



## International Travel: Double Trouble

The number of passengers on U.S. airlines fell sharply between 2000 and 2001. For example, the number of revenue passengers enplaned on international flights declined from 55.5 million to approximately 52.7 million.<sup>1</sup> The following discussion focuses on the reasons for this decline and provides some historical perspective by examining previous declines.

The decline in international passenger travel can be linked to two developments during 2001. First, the U.S. economy entered into recession in March 2001. Second, the events on 9/11 and the resulting war on terrorism have intensified concerns about safety.

With regard to the first development, growth in international passenger travel is strongly linked to growth in economic activity. Higher incomes provide the purchasing power to undertake more international travel. Both international leisure and business travel tend to rise as incomes rise and, conversely, decline as incomes decline. The figure shows, for each of the past 30 years, the annual percentage change in international passenger traffic over the routes of U.S. airlines. In eight years—1974, 1975, 1980, 1981, 1982, 1991, 1999, and 2001—international passenger traffic declined. Excluding the negligible decline in 1999, each year of decline can be connected to a recession in the United States using the National Bureau of Economic Research's dating of recessions.

International passenger travel declined approximately 5.2 percent in 2001. This decline is less than the declines associated with the November 1973–March 1975 recession—6.4 percent in 1974 and 8.0 percent in 1975—and the combined declines associated with the double-dip recession of the early 1980s—0.4 percent in 1980, 14.1 percent in 1981, and 4.4 percent in 1982. At this point, it is somewhat more than the 4.9 percent decline associated with the July 1990–March 1991 recession. One factor mitigating some of the current decline is that the 2001 recession was mild compared with the prior recessions.

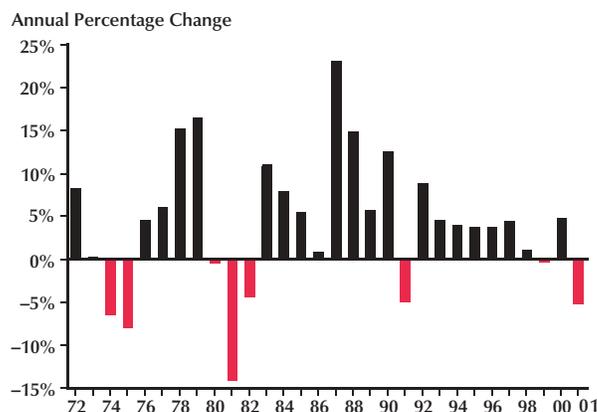
An examination of monthly data shows a decline to virtually no growth in international passenger travel in the months following the onset of the recession in March 2001. Likely, though, a substantial portion of the decline in international travel in 2001 is due to safety concerns. Sharp declines in international travel began after the events of 9/11 and continued throughout the fourth quarter, a quarter in which real gross domestic product increased at an annual rate of 1.7 percent.

What, then, is in store for 2002? Most forecasters predict a strong U.S. recovery. Such a development should promote a rebound in international travel. On the other hand, the war on terrorism continues. The recent escalation of violence in Israel is an additional factor complicating international travel plans. The resulting concerns about safety are likely to alter the travel plans of some potential travelers. Thus, the conditions for international travel will likely continue to be somewhat unfriendly.

—Cletus C. Coughlin

<sup>1</sup>Data were obtained from the Air Transport Association (ATA). Because annual data for 2001 were not yet available in mid-April 2002, monthly data were used to construct an estimate. "Revenue passengers enplaned" is defined by the ATA as the number of revenue-generating passengers boarding an aircraft for scheduled service (including origination, stopover, and any connections).

### International Revenue Passengers Enplaned



SOURCE: Air Transport Association (ATA).

# Table of Contents

---

Page	
3	Reference Tables
5	Canada
11	Euro Area
16	France
20	Germany
24	Italy
28	Japan
34	United Kingdom
40	United States
46	Notes and Sources

## **Conventions used in this publication:**

1. Charts and tables contain data that were current through April 2002. 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.

NOTES: 1. Because data are no longer available for some countries, we have ceased publication of the "Savings and Investment" charts. We have replaced these charts with "Inflation" charts that show changes in the consumer and producer price indexes.

2. We have expanded our historical coverage of the euro area.

3. Consumer price inflation for France, Germany, and Italy is now based on the harmonized index of consumer prices.

We welcome your comments addressed to:

Editor, *International Economic Trends*  
Research Division  
Federal Reserve Bank of St. Louis  
P.O. Box 442  
St. Louis, MO 63166

or to:

[webmaster@stls.frb.org](mailto:webmaster@stls.frb.org)

### Real Gross Domestic Product

Percent change from year ago

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	5.05	5.38	5.09	5.03	4.78	4.42	3.51	2.28	2.04	0.78	0.86	.
Euro Area	2.17	2.77	3.66	3.60	3.89	3.18	2.79	2.44	1.64	1.41	0.59	.
France	2.55	2.93	3.75	3.75	3.75	3.42	3.31	2.91	2.22	2.11	0.90	.
Germany	0.97	2.05	3.03	2.92	4.37	3.18	2.48	1.84	0.70	0.43	0.02	.
Italy	1.14	1.44	2.89	3.39	3.06	2.63	2.40	2.49	2.18	1.78	0.78	.
Japan	1.27	2.06	0.58	3.63	2.32	0.72	2.33	1.35	-0.64	-0.46	-1.89	.
United Kingdom	1.64	2.30	2.75	3.03	3.50	3.00	2.65	2.90	2.37	2.02	1.55	.
United States	3.89	4.02	4.41	4.23	5.22	4.38	2.81	2.55	1.22	0.54	0.48	1.58

### Nominal Gross Domestic Product

Percent change from year ago

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	5.81	8.02	8.13	9.02	8.90	8.16	7.11	6.08	4.08	0.77	-0.12	.
Euro Area	4.28	4.44	4.72	4.79	5.03	4.61	4.30	4.59	4.13	3.66	3.15	.
France	2.87	3.31	4.07	4.52	4.32	4.20	4.42	3.99	4.01	4.03	2.53	.
Germany	1.64	2.33	3.13	2.64	3.60	2.93	2.13	2.76	2.12	1.23	2.03	.
Italy	3.00	2.86	4.15	5.31	5.55	5.03	4.34	5.04	4.57	4.19	4.07	.
Japan	0.09	0.42	-1.26	1.68	0.14	-1.02	0.31	-0.54	-2.14	-1.85	-2.99	.
United Kingdom	4.55	4.79	5.24	4.88	5.45	4.86	4.20	5.12	4.80	4.54	4.33	.
United States	5.34	5.45	5.99	6.33	7.60	6.88	5.31	4.89	3.50	2.89	2.35	2.86

### Consumer Price Index

Percent change from year ago

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	1.59	2.14	2.36	2.68	2.44	2.70	3.08	2.79	3.59	2.69	1.10	.
Euro Area	1.07	1.16	1.55	2.13	2.02	2.50	2.69	2.36	3.11	2.53	2.24	2.49
France	0.39	0.47	0.99	1.58	1.56	2.03	2.05	1.44	2.31	2.01	1.53	2.18
Germany	0.48	0.66	1.09	1.97	1.74	2.12	2.43	2.40	3.16	2.47	1.71	.
Italy	1.46	1.71	2.00	2.40	2.58	2.63	2.81	2.06	2.88	2.20	2.28	2.47
Japan	-0.23	-0.01	-0.99	-0.63	-0.66	-0.64	-0.76	-0.45	-0.72	-0.78	-0.99	.
United Kingdom	1.42	1.17	1.45	2.31	3.14	3.19	3.07	2.55	1.91	1.80	1.04	.
United States	2.15	2.33	2.62	3.22	3.31	3.53	3.38	3.41	3.38	2.66	1.89	1.25

### Employment

Percent change from year ago

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	2.81	2.70	2.75	3.00	2.74	2.35	2.30	1.60	1.41	1.03	0.42	0.96
Euro Area	1.65	1.63	1.63	1.72	2.01	2.07	2.15	2.19	1.86	1.52	.	.
France	2.37	2.66	3.13	3.33	3.71	3.84	3.87	3.50	2.83	2.09	1.49	.
Germany	0.92	1.25	1.28	1.71	2.17	1.47	1.18	0.62	0.19	0.07	-0.19	.
Italy	0.61	0.64	1.22	1.22	1.52	2.01	1.99	2.11	1.49	1.36	1.29	.
Japan	-1.09	-0.66	-0.22	-0.46	-0.38	-0.37	0.22	0.43	-0.42	-0.82	-1.30	.
United Kingdom	1.47	1.79	1.98	1.71	1.72	1.16	1.33	1.13	0.86	0.60	0.30	.
United States	1.50	1.54	1.50	1.58	1.51	1.05	1.01	0.60	-0.02	-0.11	-0.99	-1.41

