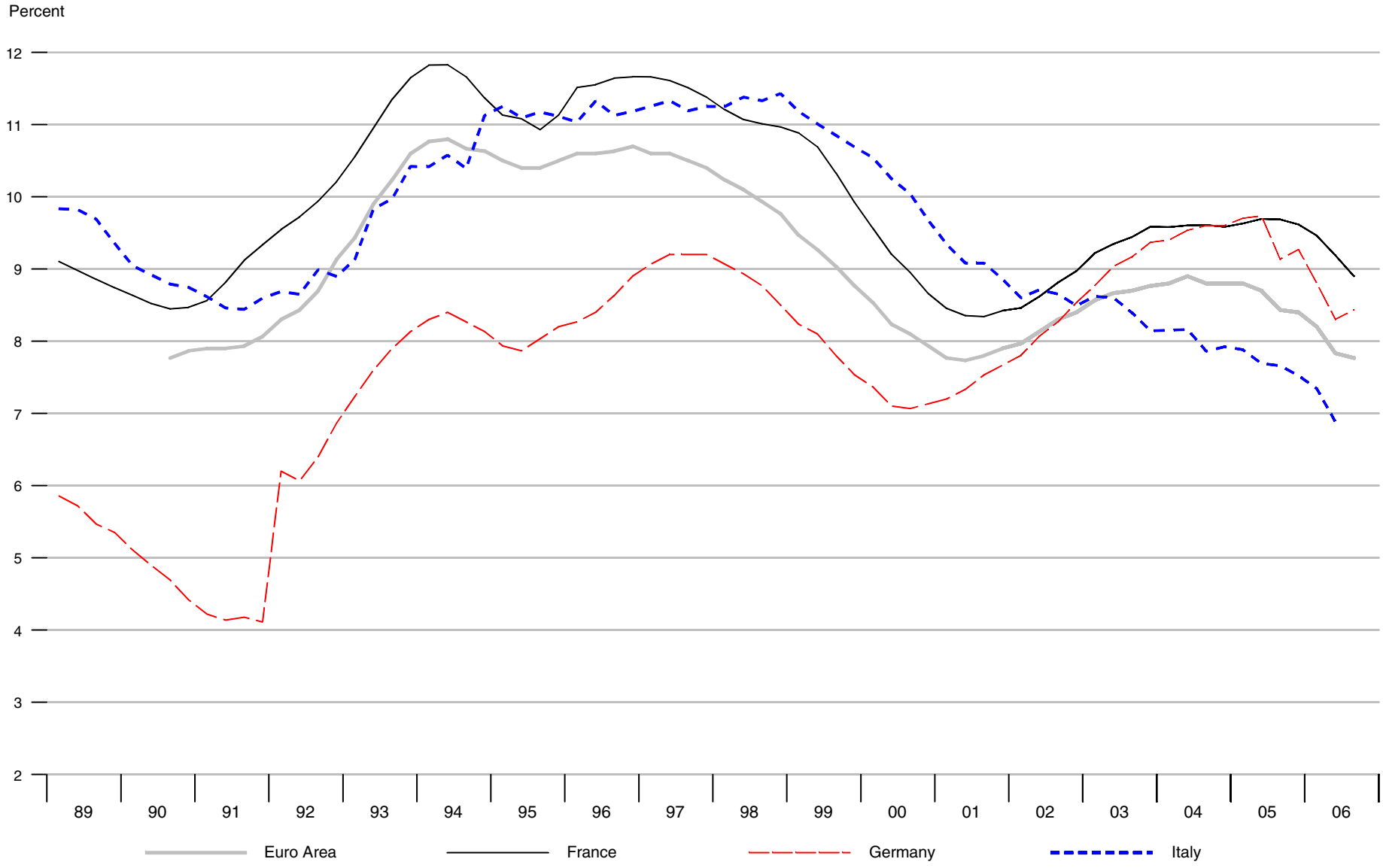
Percent change from year ago



Unemployment Rate for Canada, Japan, United Kingdom, and United States

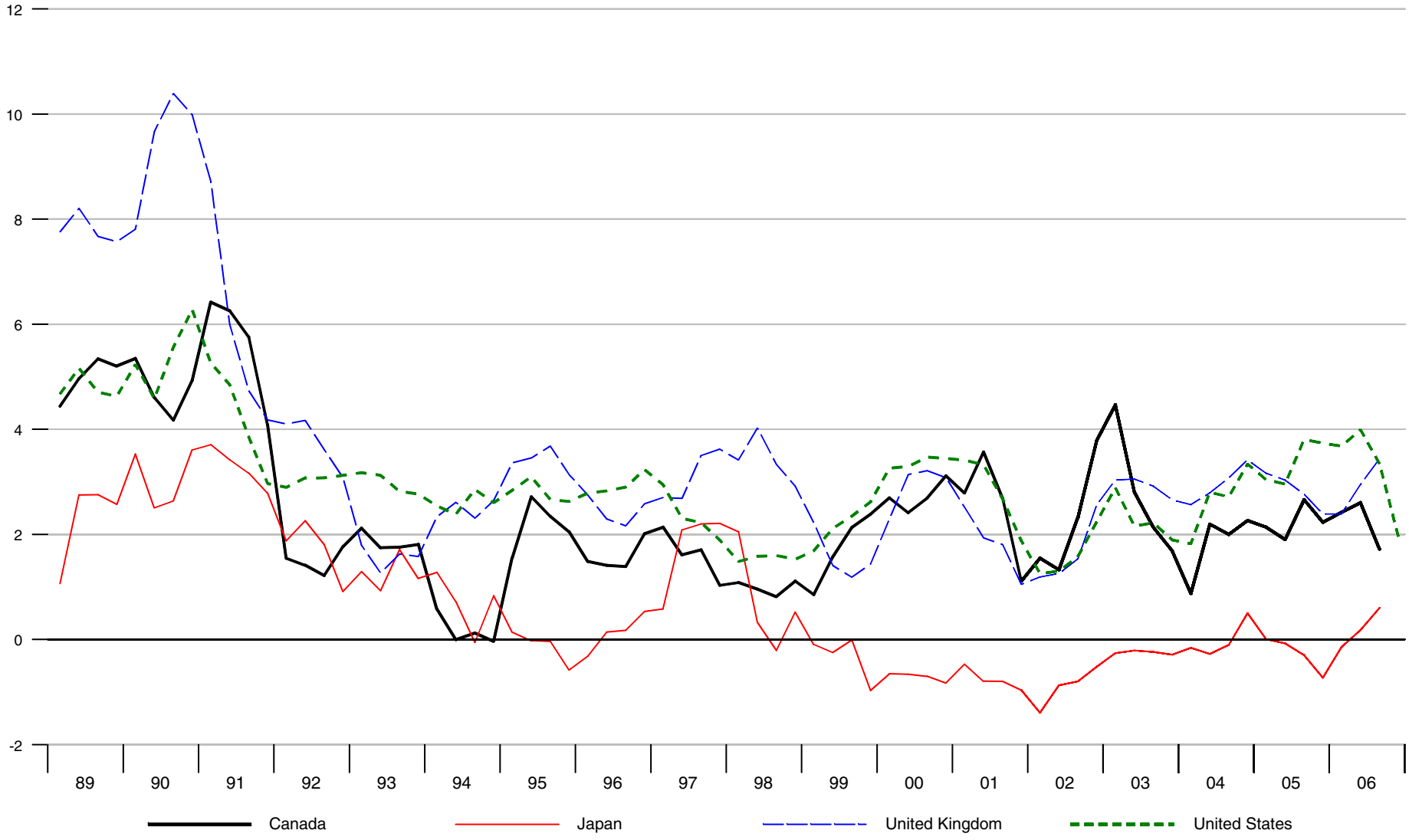


Unemployment Rate for Euro Area, France, Germany, and Italy



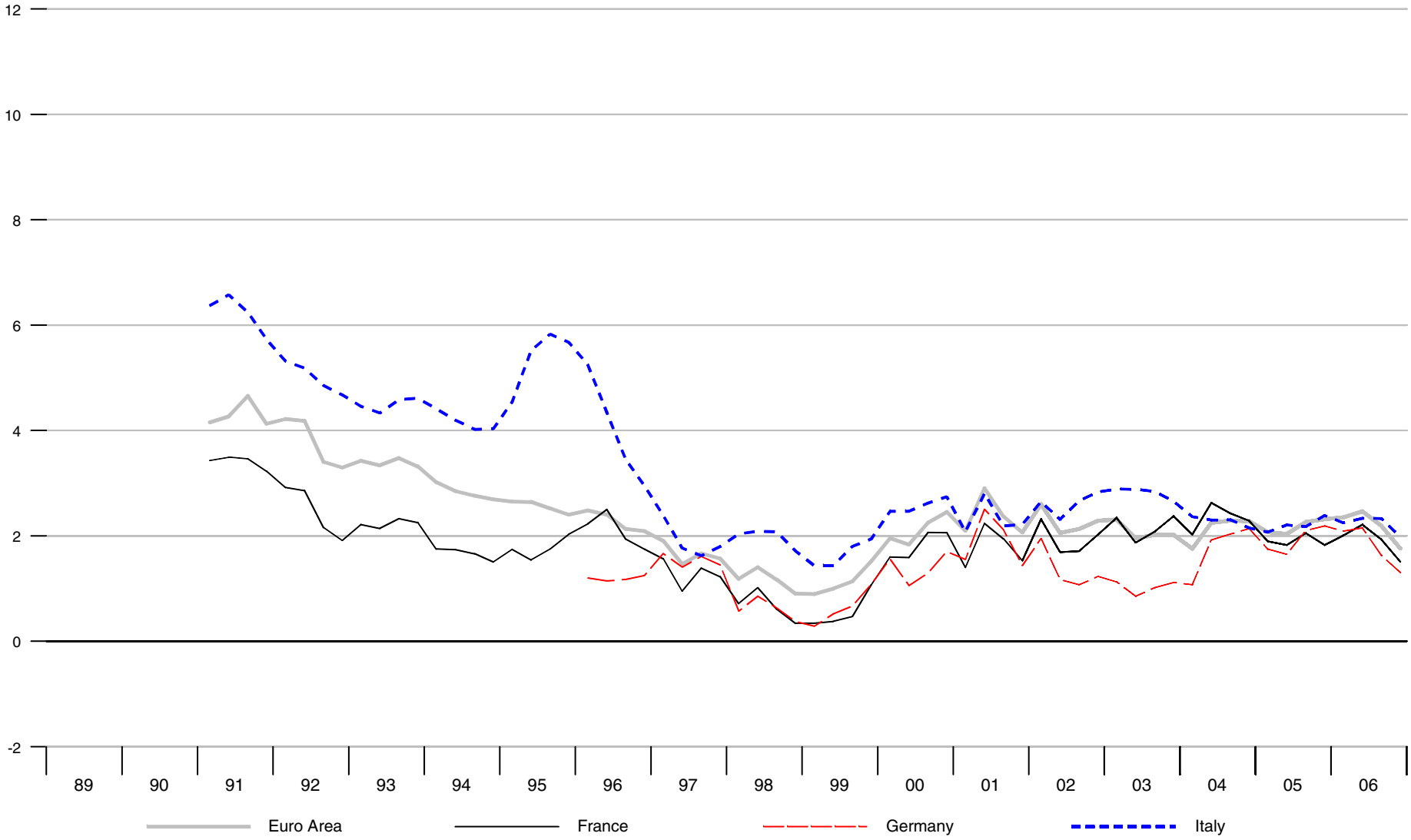
Consumer Price Index for Canada, Japan, United Kingdom, and United States

Percent change from year ago



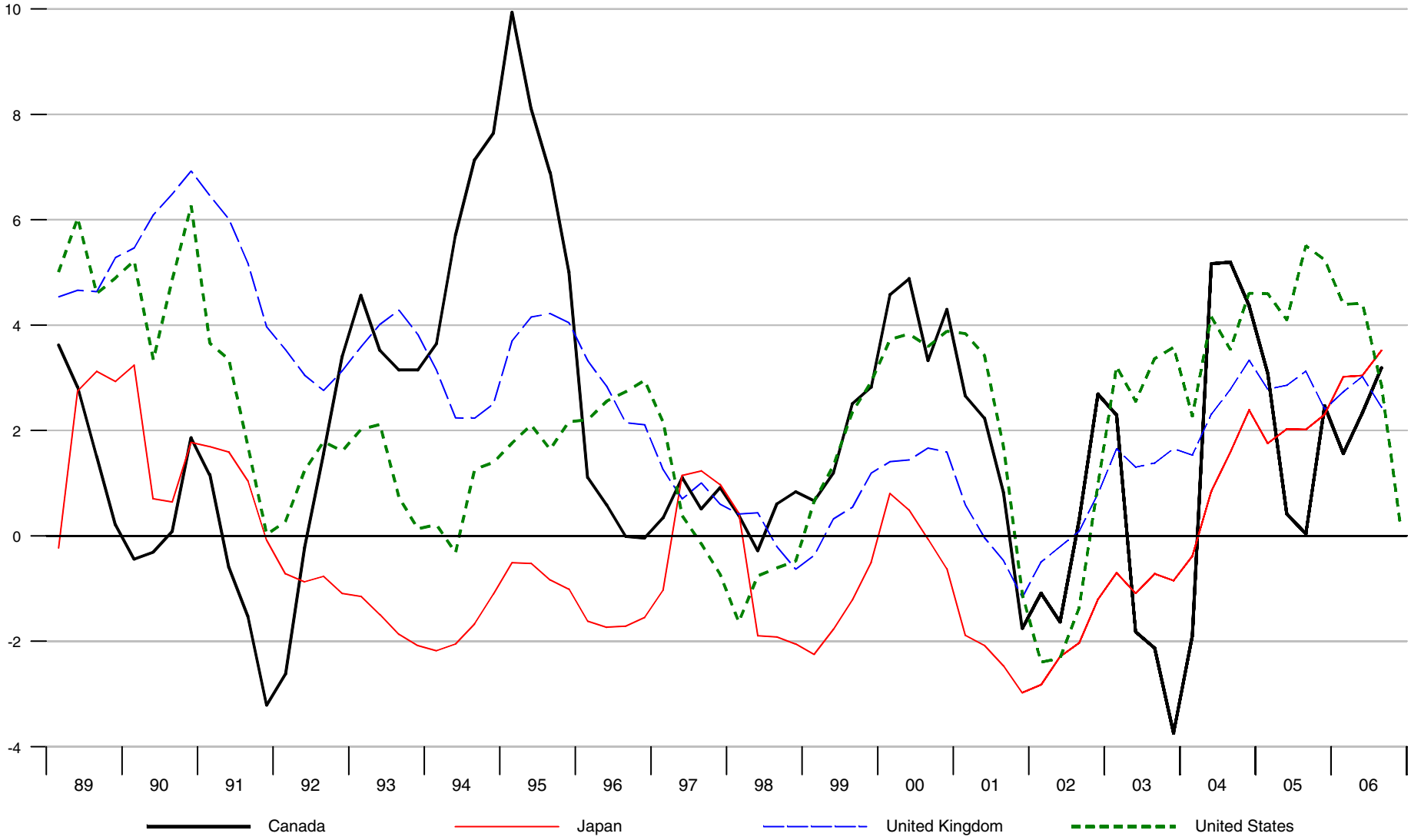
Consumer Price Index for Euro Area, France, Germany, and Italy

Percent change from year ago



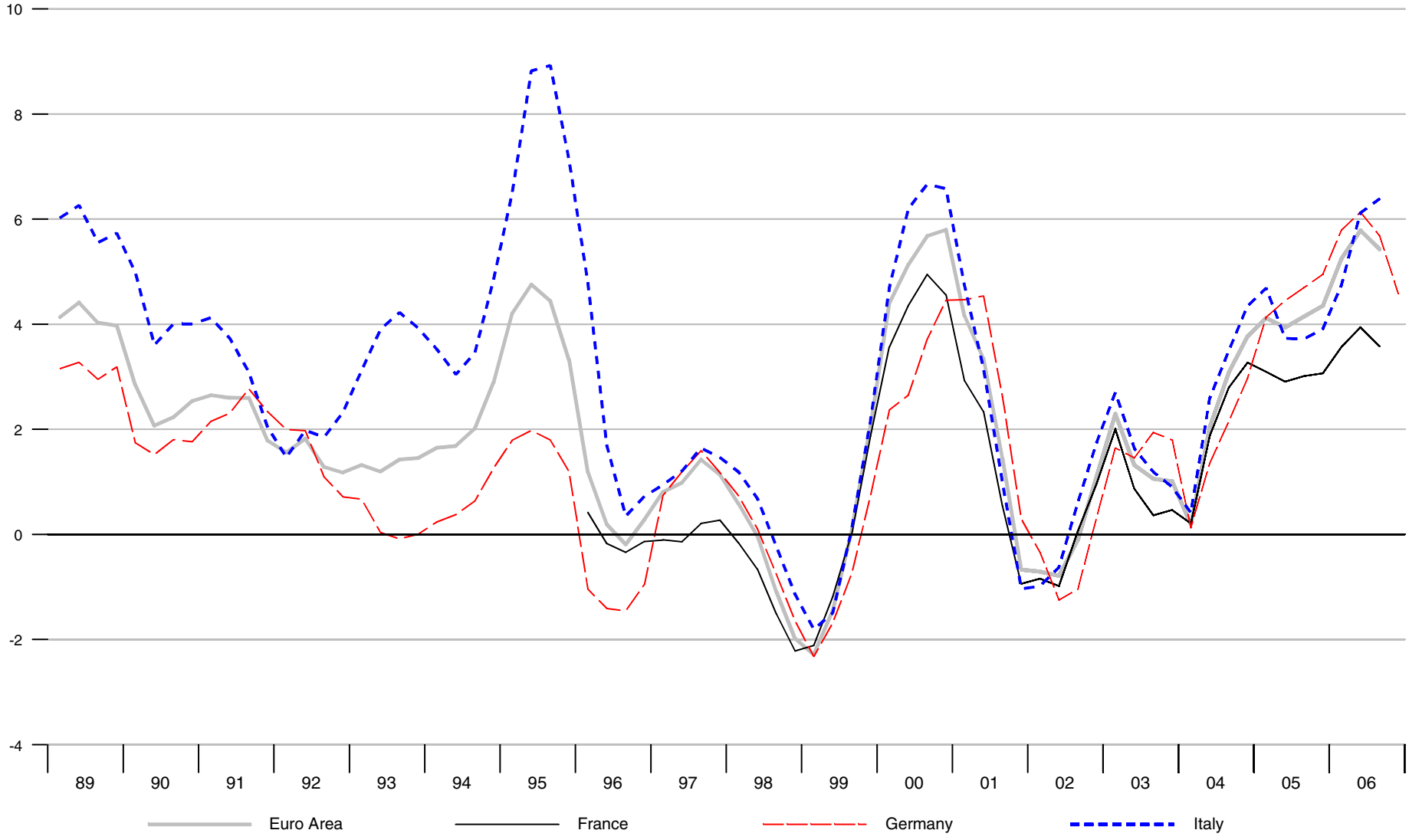
Producer Price Index for Canada, Japan, United Kingdom, and United States

Percent change from year ago



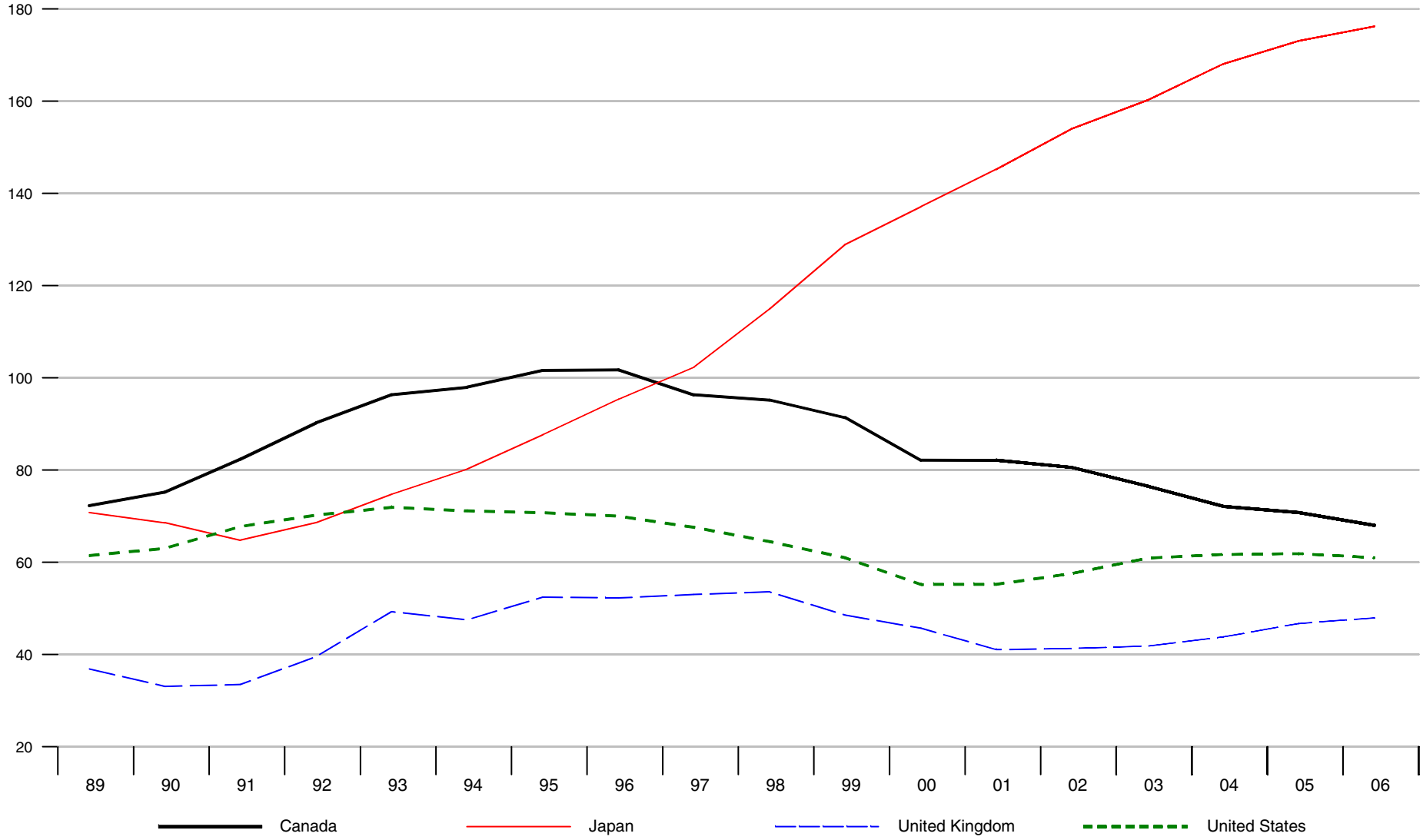
Producer Price Index for Euro Area, France, Germany, and Italy

Percent change from year ago



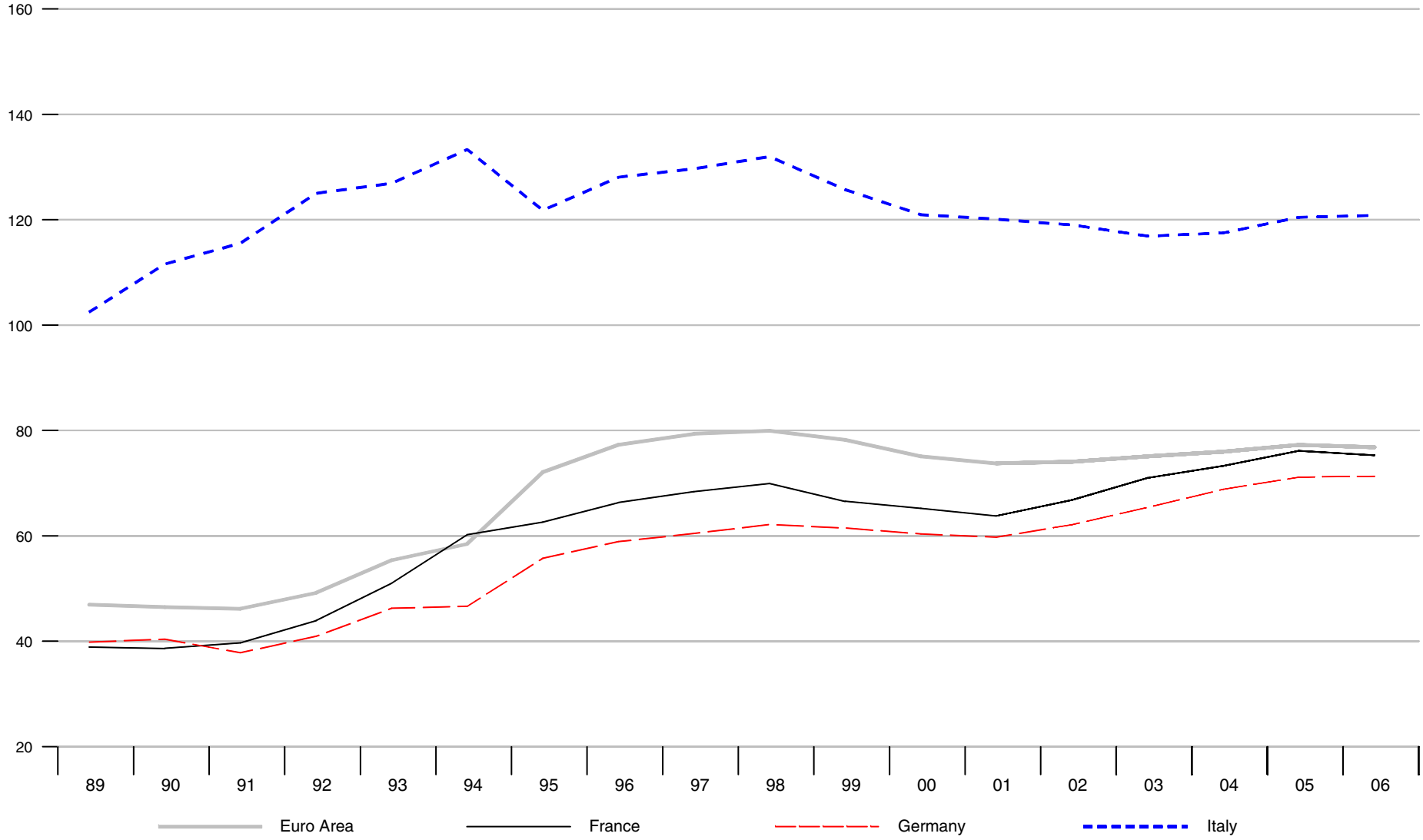
Government Gross Debt for Canada, Japan, United Kingdom, and United States

Percent of GDP, annual data



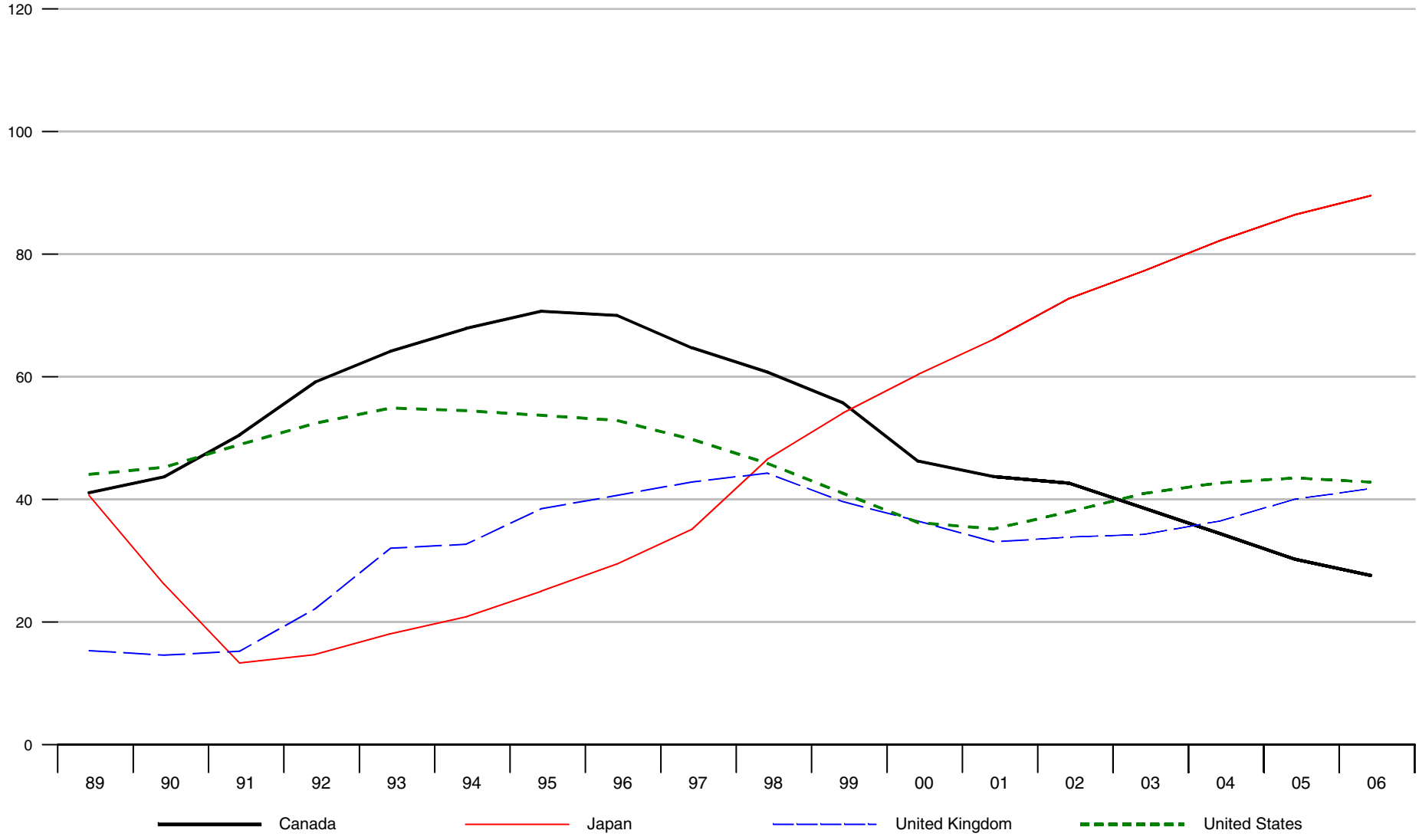
Government Gross Debt for Euro Area, France, Germany, and Italy