### Unemployment Rate

Percent

	99.1	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4
Canada	7.88	7.87	7.52	6.97	6.77	6.69	6.92	6.87	6.95	7.04	7.20	7.66
Euro Area	10.20	9.90	9.70	9.40	9.20	8.90	8.70	8.50	8.40	8.30	8.30	8.40
France	11.20	10.97	10.58	10.17	9.77	9.39	9.07	8.78	8.60	8.57	8.61	8.78
Germany	8.75	8.68	8.57	8.38	8.12	7.96	7.84	7.73	7.75	7.82	7.89	8.02
Italy	11.46	11.34	11.12	11.00	10.88	10.56	10.24	9.93	9.68	9.53	9.42	9.22
Japan	4.61	4.72	4.73	4.64	4.80	4.68	4.66	4.78	4.74	4.88	5.11	5.43
United Kingdom	6.11	5.95	5.82	5.81	5.69	5.41	5.30	5.20	5.01	4.91	5.02	5.08
United States	4.27	4.26	4.25	4.10	4.02	4.00	4.06	3.97	4.19	4.47	4.84	5.61

**Reserve Money**

Percent change from year ago

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	8.03	9.07	24.95	7.11	4.90	1.77	-8.09	3.19	6.94	7.26	4.16	.
Japan	6.41	7.39	14.92	10.72	6.38	4.06	-1.17	0.99	7.56	13.83	17.77	32.72
United Kingdom	6.87	7.66	9.42	9.72	8.05	7.61	6.57	6.86	6.93	6.90	7.66	.
United States	8.75	9.09	12.87	10.57	7.36	5.56	0.64	1.97	4.25	7.61	8.49	9.62

**Narrow Money**

Percent change from year ago

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	2.21	2.08	3.08	9.94	15.21	17.71	18.01	13.05	11.24	8.02	13.72	.
Euro Area	12.15	13.15	11.37	10.62	7.47	6.60	4.98	1.43	4.24	4.92	5.88	.
Japan	11.55	13.00	12.12	10.65	8.38	5.14	3.95	5.06	7.71	11.03	14.31	.
United Kingdom	6.76	7.04	7.31	6.80	6.80	6.82	7.08	8.43	9.48	9.86	9.57	.
United States	13.48	12.24	9.54	8.38	7.71	7.99	8.21	10.84	14.42	17.03	20.57	17.79

**Broad Money**

Percent change from year ago

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	2.46	2.93	3.76	5.65	7.09	7.52	7.11	5.70	5.13	4.33	5.65	.
Euro Area	4.67	5.28	5.78	6.87	5.58	5.28	4.26	3.82	5.66	6.77	8.43	.
Japan	4.30	3.32	2.70	1.94	1.87	1.98	1.94	2.51	2.92	3.18	3.36	.
United Kingdom	5.58	3.15	4.03	5.34	6.89	8.97	8.48	8.26	7.50	7.71	6.51	.
United States	7.98	7.64	6.32	6.00	6.11	6.06	6.14	7.12	8.06	9.50	10.40	9.19

**Short-Term Interest Rates**

Percent

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	4.70	4.82	5.04	5.28	6.12	5.90	5.81	5.10	4.48	3.95	2.39	2.11
Euro Area	2.64	2.70	3.43	3.54	4.26	4.74	5.02	4.75	4.59	4.27	3.44	3.36
Japan	0.11	0.09	0.29	0.11	0.08	0.27	0.54	0.36	0.04	0.04	0.04	0.12
United Kingdom	5.20	5.19	5.89	6.12	6.19	6.12	5.99	5.63	5.23	4.92	4.09	.
United States	4.98	5.38	6.06	6.03	6.57	6.63	6.59	5.26	4.10	3.34	2.06	1.82

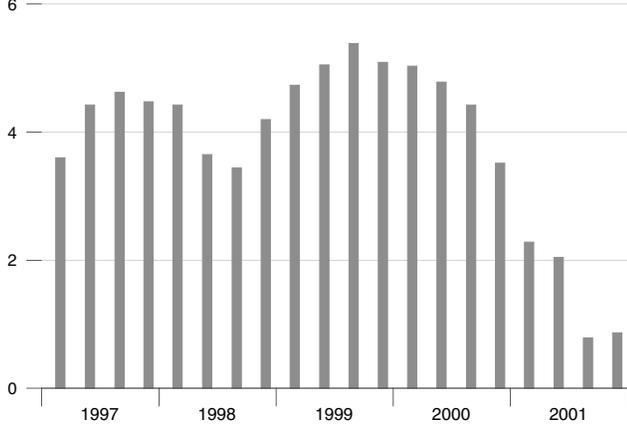
**Long-Term Interest Rates**

Percent

	99.2	99.3	99.4	00.1	00.2	00.3	00.4	01.1	01.2	01.3	01.4	02.1
Canada	5.49	5.78	6.21	6.20	5.96	5.81	5.72	5.67	5.95	5.90	5.64	5.77
Euro Area	4.26	5.05	5.32	5.62	5.43	5.44	5.28	4.99	5.19	5.12	4.82	.
France	4.55	5.20	5.71	5.93	5.90	5.99	5.75	5.48	5.55	5.34	5.15	.
Germany	4.07	4.87	5.16	5.46	5.26	5.25	5.08	4.75	4.96	4.88	4.60	4.98
Italy	4.34	5.12	5.38	5.69	5.55	5.59	5.48	5.16	5.37	5.27	4.94	5.25
Japan	1.39	1.79	1.78	1.79	1.71	1.79	1.74	1.39	1.28	1.36	1.35	1.41
United Kingdom	4.89	5.45	5.50	5.60	5.30	5.28	5.05	4.81	5.09	5.04	4.78	.
United States	6.04	6.34	6.55	6.54	6.29	6.06	5.85	5.56	5.81	5.59	5.44	5.70