Percent of GDP, annual data



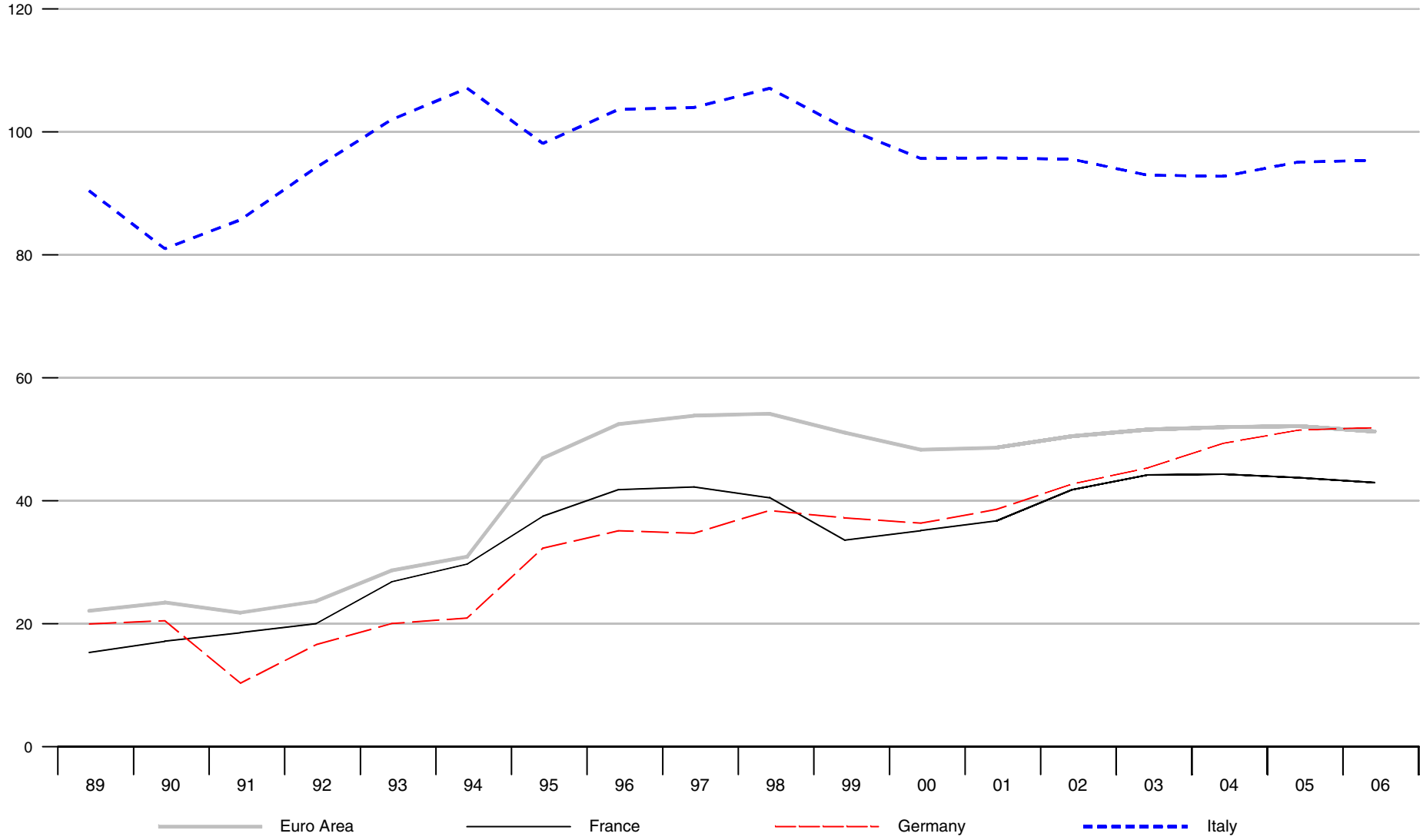
Government Net Debt for Canada, Japan, United Kingdom, and United States

Percent of GDP, annual data



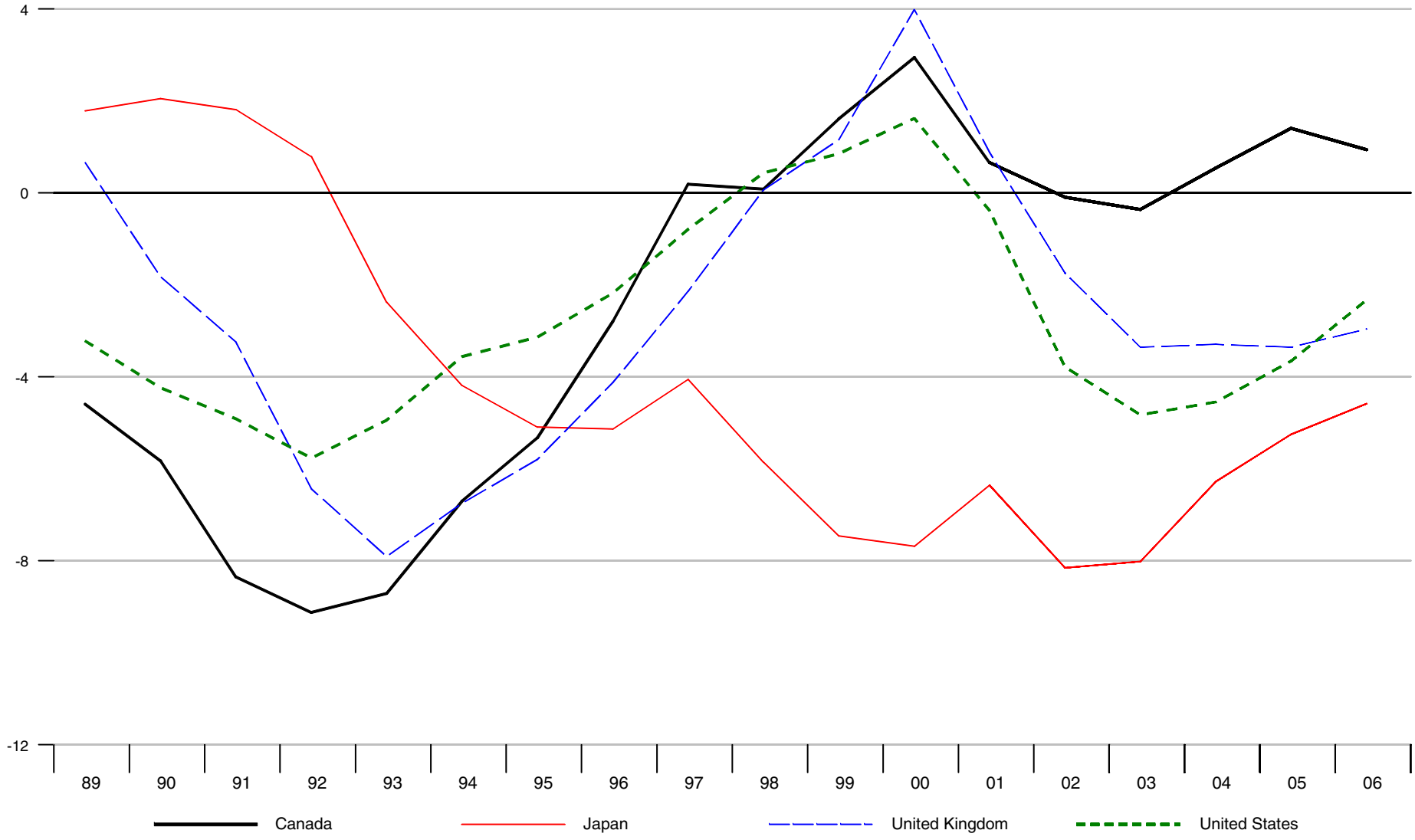
Government Net Debt for Euro Area, France, Germany, and Italy

Percent of GDP, annual data



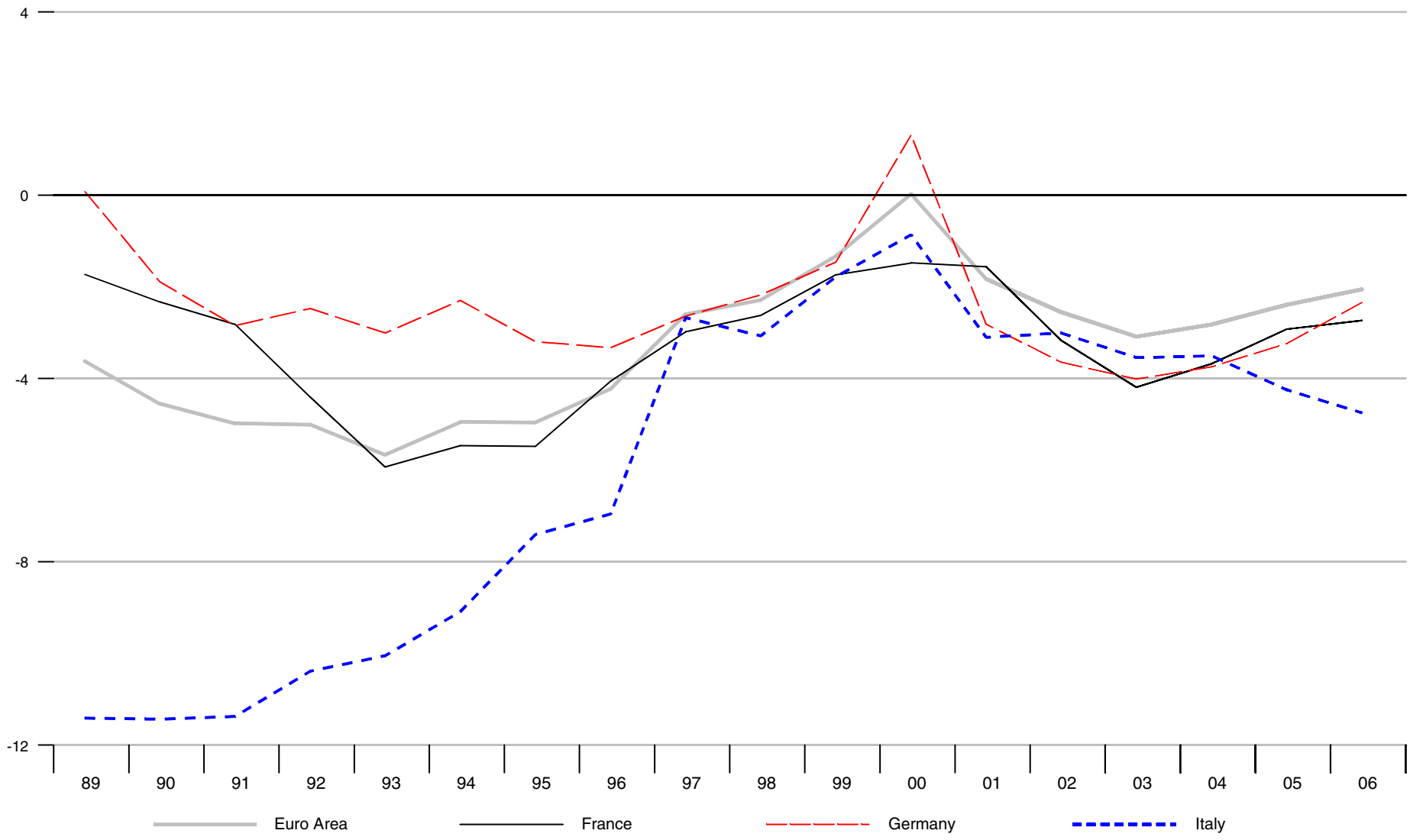
Government Budget Balance for Canada, Japan, United Kingdom, and United States

Percent of GDP, annual data



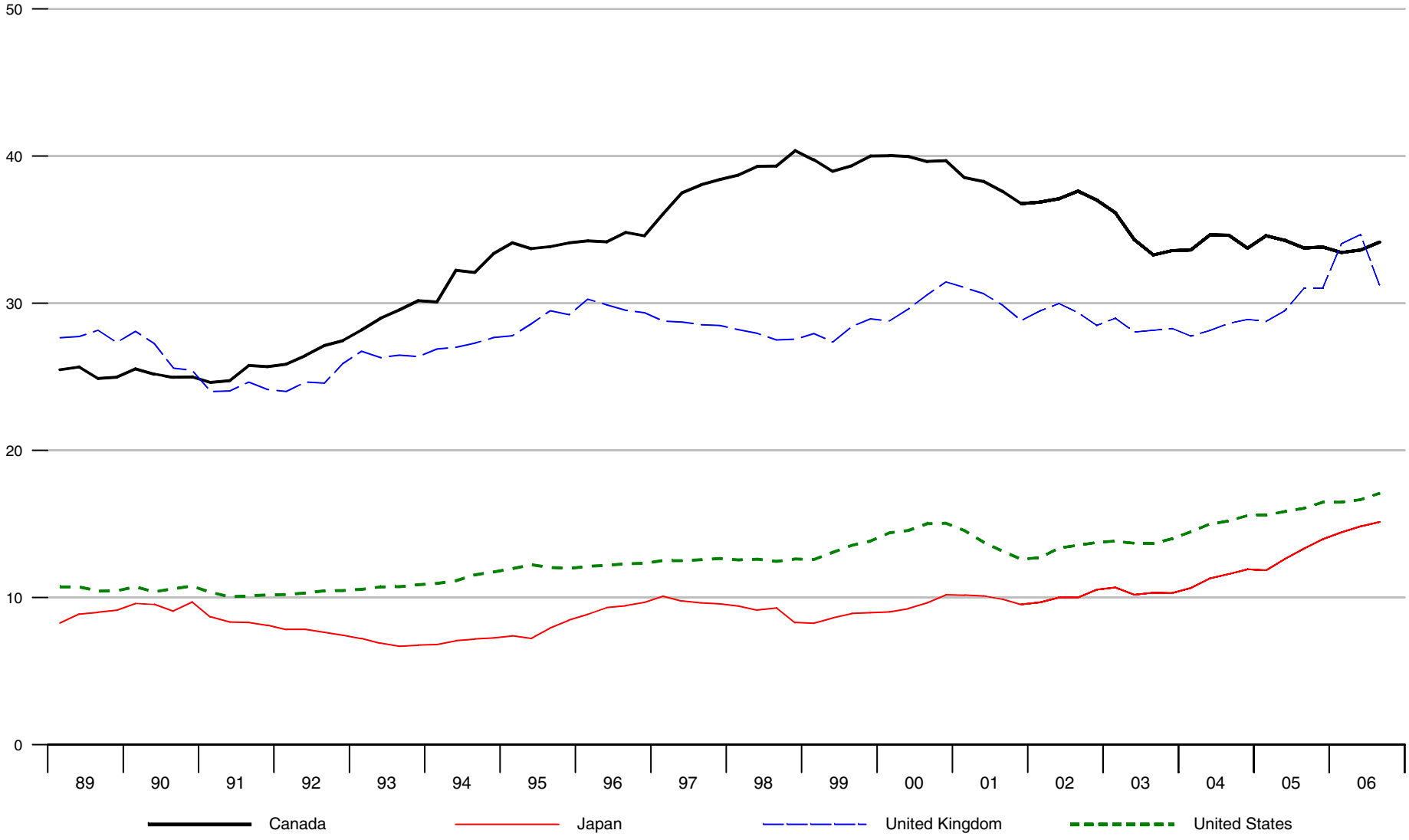
Government Budget Balance for Euro Area, France, Germany, and Italy

Percent of GDP, annual data



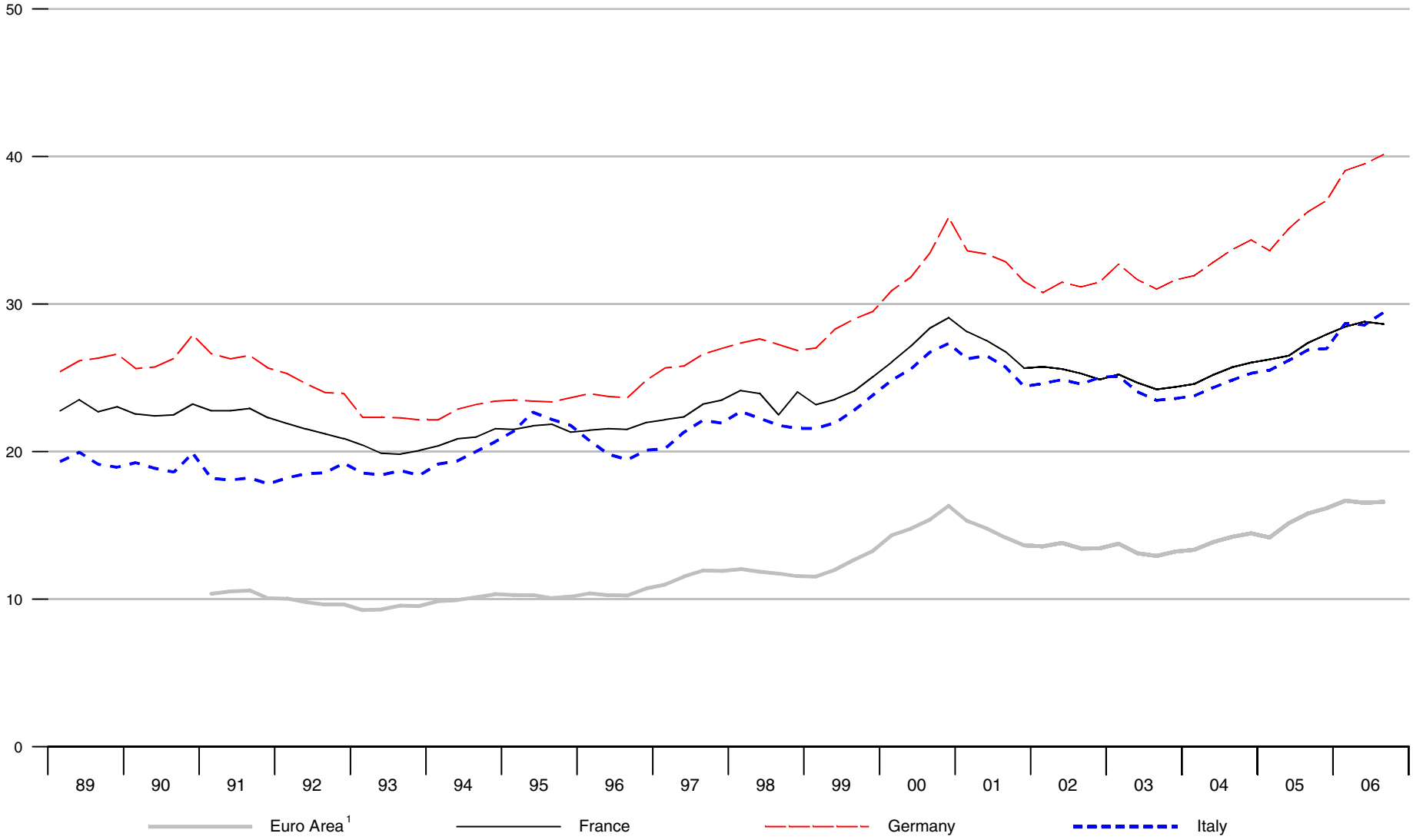
International Trade - Imports of Goods and Services for Canada, Japan, United Kingdom, and United States

Percent of GDP



International Trade - Imports of Goods and Services for Euro Area, France, Germany, and Italy

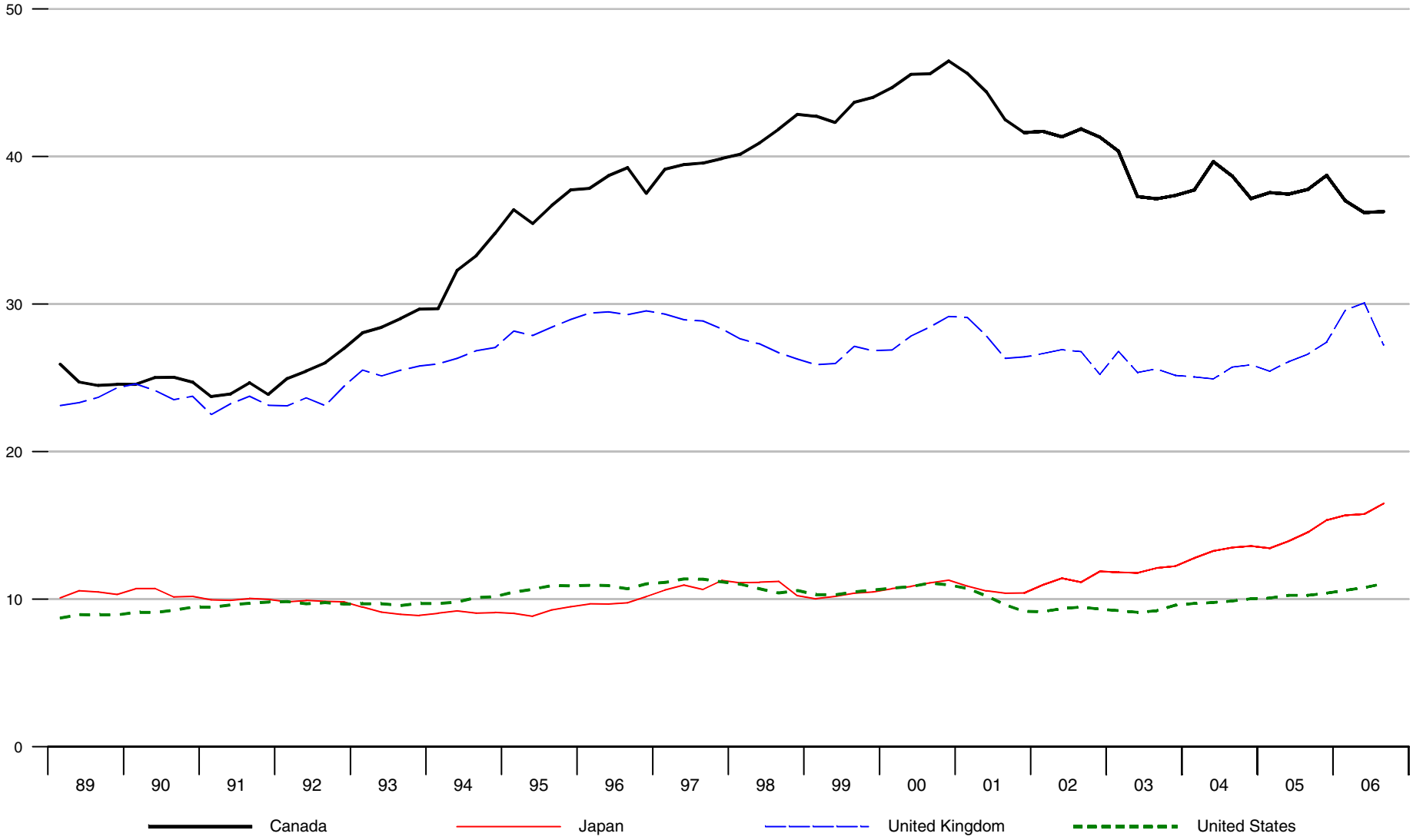
Percent of GDP



[1] Imports of Goods Only

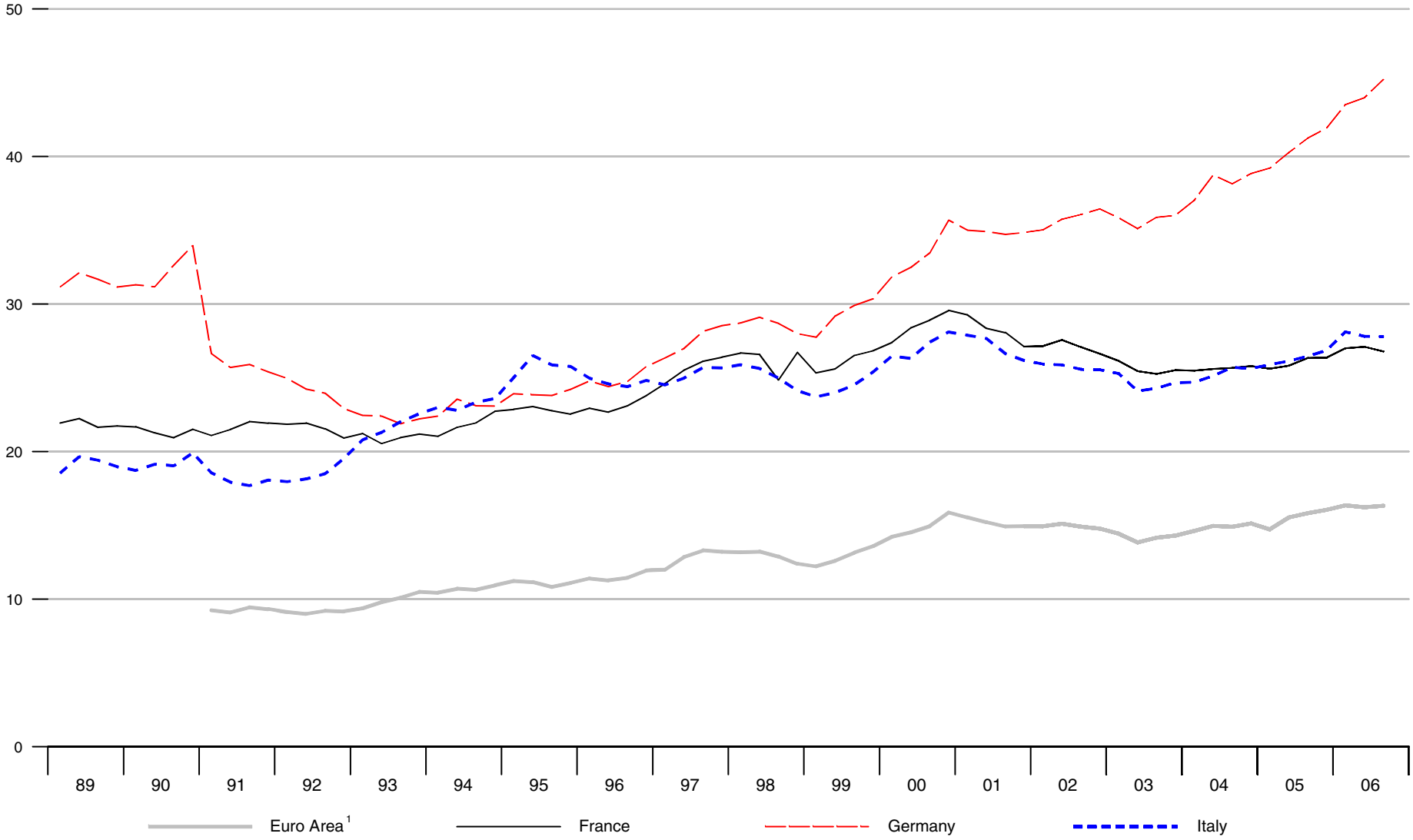
International Trade - Exports of Goods and Services for Canada, Japan, United Kingdom, and United States

Percent of GDP



International Trade - Exports of Goods and Services for Euro Area, France, Germany, and Italy