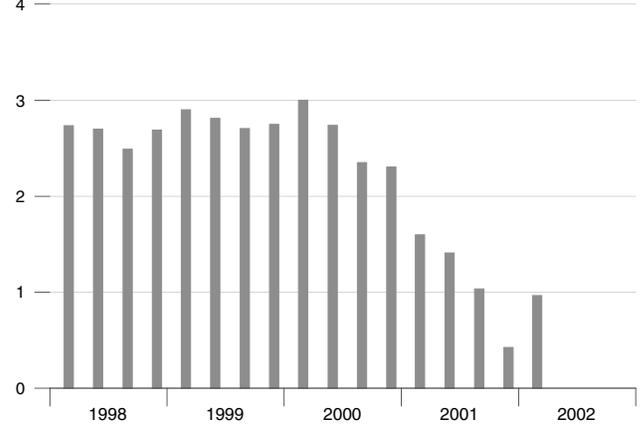
**Real GDP**

Percent change from year ago  
6



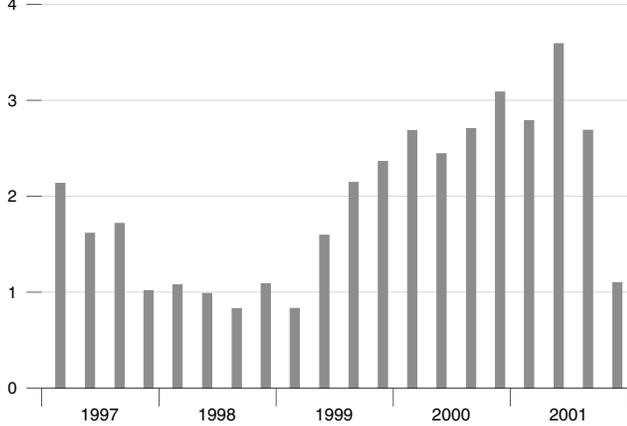
**Employment**

Percent change from year ago  
4



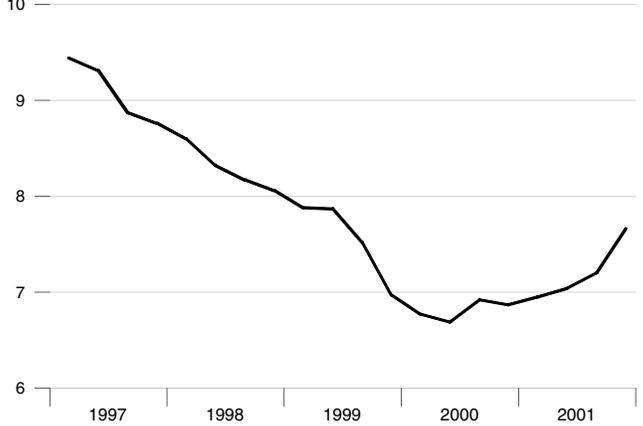
**Consumer Price Index**

Percent change from year ago  
4



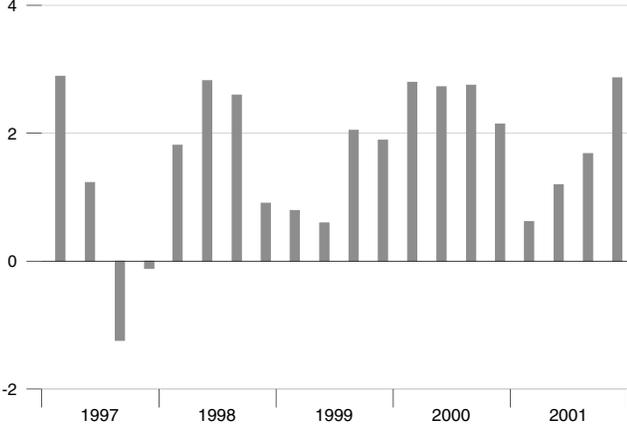
**Unemployment Rate**

Percent  
10



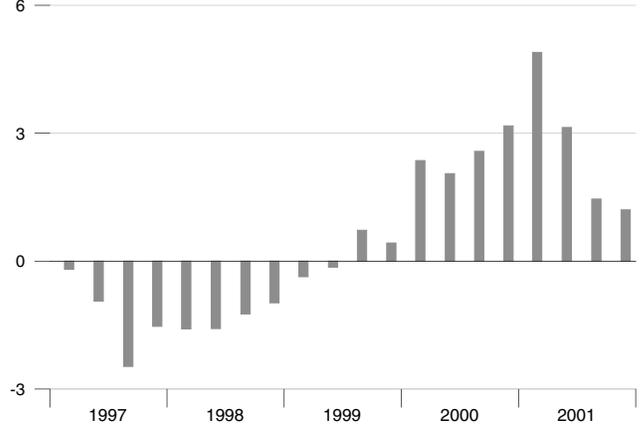
**Hourly Earnings**

Percent change from year ago  
4



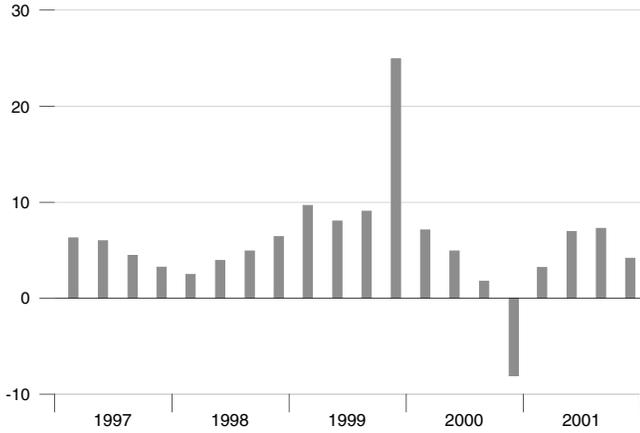
**Current Account Balance**

Percent of GDP  
6



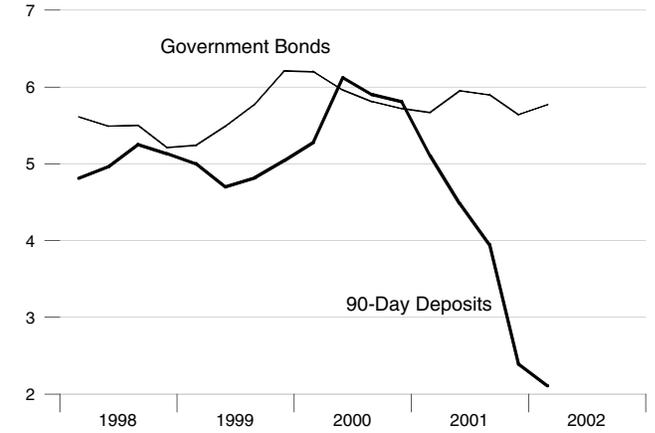
### Reserve Money

Percent change from year ago