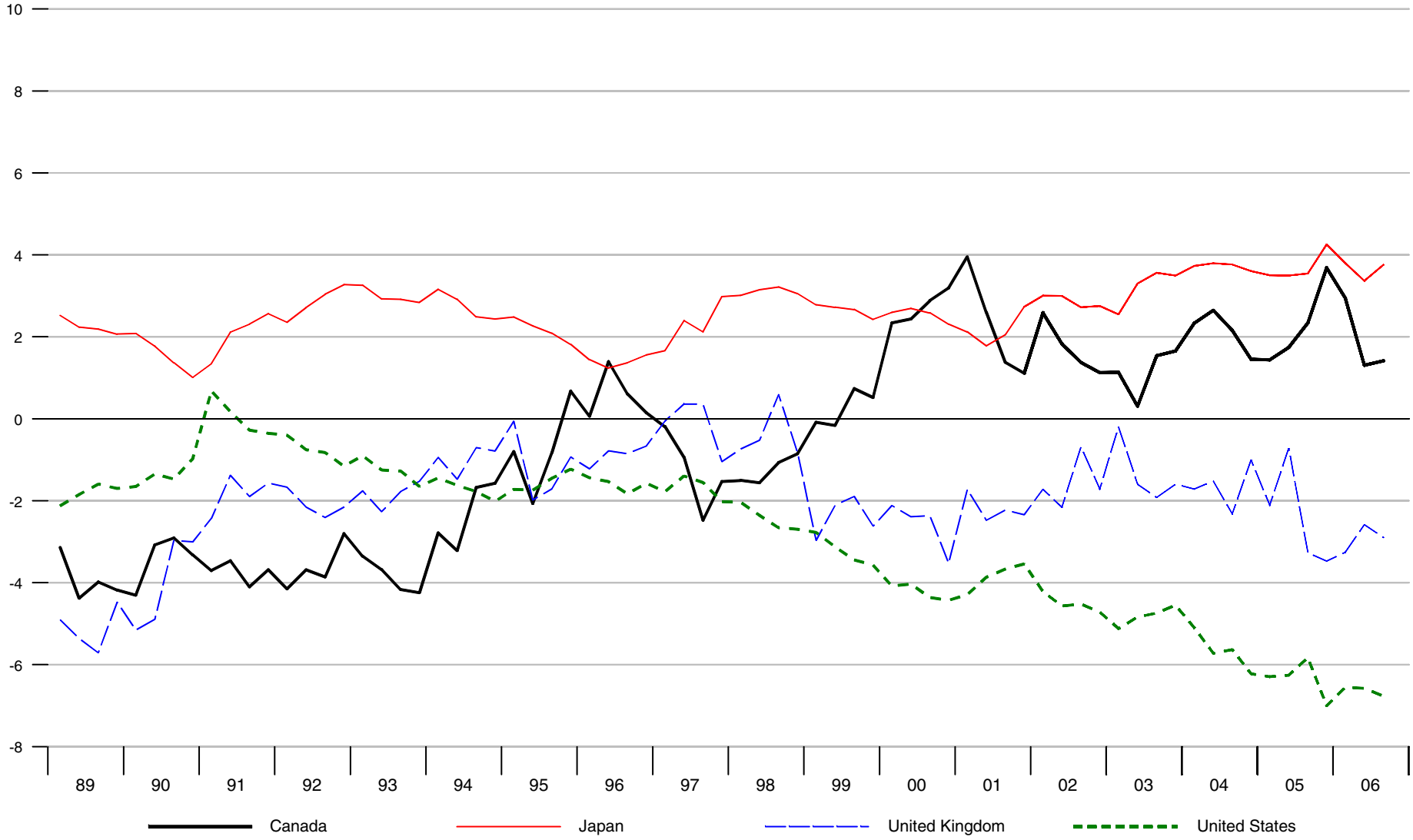
Percent of GDP



[1] Exports of Goods Only

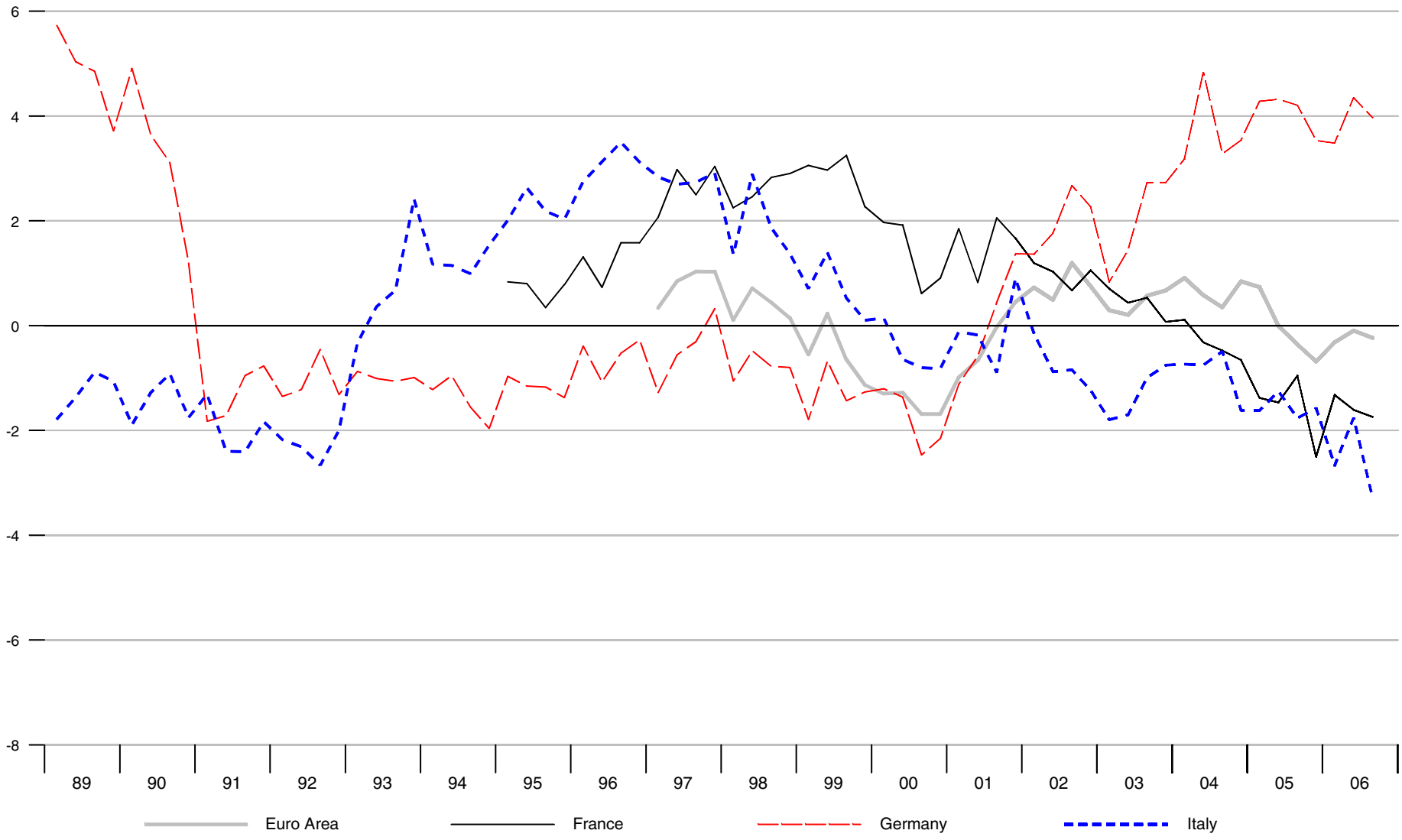
Current Account Balance for Canada, Japan, United Kingdom, and United States

Percent of GDP

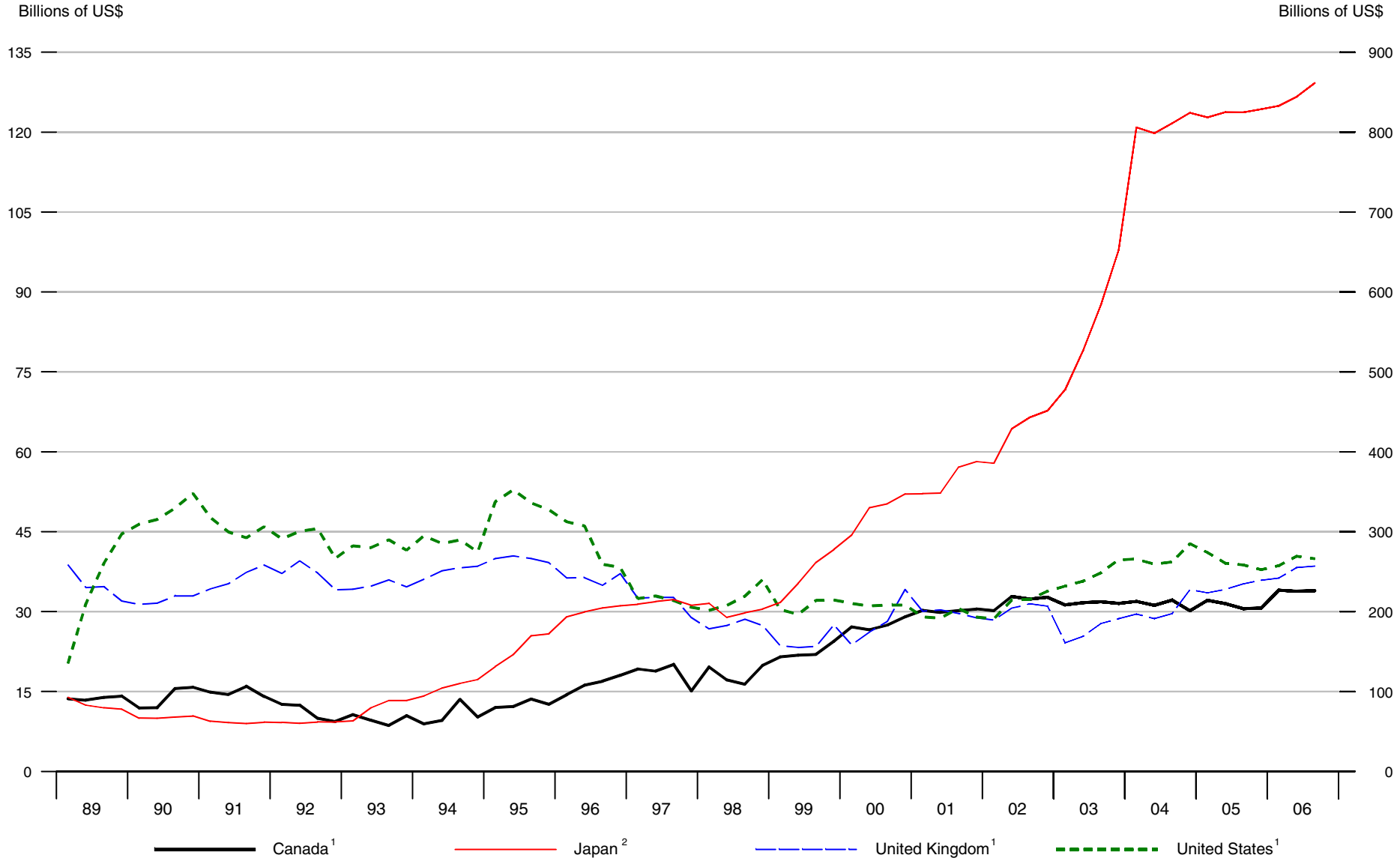


Current Account Balance for Euro Area, France, Germany, and Italy

Percent of GDP



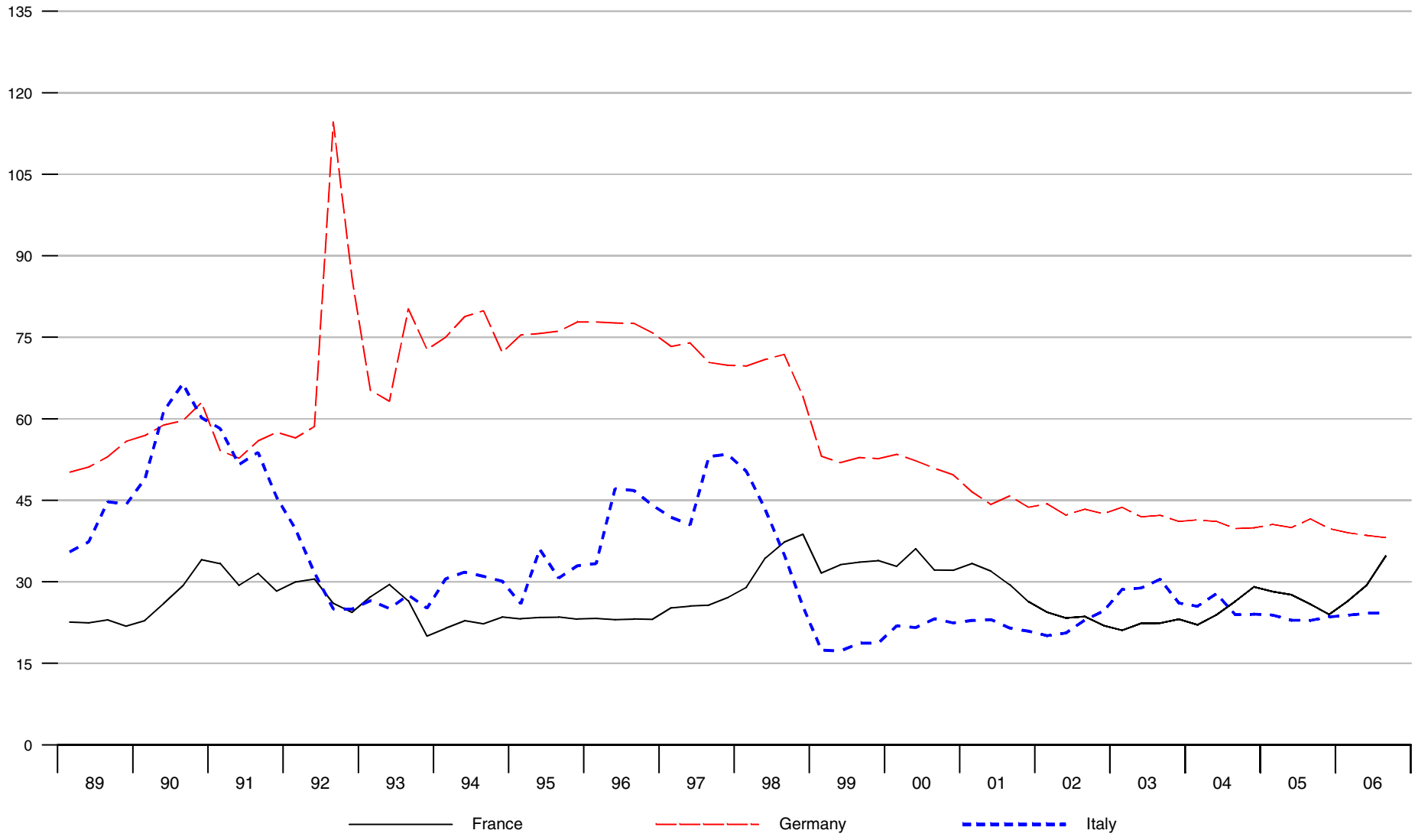
Foreign Exchange Reserves Canada, Japan, United Kingdom, and United States



1 Left Scale, 2 Right Scale

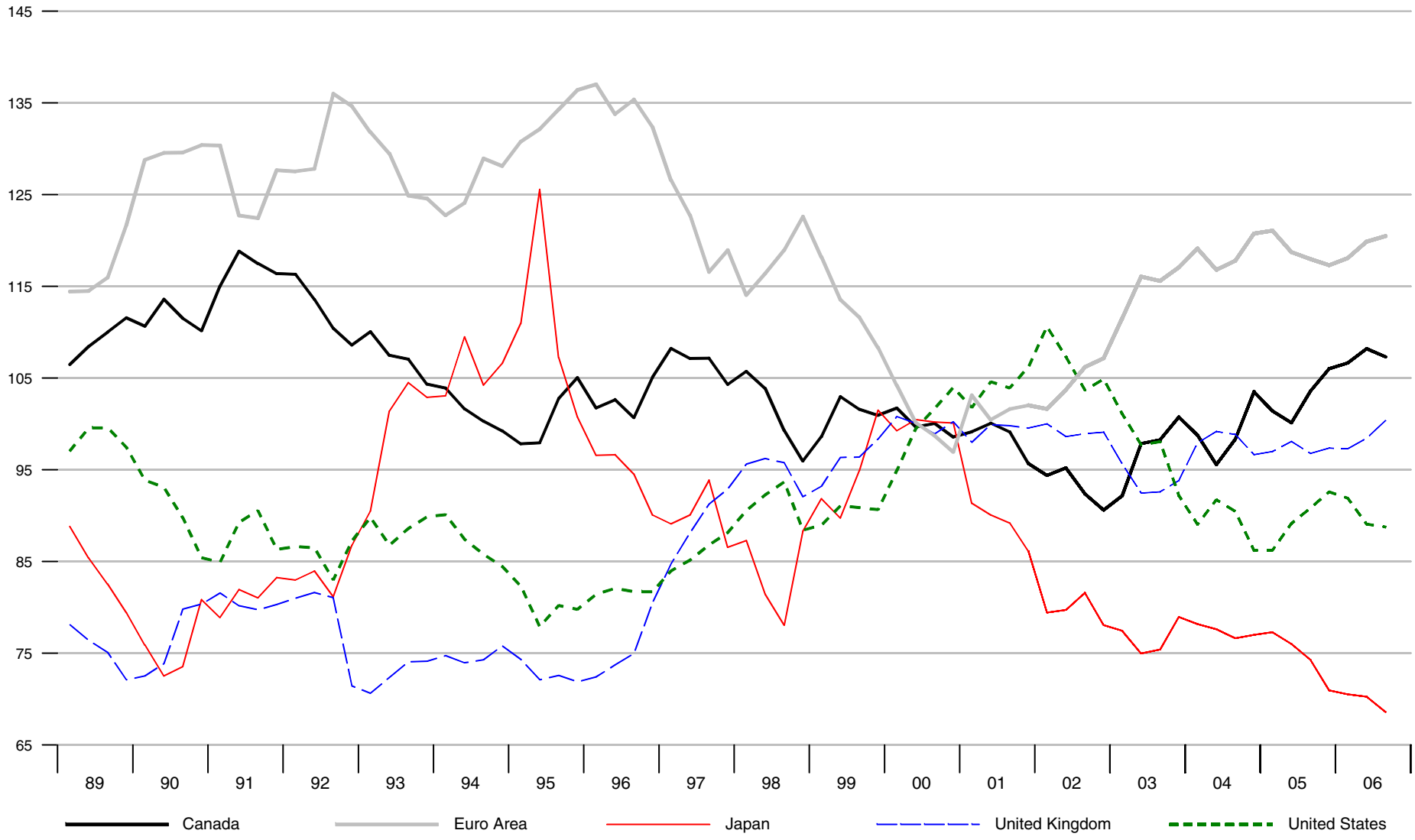
Foreign Exchange Reserves for France, Germany, and Italy

Billions of US$

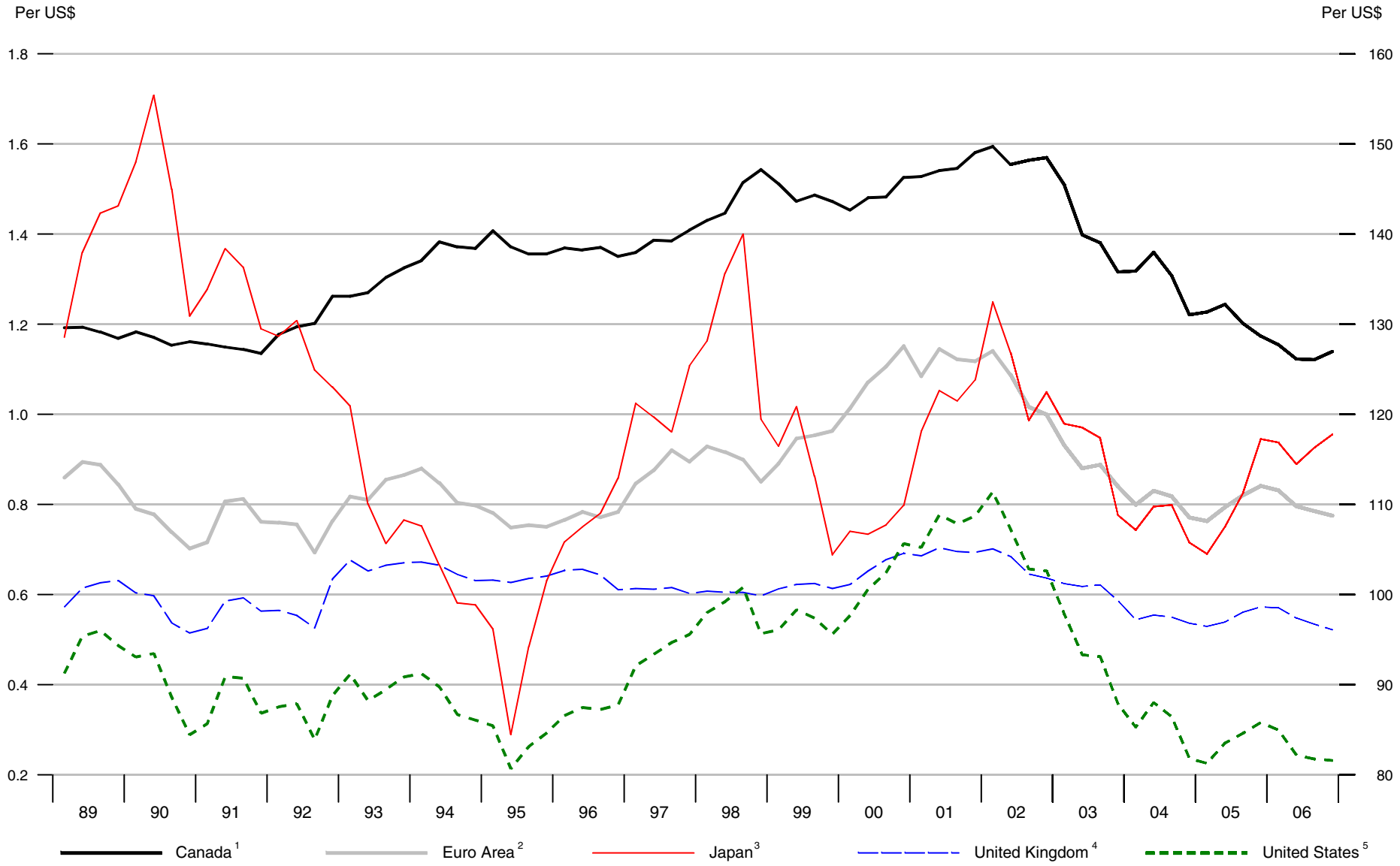


Real Effective Exchange Rate for Canada, Euro Area, Japan, United Kingdom, and United States

Index 2000 = 100



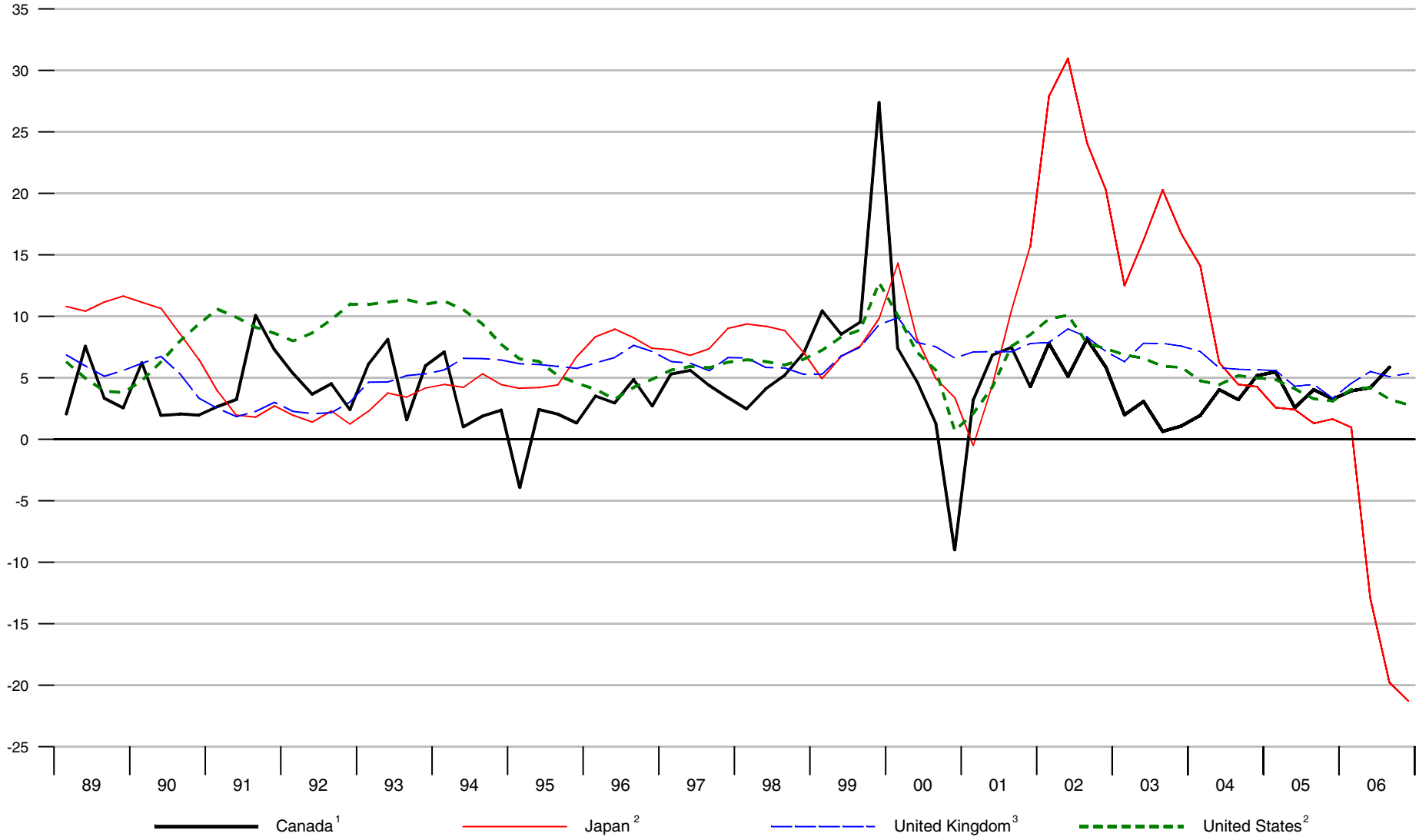
Exchange Rates for Canada, Euro Area, Japan, United Kingdom, and United States



[1] Canadian dollar, Left Scale, [2] euro, Left Scale, [3] Japanese yen, Right Scale, [4] UK pound, Left Scale, [5] US TWEX, March 1973=100, Right Scale

Reserve Money for Canada, Japan, United Kingdom, and United States

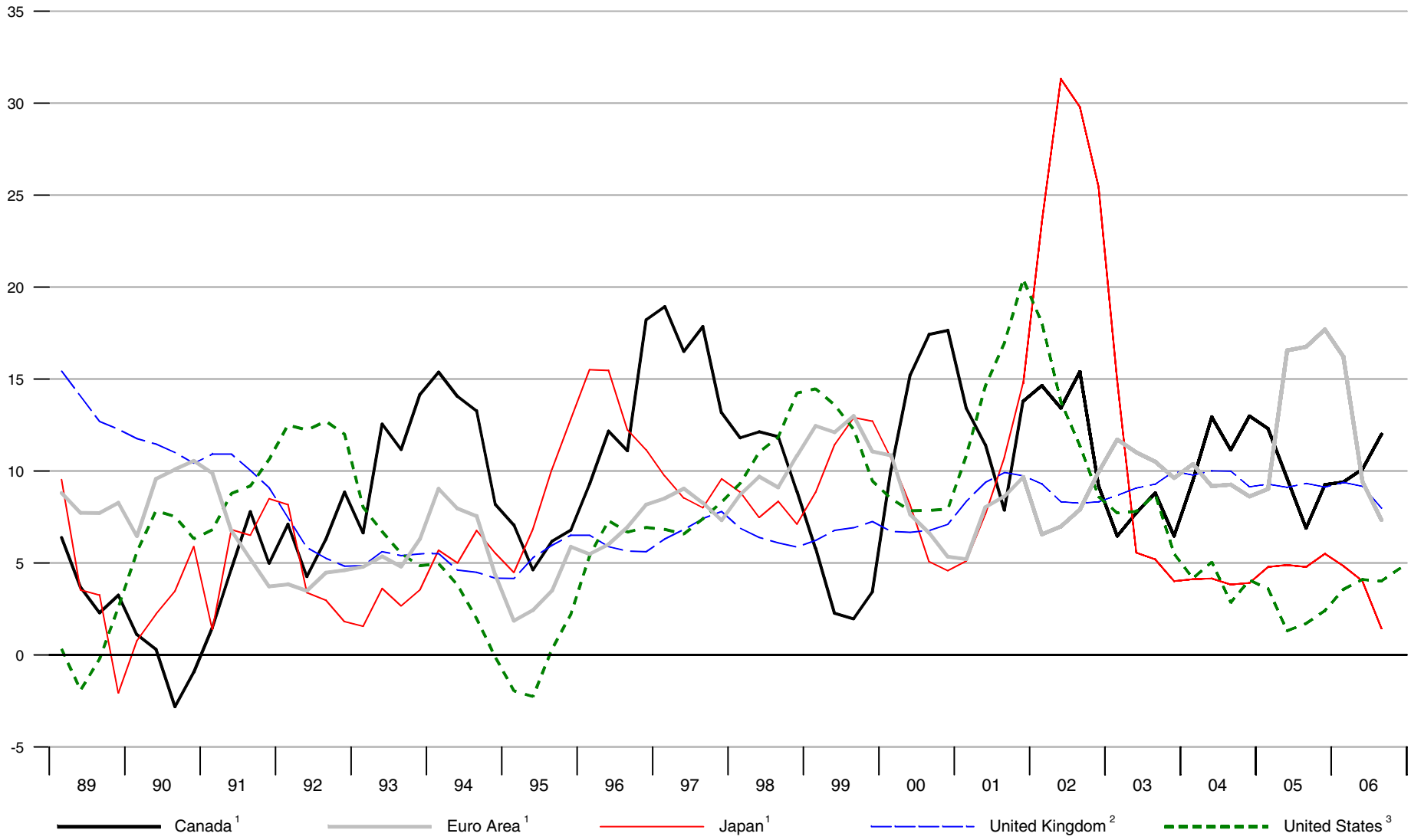
Percent change from year ago



[1] Reserve Money, [2] Adjusted Monetary Base, [3] Coins and Notes in Circulation