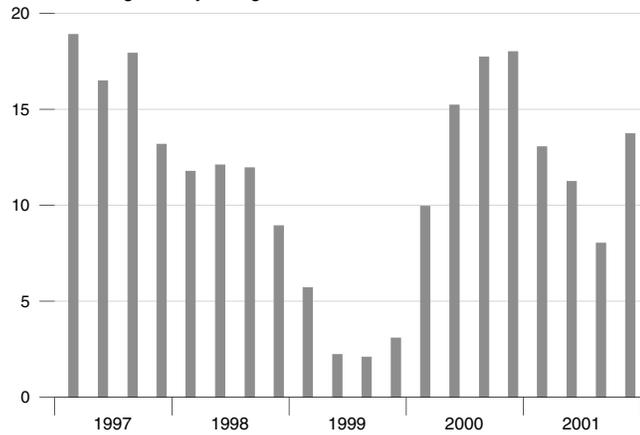
### Interest Rates

Percent



### M1

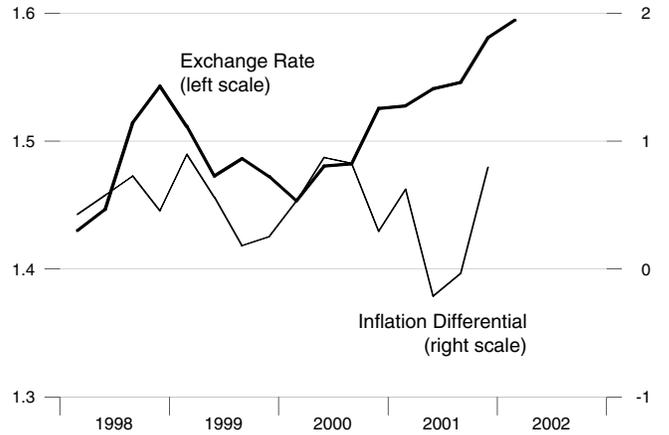
Percent change from year ago



### Exchange Rate and Inflation Differential

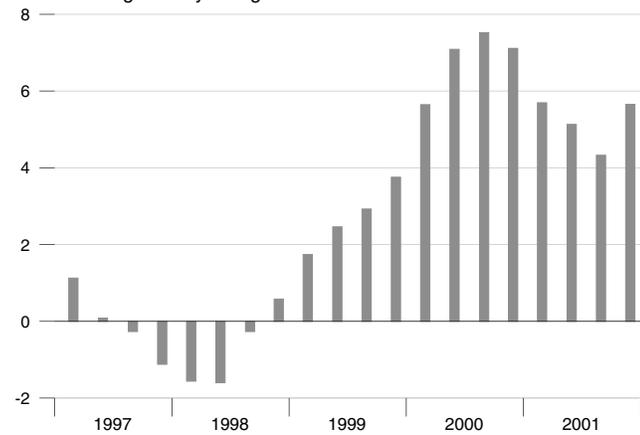
C\$/US\$

Percent



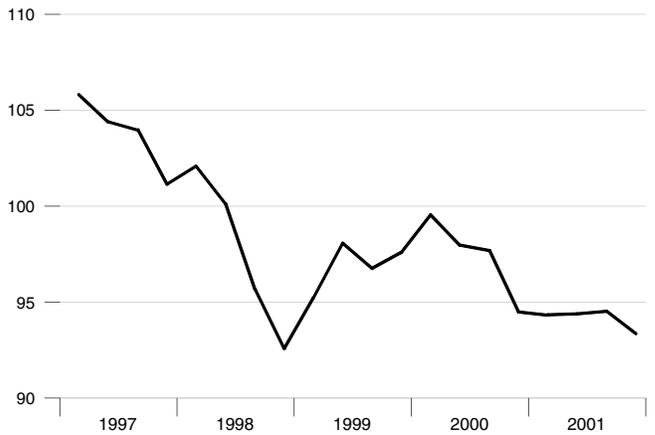
### M2

Percent change from year ago



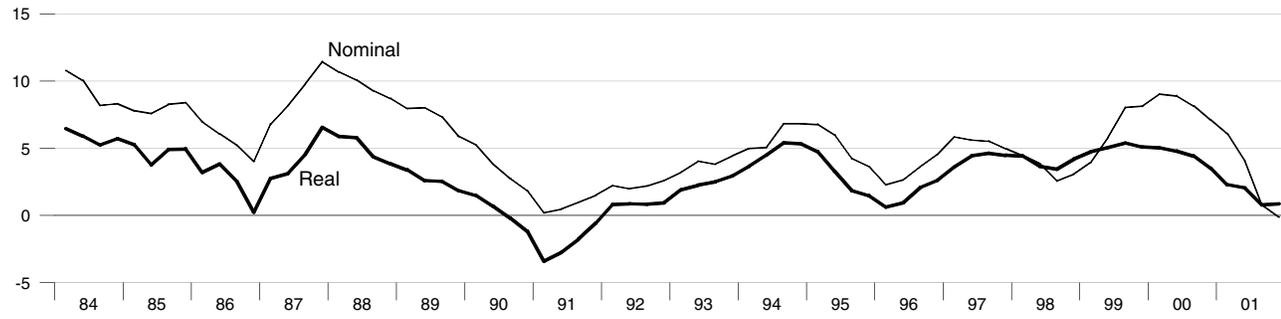
### Real Effective Exchange Rate

Index 1995 = 100



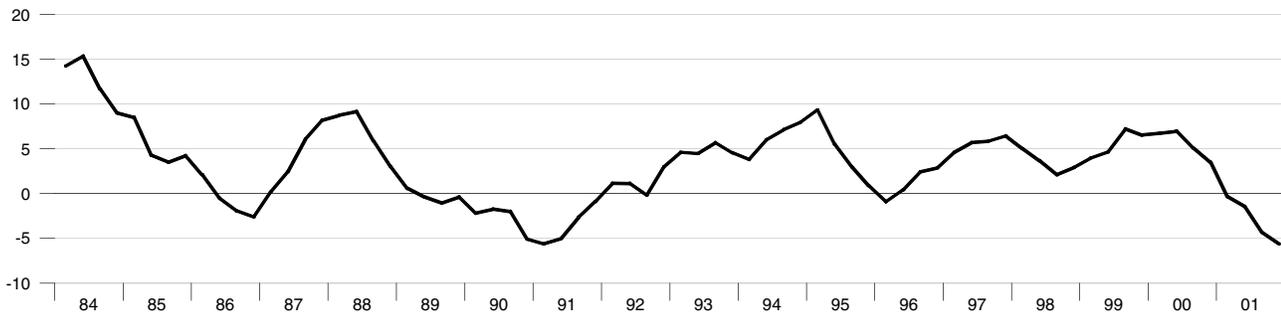
**GDP**

Percent change from year ago



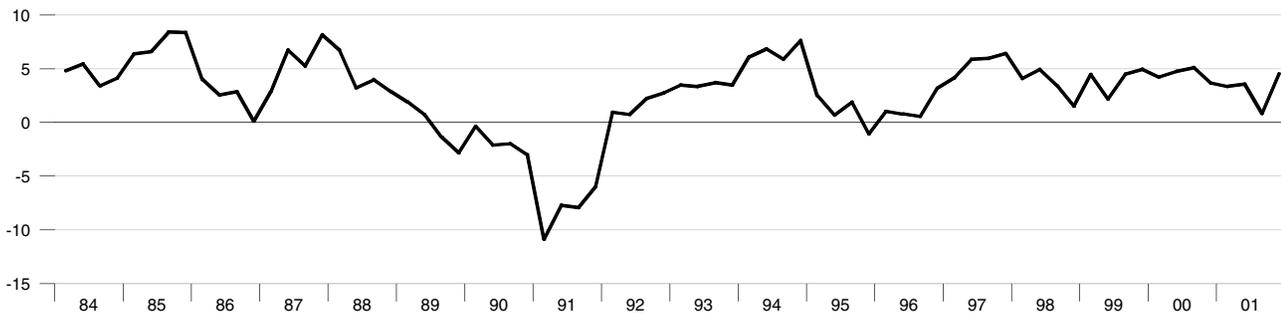
**Industrial Production**

Percent change from year ago



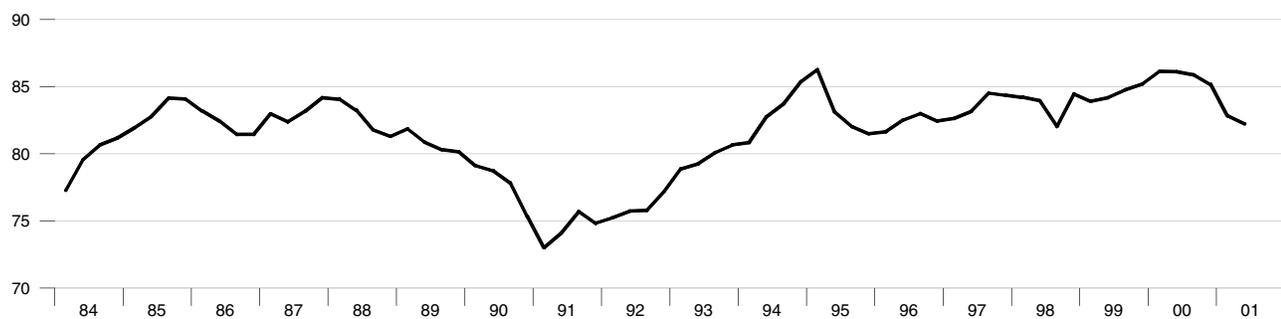