Narrow Money for Canada, Euro Area, Japan, United Kingdom, and United States

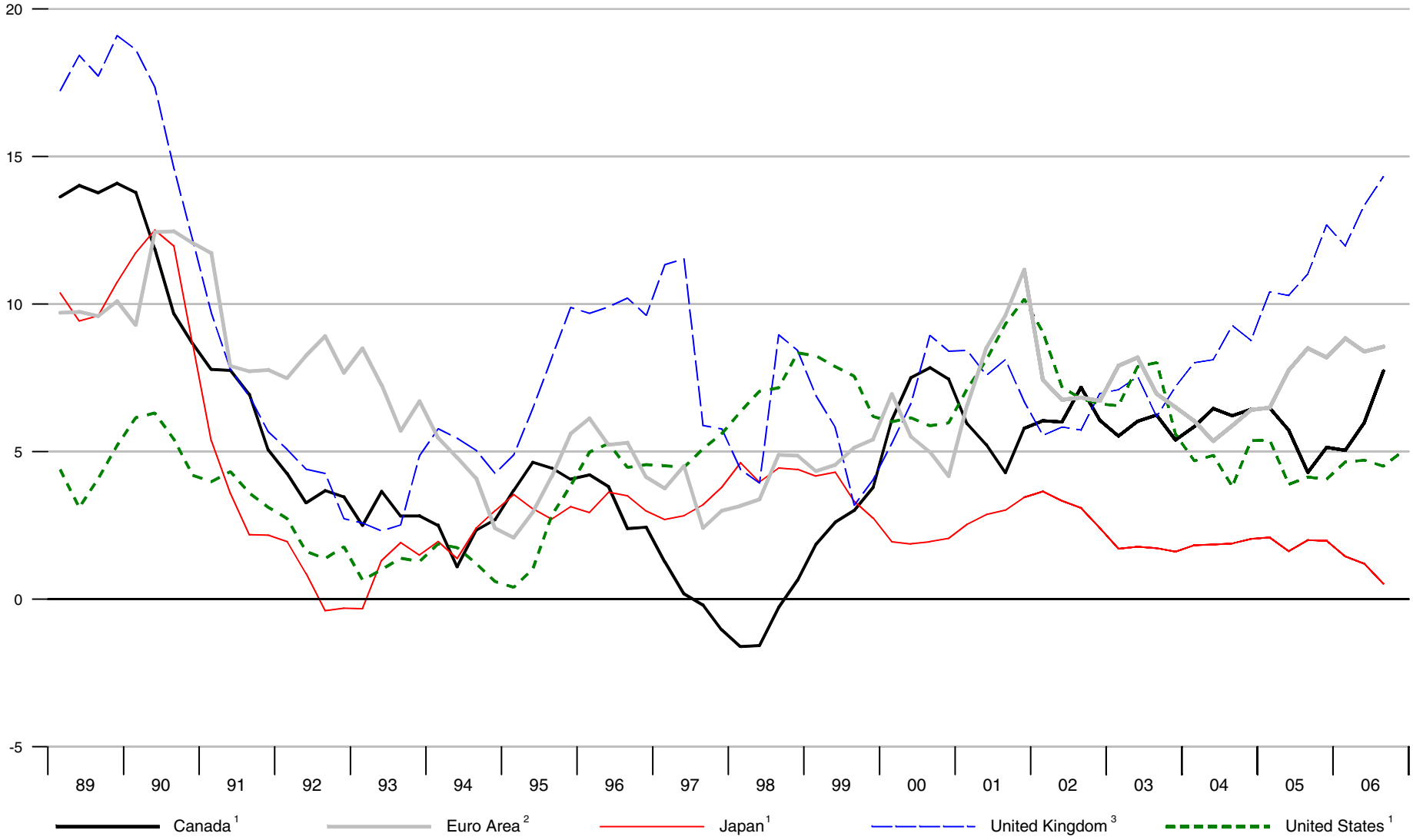
Percent change from year ago



1 M1, 2 M2, 3 MZM

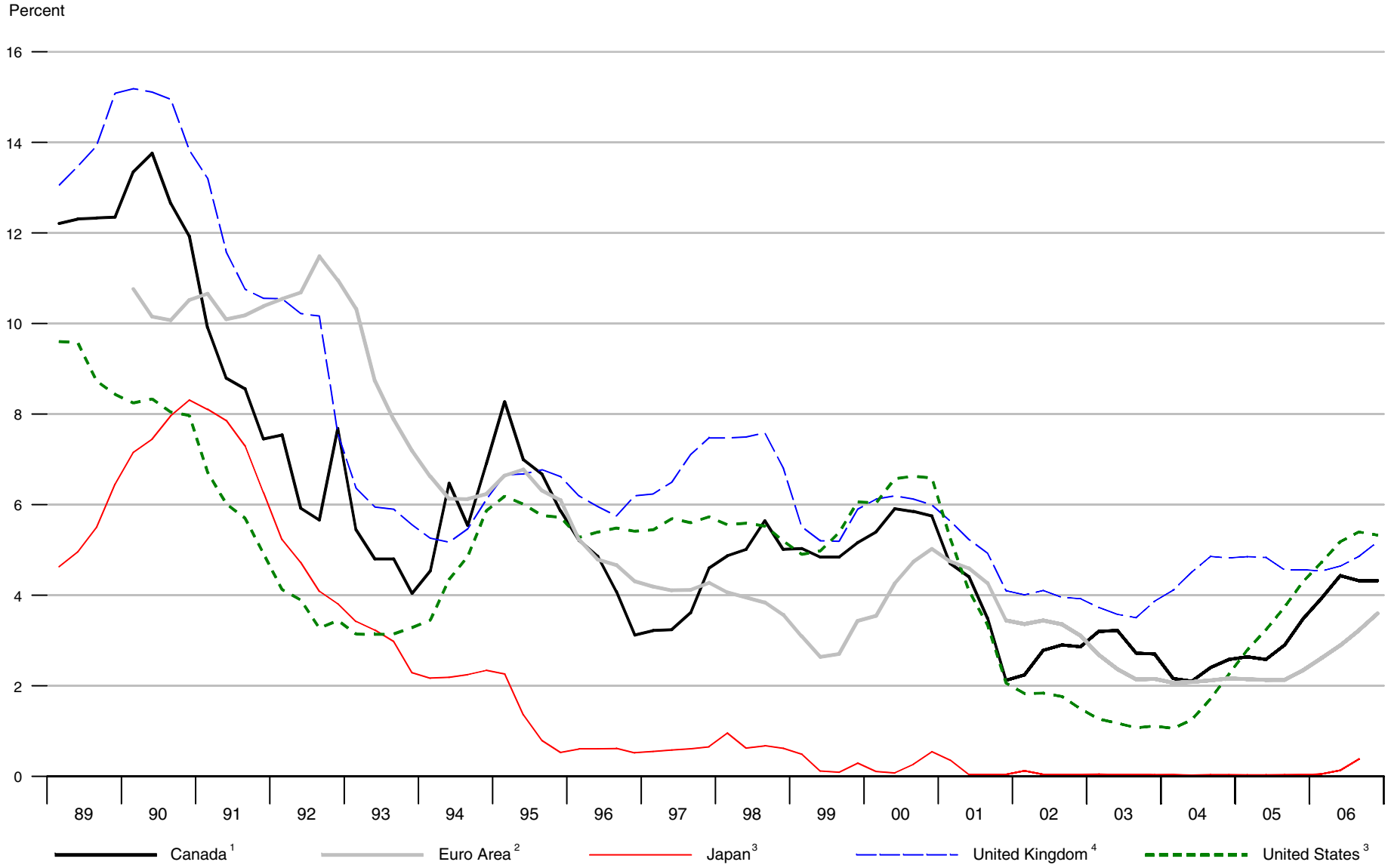
Broad Money for Canada, Euro Area, Japan, United Kingdom, and United States

Percent change from year ago



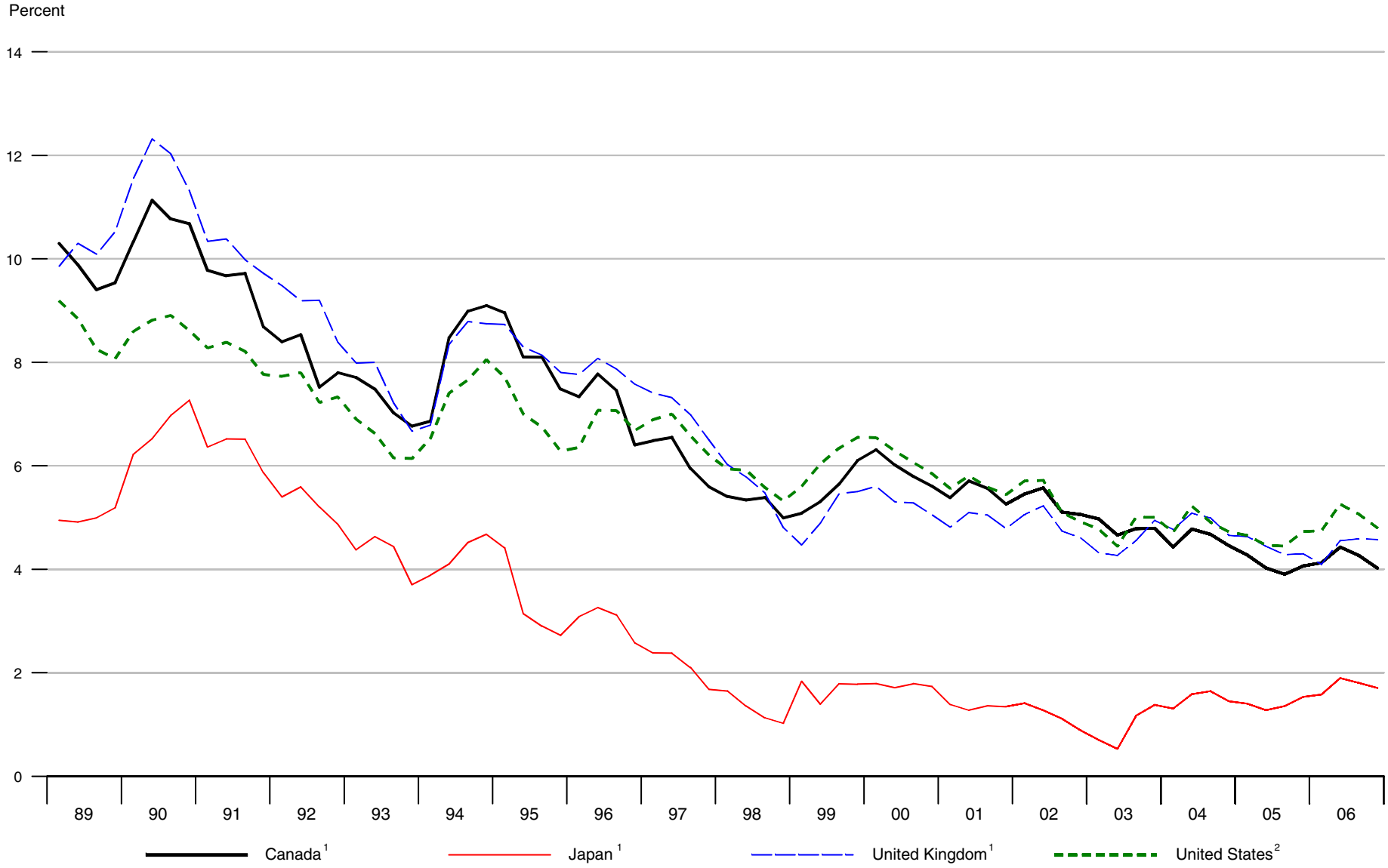
1 M2, 2 M3, 3 M4

Short-Term Interest Rates for Canada, Euro Area, Japan, United Kingdom, and United States



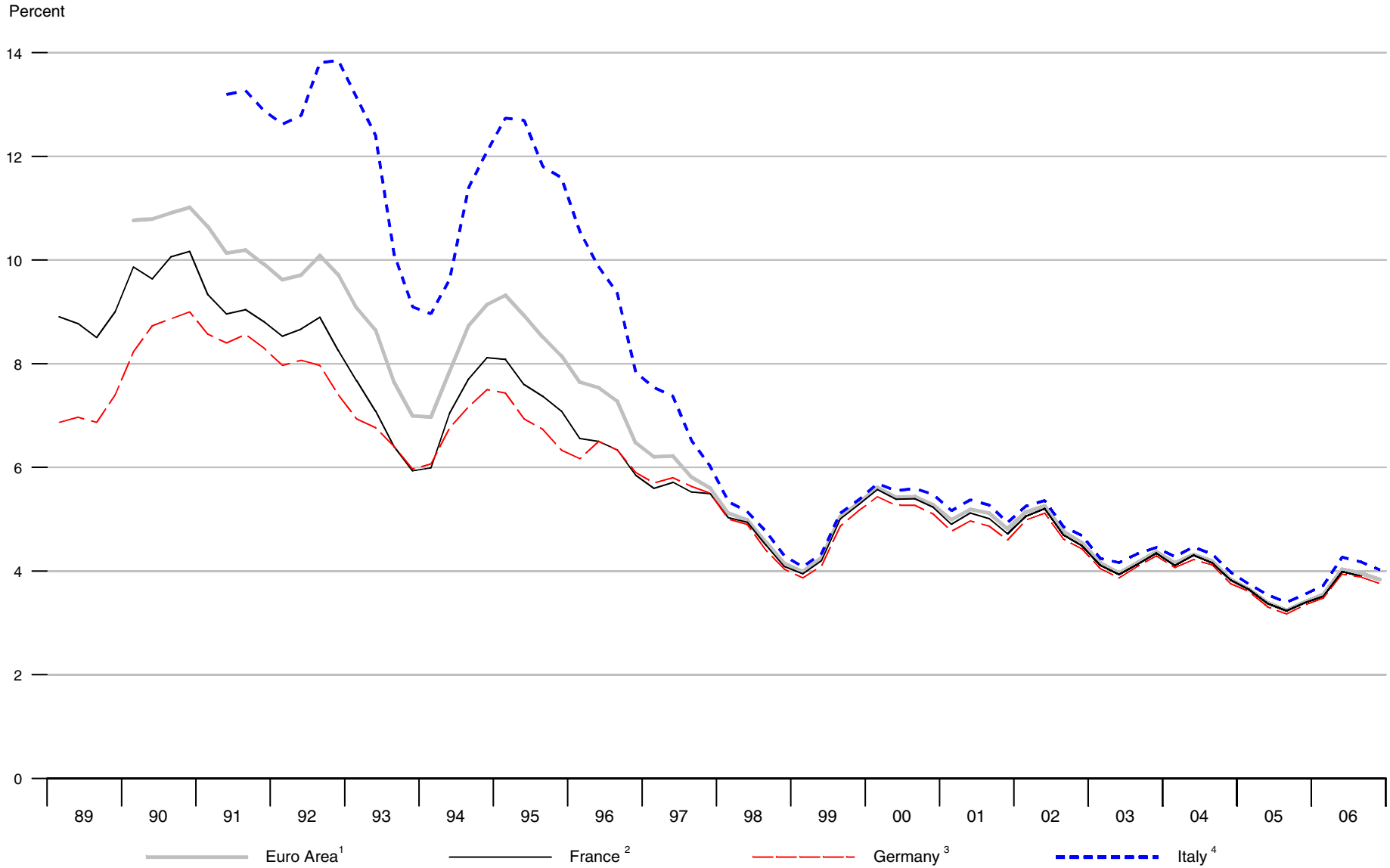
[1] 90-Day Prime Corporate Paper, [2] 90-Day Deposits, [3] 3-Month CDs, [4] 3-Month Interbank Loans

Long-Term Interest Rates for Canada, Japan, United Kingdom, and United States



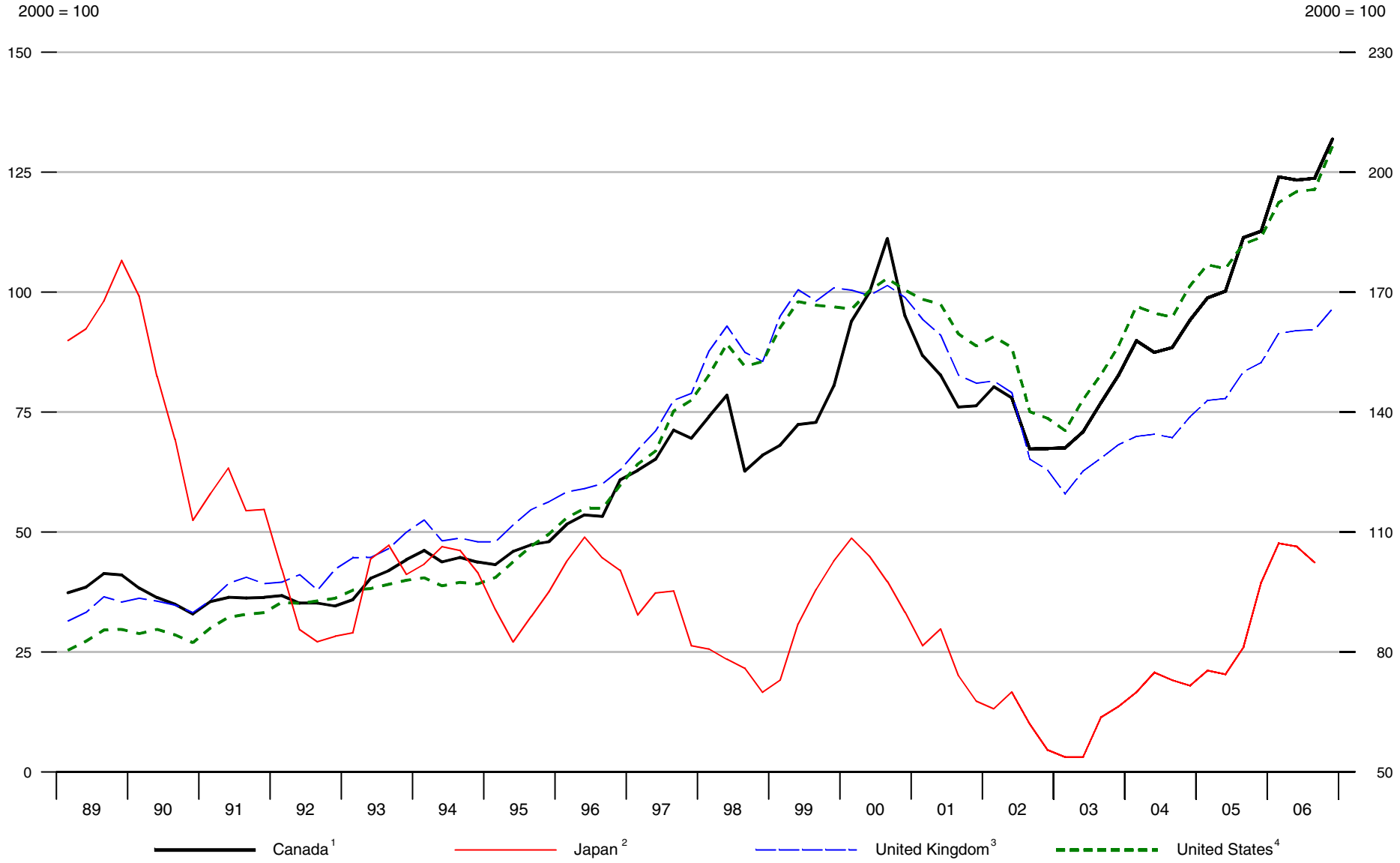
1 10-Year Government Bonds, 2 Composite of Long-Term Government Bonds

Long-Term Interest Rates for Euro Area, France, Germany, and Italy



[1] Weighted Average of 10-Year Government Bonds, [2] 10-Year Benchmark Bonds, [3] 7- to 15-Year Public Sector Bonds, [4] Government Bonds, 15- to 20-Year through 1990 and 10-Year starting in 1991

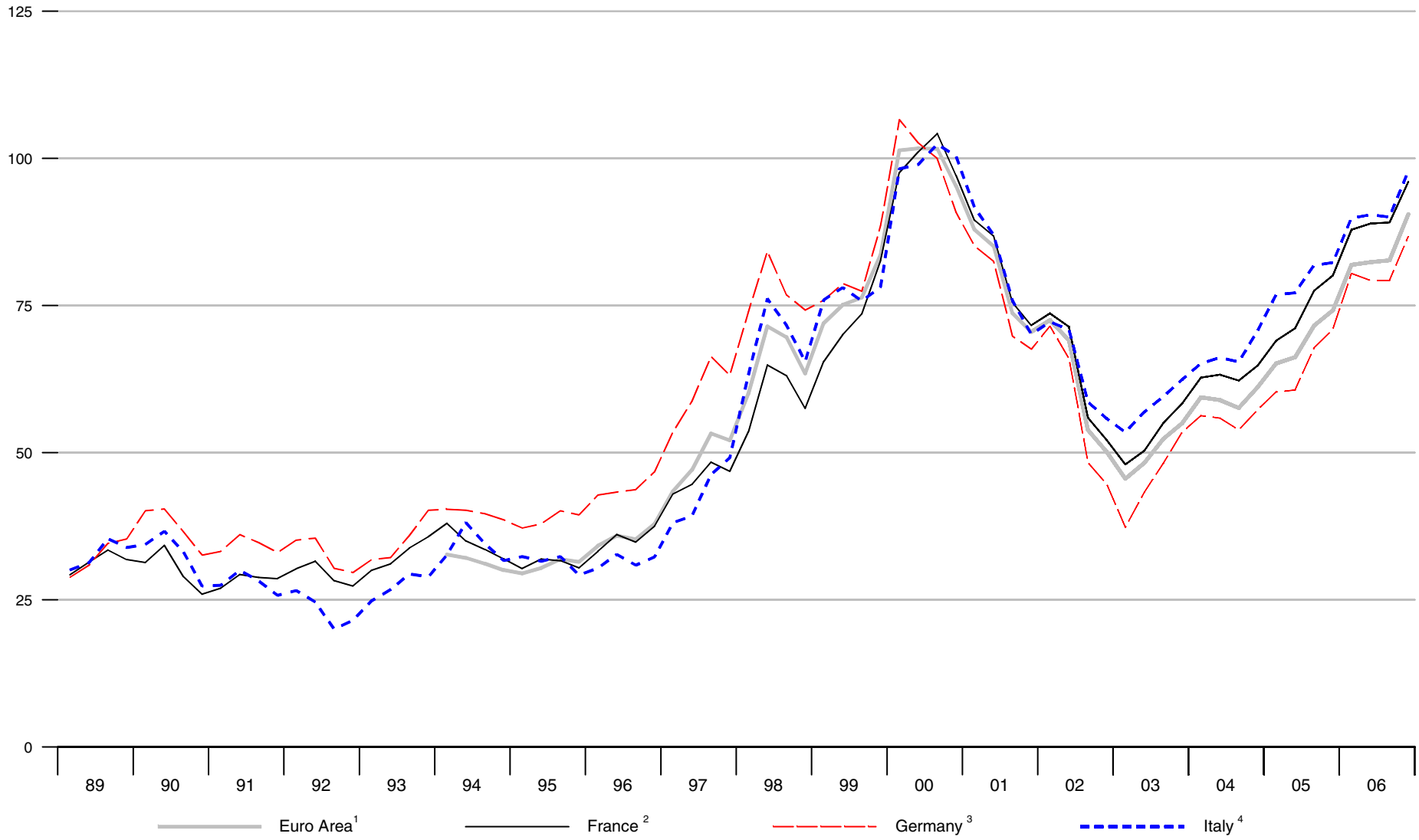
Stock Exchange Indices for Canada, Japan, United Kingdom, and United States



[1] Toronto Stock Exchange, Left Scale, [2] Tokyo Stock Exchange, Right Scale, [3] Financial Times Stock Exchange, Left Scale, [4] New York Stock Exchange, Left Scale

Stock Exchange Indices for Euro Area, France, Germany, and Italy

2000 = 100



[1] Dow Jones EURO STOXX℠, [2] SBF 250, [3] CDAX, [4] Milan Stock Exchange

Notes

Euro-Area Data: On January 1, 2001, the euro area was enlarged to include Greece as its 12th member country. Historical euro area series for capacity utilization, the consumer price index, current account balance, earnings, employment, government debt and budget balance, gross domestic product (GDP), industrial production, merchandise trade, the producer price index, and unemployment include Greece. The series for interest rates, monetary aggregates, the real effective exchange rate, retail sales, and the stock exchange index incorporate Greece starting in January 2001.

Euro-area interest rates prior to December 1998 are calculated on the basis of national government yields weighted by GDP. Starting in 1999, short-term rates are euro interbank offered rates. Long-term rates are calculated on the basis of national government bond yields weighted by the nominal outstanding amounts of government bonds in each maturity band.

The euro/dollar exchange rate used in the chart on page 12 is a synthetic rate prior to January 1999. This is constructed by calculating a weighted average of the exchange rates of the euro-area countries, excluding Greece and Luxembourg, against the dollar. The weights are based on 1997 GDP shares.

German Data: As a result of reunification, data for all of Germany are now incorporated in the statistical series. The starting periods for unified German data are listed below. Care should be exercised when interpreting the data around these break periods.

Third quarter 1990: current account balance, international trade, and unemployment.
First quarter 1991: consumer price index, GDP, industrial production, output per worker.
Third quarter 1992: capacity utilization.
First quarter 1993: stock exchange index.
Third quarter 1993: employment.
First quarter 1995: hourly earnings.

Capacity Utilization covers the manufacturing sector for Canada, France, Japan, the United Kingdom, the United States, and the euro area; manufacturing excluding food, beverage, and tobacco for Germany; and mining and manufacturing for Italy.

Consumer Price Index is for all items. The current index is based on goods and services consumed by all individuals for Canada; all multi-person households excluding those mainly engaged in agriculture, forestry, and fisheries for Japan; all households except pensioners dependent on state pension and high income households for the United Kingdom; and all urban households for the United States. Data for the euro area, France, Germany, and Italy are based on the harmonized index of consumer prices.

Current Account Balance is the sum of merchandise and service exports and income receipts on domestic assets abroad minus the sum of merchandise and service imports and income payments from foreign assets in the domestic economy plus net unilateral transfers.

Real Earnings are based on hourly earnings in manufacturing for Canada, Germany, the United States, and the euro area; hourly earnings in manufacturing excluding construction for France, hourly earnings in industry for Italy; monthly earnings in manufacturing for Japan; and weekly earnings in manufacturing for the United Kingdom.

The **Exchange Rate** for all countries except the United States is expressed as units of local currency per U.S. dollar. For the United States the trade-weighted exchange rate, **TWEX**, is used. This is a weighted average of the exchange value of the U.S. dollar relative to the major international currencies—the euro, Canadian dollar, Japanese yen, British pound, Swiss franc, Australian dollar, and Swedish kronor. Prior to 1999, the currencies of the euro-area countries (with the exception of Greece) are used instead of the euro.

Real Effective Exchange Rate uses normalized unit labor costs in manufacturing. The weighting scheme used to construct the rates, for all except the euro area, is based on disaggregated data for trade among 21 industrial countries in manufactured goods for 1995. For the euro area the weights relate to the trade of the euro area with the other countries. The weights reflect the relative importance of a country's trading partners in its direct bilateral trade relations and competition in third markets. Normalized unit labor costs in manufacturing are calculated by dividing an index of actual hourly compensation per worker by a five-year moving average index of output per man-hour.

Employment data refer to civilian employment for Canada, Germany, Italy, Japan, and the United States; industrial employment for France; and total employment for the euro area and the United Kingdom.

Foreign Exchange Reserve data are end of period. The dollar value of reserves may fluctuate as a result of changes in reserve holdings and/or changes in the value of the currencies held vis-à-vis the U.S. dollar.

Government Budget Balance is the difference between general government current receipts and total outlays. Total outlays consist of current expenditures and net capital expenditures. **Gross Government Debt** incorporates all financial liabilities of the general government sector. The general government sector consolidates the accounts of the central, state, local, and social security sectors. **Net Government Debt** measures the gross financial liabilities of the general government sector less the financial assets of the general government sector.

Industrial Production measures the change in the volume of output in the mining, manufacturing, oil, electricity, gas, and water industries.

The **Short-Term Interest Rate** table on page 4 uses the relevant 3-month interest rate shown in the country pages.

The **Long-Term Interest Rate** table on page 4 uses the government bond rate. The government bond rate is a composite of yields on federal government bonds with maturities of more than 10 years for the United States; long-term public and semi-public sector bonds for France; 7- to 15-year public sector bonds for Germany; 15- to 20-year government bonds through 1990 and 10-year government bonds starting in 1991 for Italy; and 10-year government bonds for Canada, the euro area, Japan, and the United Kingdom.

The **Reserve Money** table on page 4 refers to the adjusted monetary base for Japan and the United States; reserve money for Canada; and M0 for the United Kingdom. **Reserve Money** is currency in circulation, deposits of the deposit money banks, and demand deposits of other residents (with the exception of the central government) with the monetary authority.

Adjusted Monetary Base
Japan: currency in circulation and current deposits at the Bank of Japan.
United States: the sum of currency in circulation outside Federal Reserve banks and the U.S. Treasury, deposits of depository financial institutions at Federal Reserve banks, and an adjustment for the effects of changes in statutory reserve requirements on the quantity of base money held by depositories.

Notes and Coins in Circulation
United Kingdom: After reforming the rules governing bank reserves, the Bank of England discontinued its M0 series in May 2006 because the data would not be comparable to previous data. *IET* now presents a related series, "Notes and Coins in Circulation," in place of M0. The Bank of England directs interested parties to "Publication of narrow money data: the implication of money market reform" in its Autumn 2005 *Quarterly Bulletin* (http://www.bankofengland.co.uk/publications/quarterlybulletin/qb050304.pdf).

M1
Canada: currency in circulation and chartered bank net demand deposits.
Japan: cash, currency in circulation, and deposit money.
Euro area: currency in circulation and overnight deposits.

MZM
United States: currency in circulation, travelers' checks, total publicly-held checkable deposits minus cash items in the process of collection and Federal Reserve float, savings deposits, shares in retail money market mutual funds (funds with initial investments of less than $50,000), net of retirement accounts, and institutional money market mutual funds.

M2
Canada: M1 plus all checkable notice deposits and personal term deposits.
United Kingdom: currency in circulation and sterling retail deposits with the U.K. banks and building societies.
United States: MZM less institutional money market mutual funds plus small denomination (less than $100,000) time deposits.

M2 + CDs
Japan: M1 plus private deposits, public deposits less demand deposits, and certificates of deposit.

M3
Euro area: M1 plus deposits with a maturity up to 2 years, deposits redeemable at notice up to 3 months, repurchase agreements, money market funds, and debt securities up to 2 years.

M4
United Kingdom: M2 plus wholesale deposits with the U.K. banks and building societies.

Output Per Worker is the ratio of real GDP to employment.

Producer Price Index covers manufacturing for Canada and the United Kingdom; and total industry for Japan and the United States. Data for the euro area, France, Germany, and Italy are based on the harmonized index of total industry excluding construction.

Retail Sales are based on a volume index. The percent change in retail sales for the United States is based on the Standard Industrial Classification system through 1992 and the North American Industrial Classification System from 1993 on.

Stock Exchange Index refers to all share prices except for the United Kingdom, which excludes financial firms.

Unemployment Rate is the standardized unemployment rate. It is the percentage of the civilian labor force that is unemployed. The unemployed are all persons of working age who are without work, readily available for work, and actively seeking work. The standardized rate may differ from the national unemployment rate calculations.

Sources

Abbreviations
Board of Governors of the Federal Reserve System (BOG)
Bureau of Economic Analysis, U.S. Department of Commerce (BEA)
Bureau of Labor Statistics, U.S. Department of Labor (BLS)
International Monetary Fund, *International Financial Statistics* (IMF)
Organization for Economic Cooperation and Development,
Economic Outlook (OECD1)
Main Economic Indicators (OECD2)
National Accounts Quarterly (OECD3)

Canada
Bank of Canada: M1 and M2.
BOG: exchange rate.
IMF: foreign exchange reserves, merchandise and service trade, real effective exchange rate, and reserve money.
OECD1: gross government debt, net government debt, and budget balance.
OECD2: capacity utilization, consumer price index, current account balance, GDP, hourly earnings, industrial production, interest rates, producer price index, retail sales, stock exchange index, and unemployment rate.
Statistics Canada: employment.

Euro Area
European Central Bank: currrent account balance and employment .
Eurostat: capacity utilization, consumer price index, GDP, interest rates, merchandise trade, producer price index, and retail sales.
Haver Analytics: synthetic euro exchange rate.
IMF: real effective exchange rate.
OECD1: gross government debt, net government debt, and budget balance.
OECD2: hourly earnings, industrial production, M1, M3, stock exchange index, and unemployment.

France
BOG: exchange rate.
Eurostat: capacity utilization, consumer price index, and producer price index.
IMF: foreign exchange reserves, merchandise and service trade, and real effective exchange rate.
Institut National de la Statistique et des Etudes Economiques: employment.
OECD1: gross government debt, net government debt, and budget balance.
OECD2: current account balance, GDP, hourly earnings, industrial production, retail sales, interest rates, stock exchange index, and unemployment.

Germany
BOG: exchange rate.
Bundesanstalt Fur Arbeit: employment.
Eurostat: capacity utilization, consumer price index, and producer price index.
IMF: foreign exchange reserves, merchandise and service trade, and real effective exchange rate.
OECD1: gross government debt, net government debt, and budget balance.
OECD2: current account balance, GDP, hourly earnings, industrial production, M1, M3, retail sales, interest rates, stock exchange index, and unemployment.

Italy
BOG: exchange rate.
Eurostat: capacity utilization, consumer price index, and producer price index.
IMF: foreign exchange reserves, merchandise and service trade, and real effective exchange rate.
Instituto Nazionale di Statistica: employment.
OECD1: gross government debt, net government debt, and budget balance.
OECD2: current account balance, GDP, hourly earnings, industrial production, long-term interest rates, retail sales, stock exchange index, and unemployment.

Japan
Bank of Japan: adjusted monetary base and long-term interest rate.
BOG: exchange rate.
IMF: foreign exchange reserves, merchandise and service trade, and real effective exchange rate.
OECD1: gross government debt, net government debt, and budget balance.
OECD2: capacity utilization, consumer price index, current account balance, employment, GDP, hourly earnings, industrial production, M1, M2, producer price index, retail sales, short-term interest rate, stock exchange index, and unemployment.

United Kingdom
Bank of England: M2.
BOG: exchange rate.
IMF: foreign exchange reserves, merchandise and service trade, and real effective exchange rate.
OECD1: gross government debt, net government debt, and budget balance.
OECD2: capacity utilization, consumer price index, current account balance, GDP, industrial production, interest rates, M4, producer price index, retail sales, stock exchange index, unemployment, and weekly earnings.
U.K. Office for National Statistics: employment and Notes and Coins in Circulation.

United States
BOG: capacity utilization, exchange rate, industrial production index, M2, and interest rates.
BEA: GDP, current account balance, merchandise and service trade, and retail sales.
BLS: employment, consumer price index, and producer price index.
Federal Reserve Bank of St. Louis: adjusted monetary base and MZM.
IMF: foreign exchange reserves and real effective exchange rate.
OECD1: gross government debt, net government debt, and budget balance.
OECD2: hourly earnings, stock exchange index, and unemployment.