**Retail Sales**

Percent change from year ago



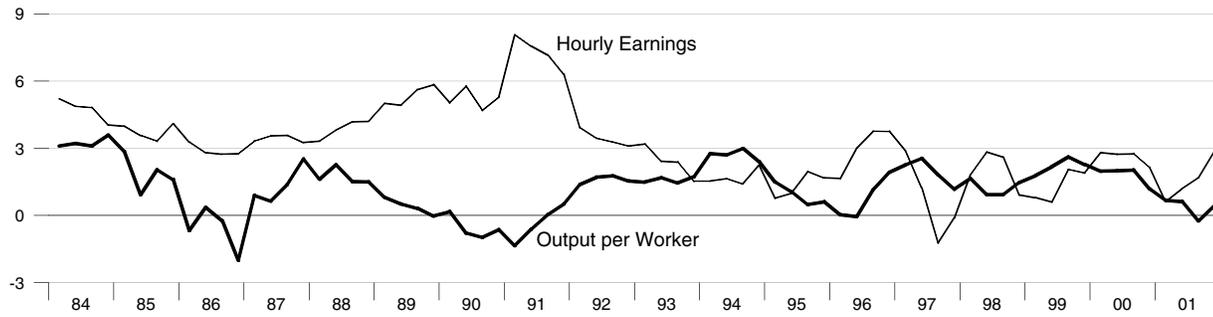
**Capacity Utilization**

Percent



### Hourly Earnings and Output per Worker

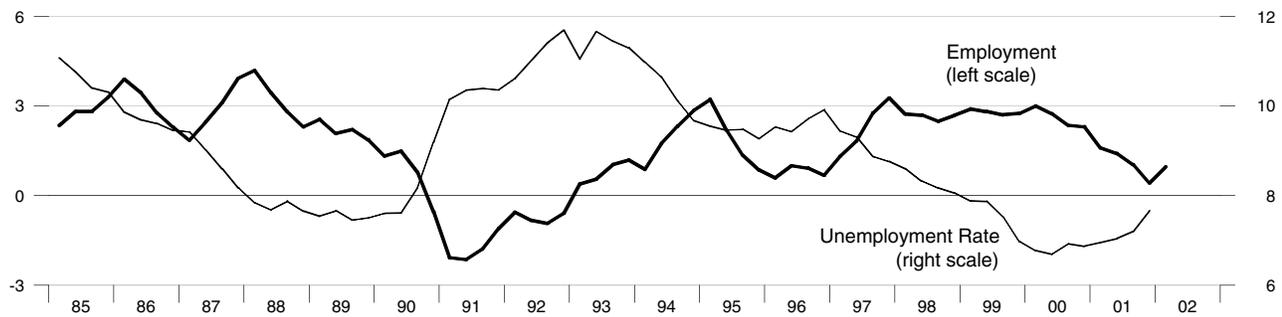
Percent change from year ago



### Labor Force Indicators

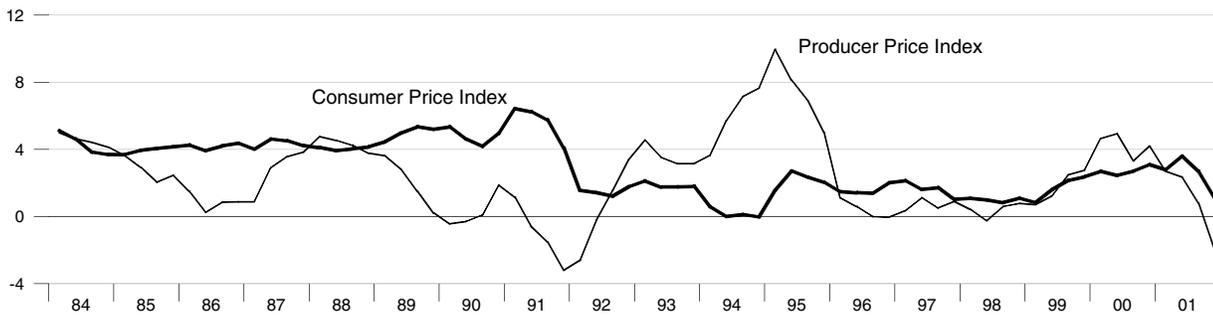
Percent change from year ago

Percent



### Inflation

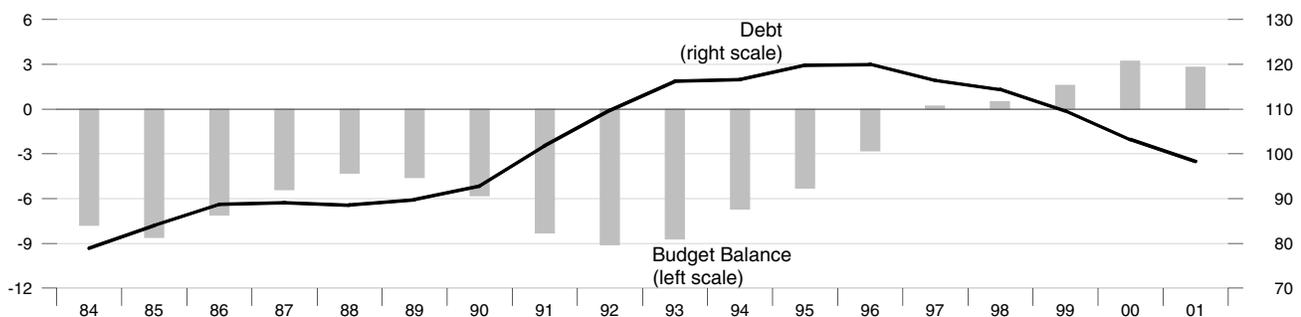
Percent change from year ago



### Government Debt and Budget Balance

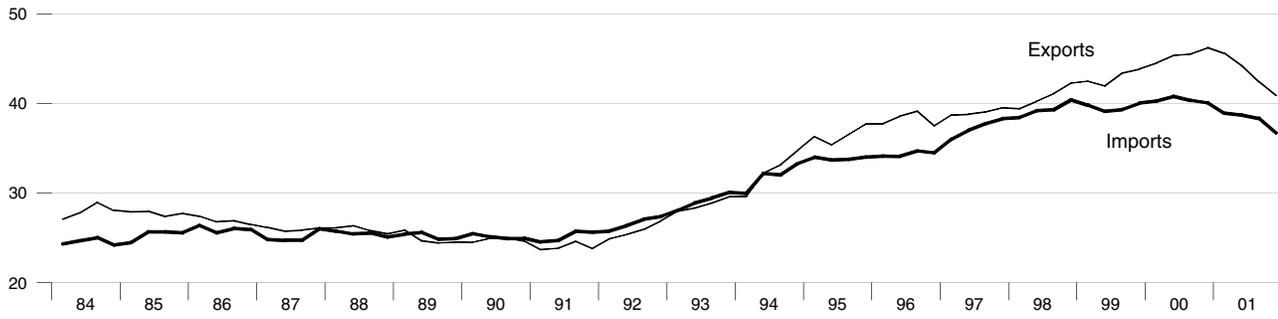
Percent of GDP, annual data

Percent of GDP, annual data



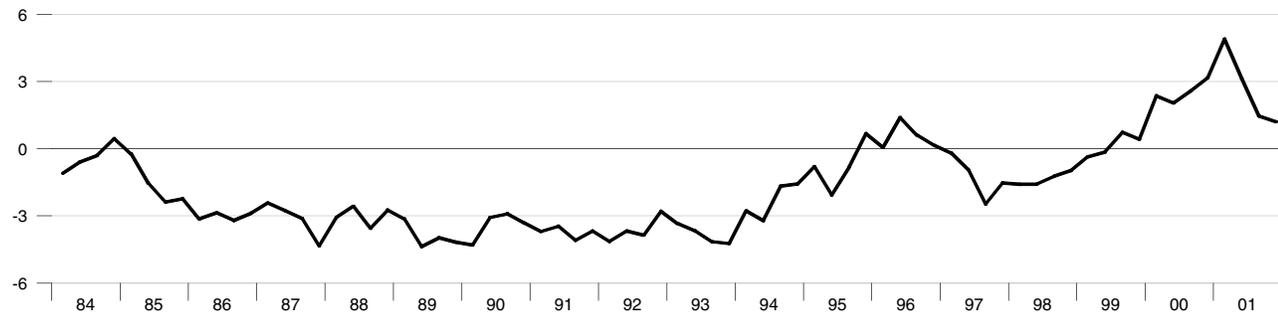
### International Trade - Goods and Services

Percent of GDP



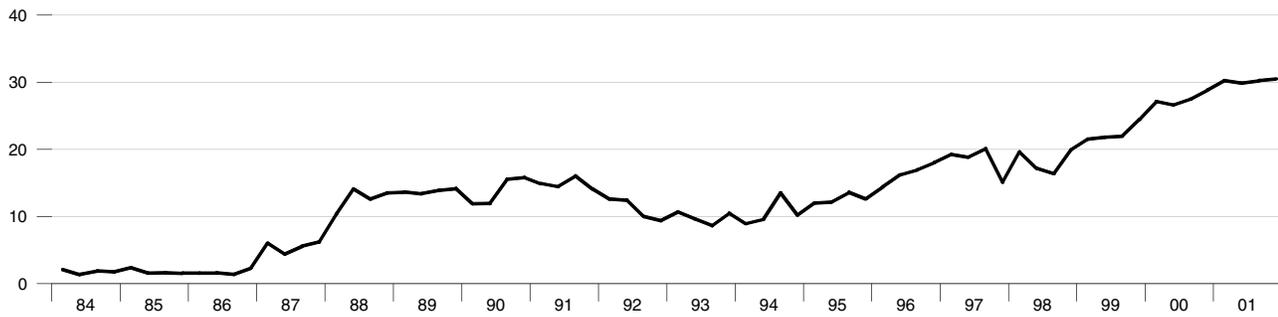
### Current Account Balance

Percent of GDP



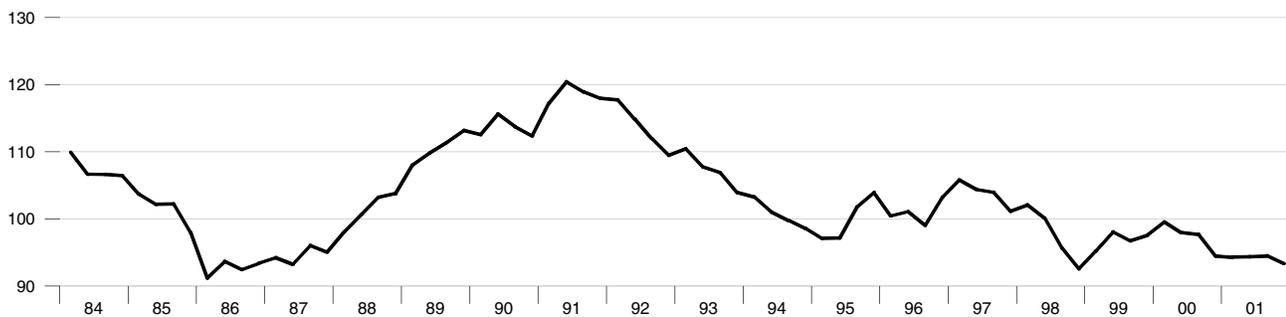
### Foreign Exchange Reserves

Billions of US\$



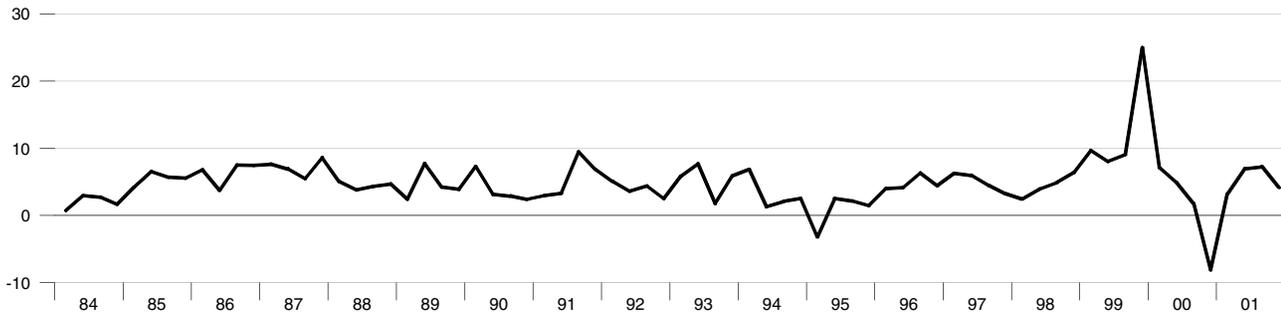
### Real Effective Exchange Rate

Index 1995 = 100



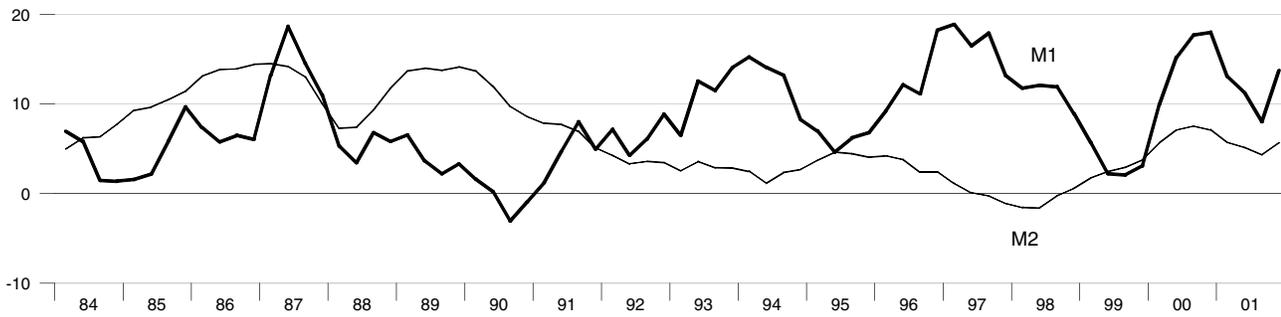
**Reserve Money**

Percent change from year ago



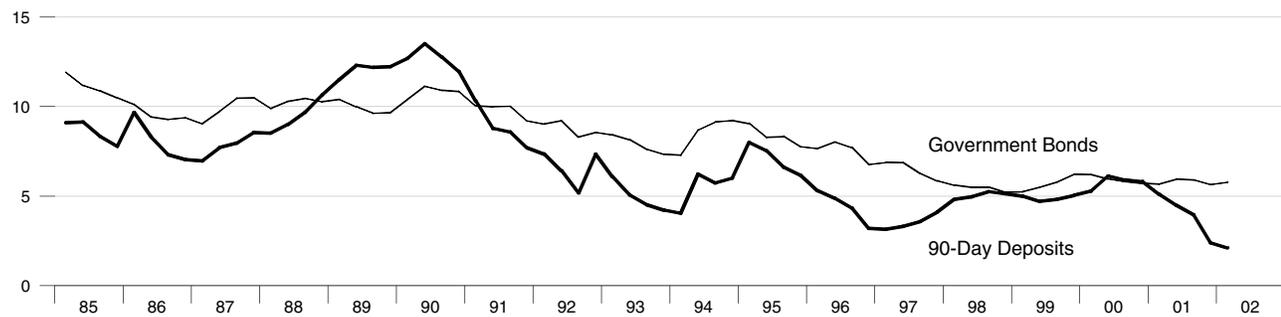
**Monetary Aggregates**

Percent change from year ago



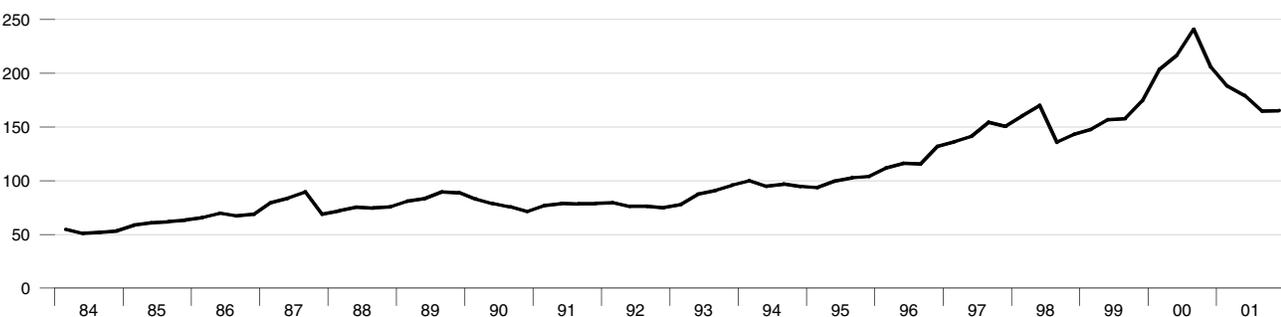
**Interest Rates**

Percent



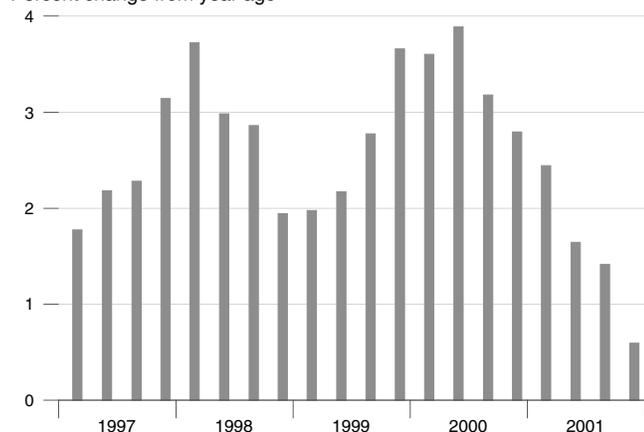
**Stock Exchange Index - Toronto Stock Exchange**

1995 = 100



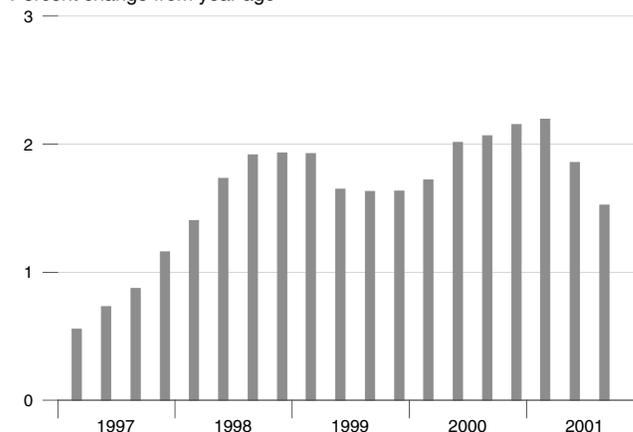
### Real GDP

Percent change from year ago



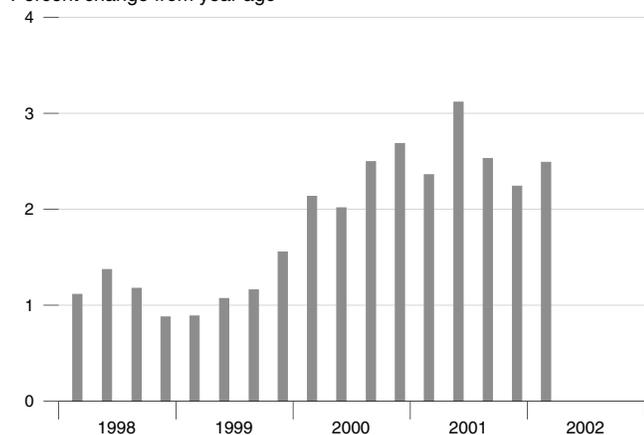
### Employment

Percent change from year ago



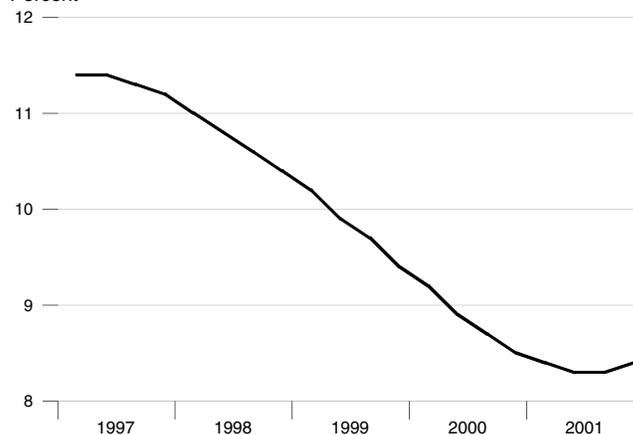
### Consumer Price Index

Percent change from year ago



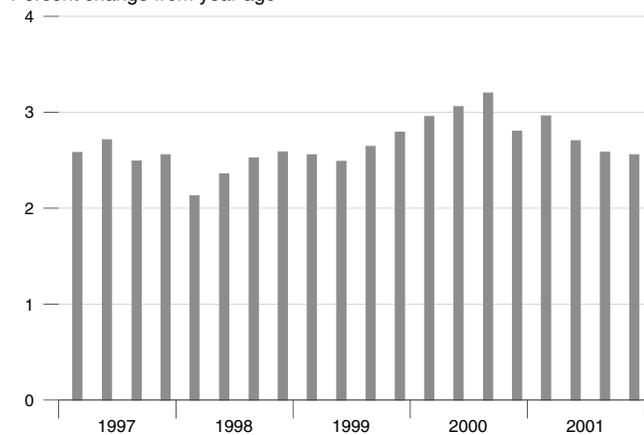
### Unemployment Rate

Percent



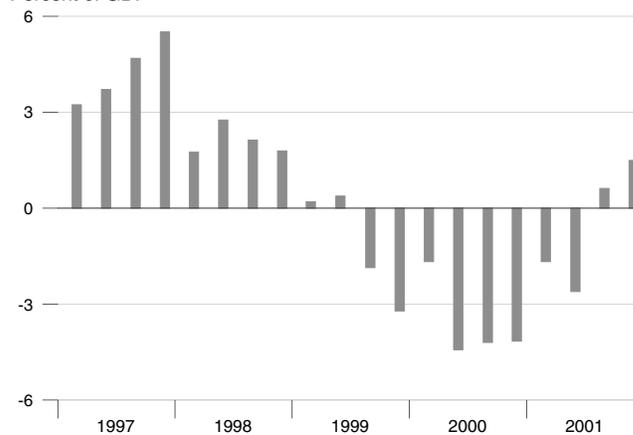
### Hourly Earnings

Percent change from year ago



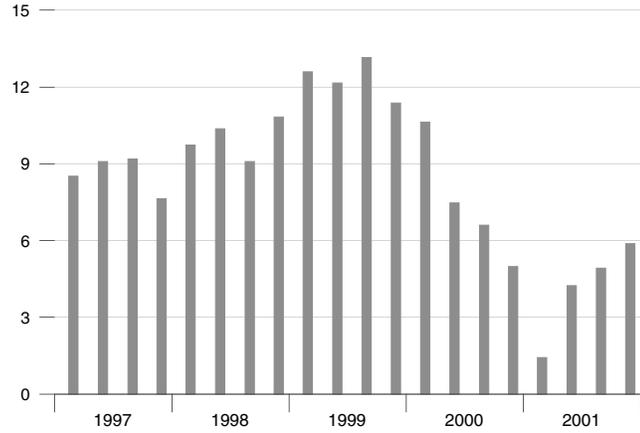
### Current Account Balance

Percent of GDP



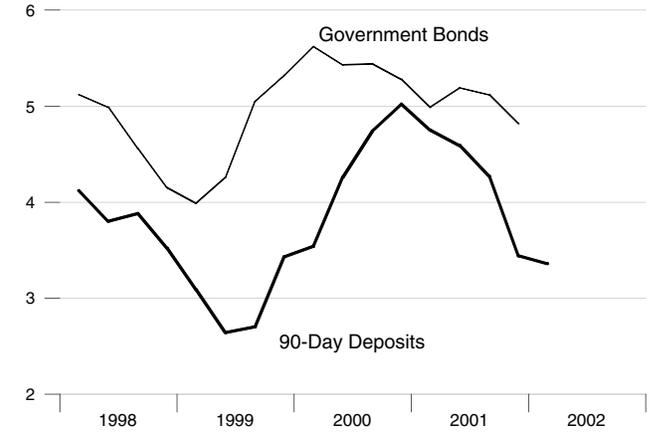
**M1**

Percent change from year ago



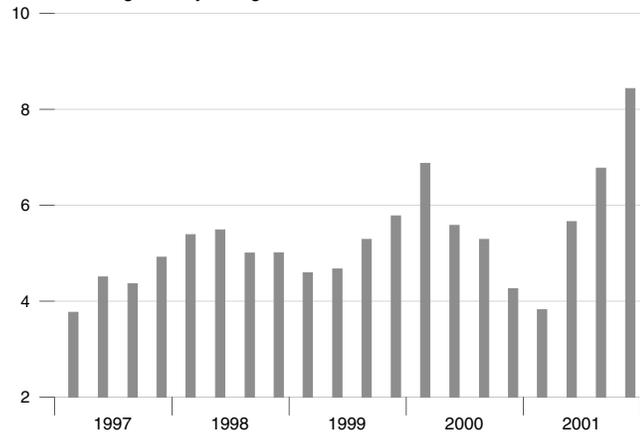
**Interest Rates**

Percent



**M3**

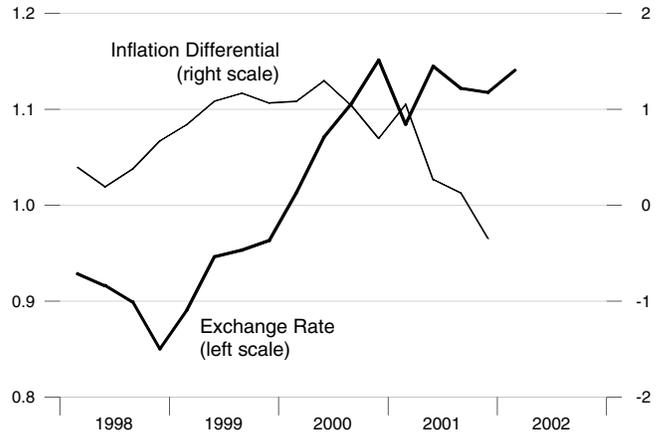
Percent change from year ago



**Exchange Rate and Inflation Differential**

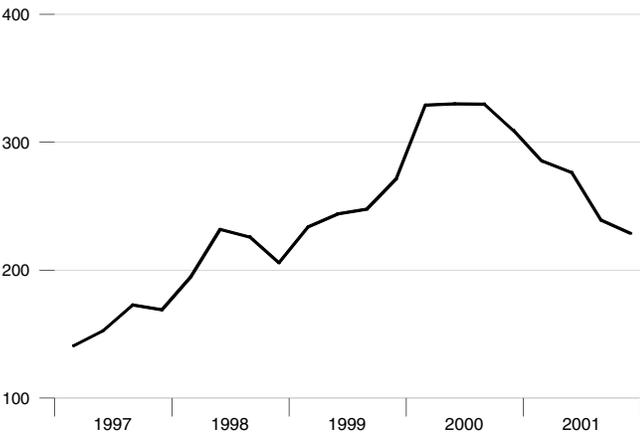
Euro/US\$

Percent



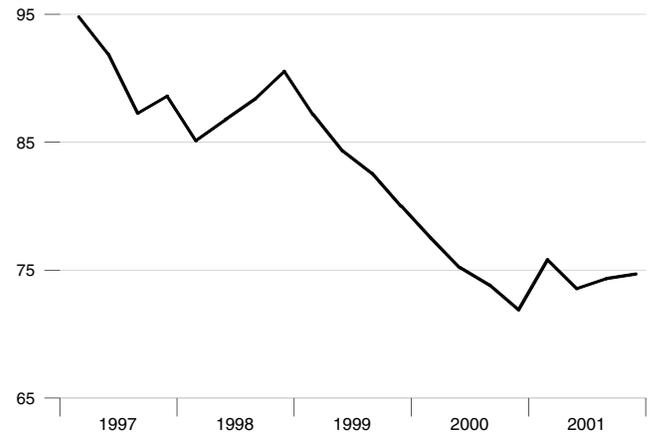
**Stock Exchange Index - Dow Jones EURO STOXX<sup>SM</sup>**

1995 = 100



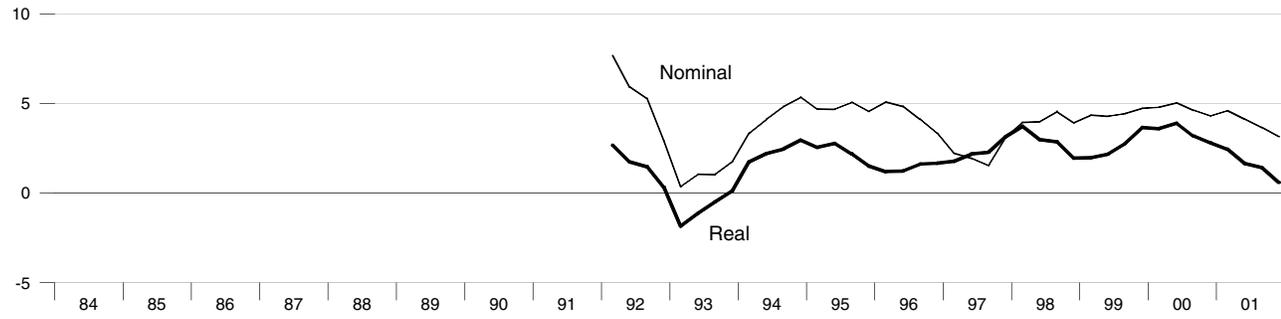
**Real Effective Exchange Rate**

Index 1995 = 100



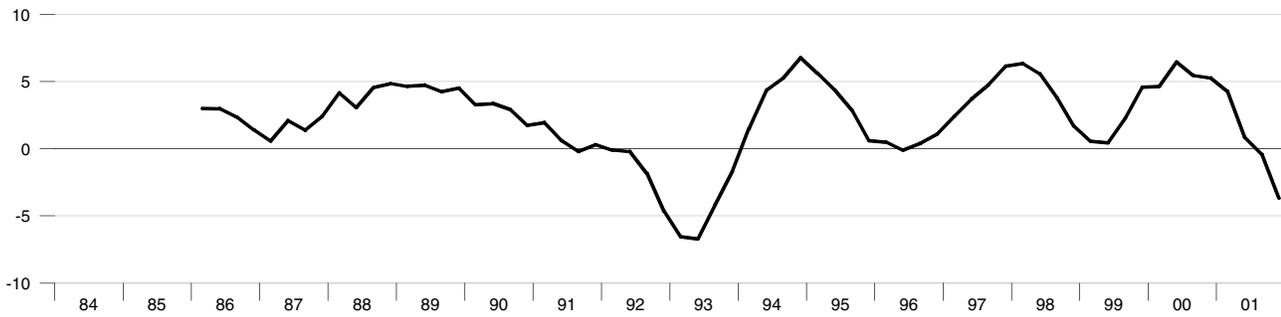
### GDP

Percent change from year ago



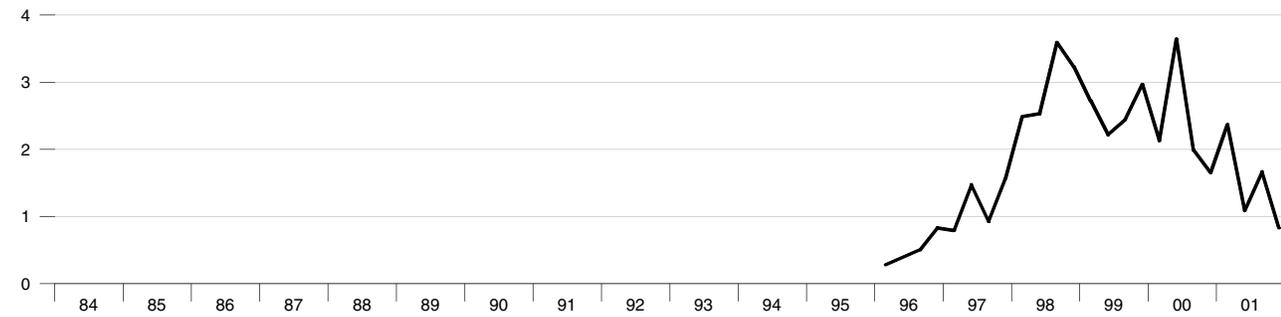
### Industrial Production

Percent change from year ago



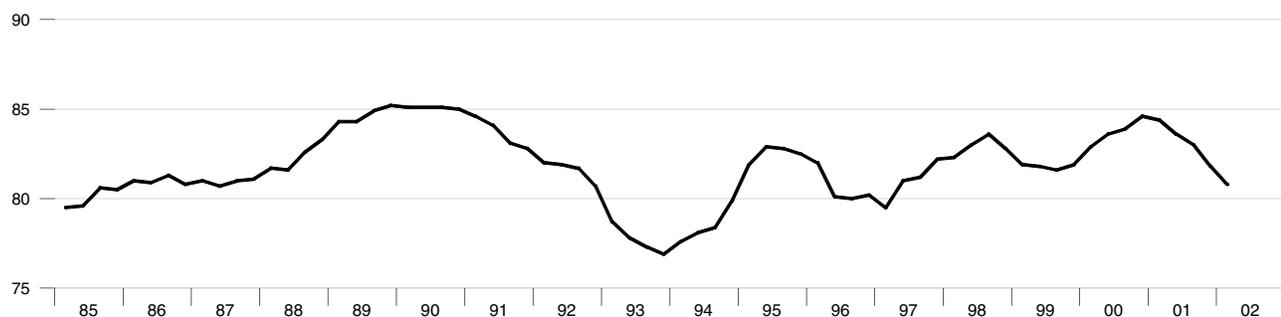
### Retail Sales

Percent change from year ago

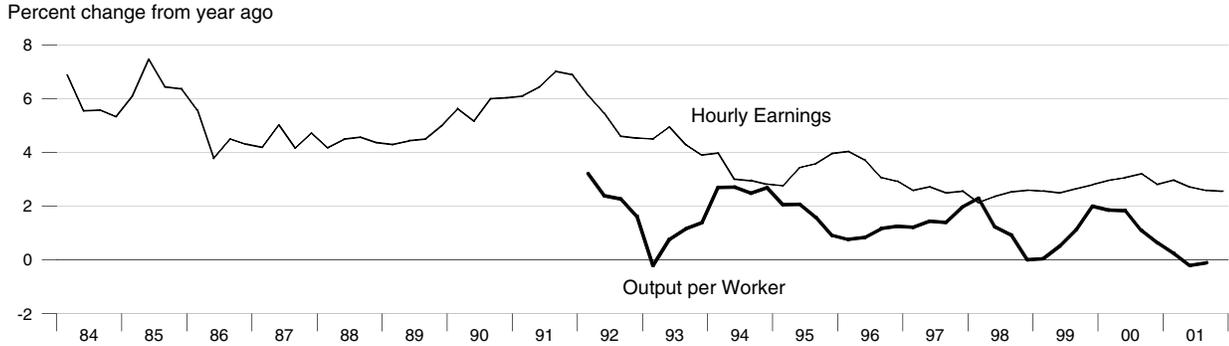


### Capacity Utilization

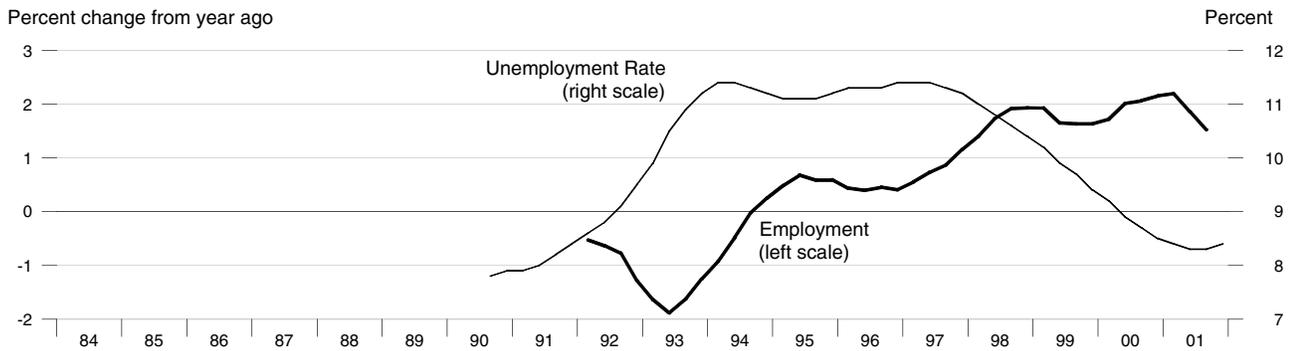
Percent



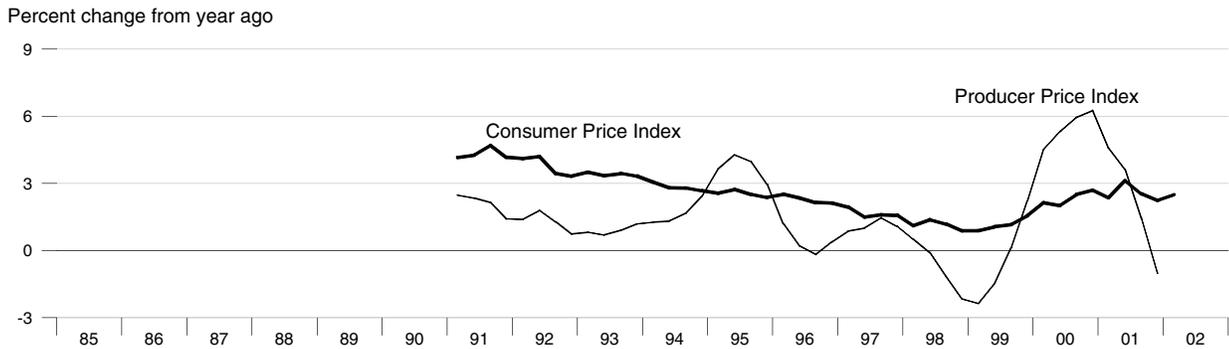
### Hourly Earnings and Output per Worker



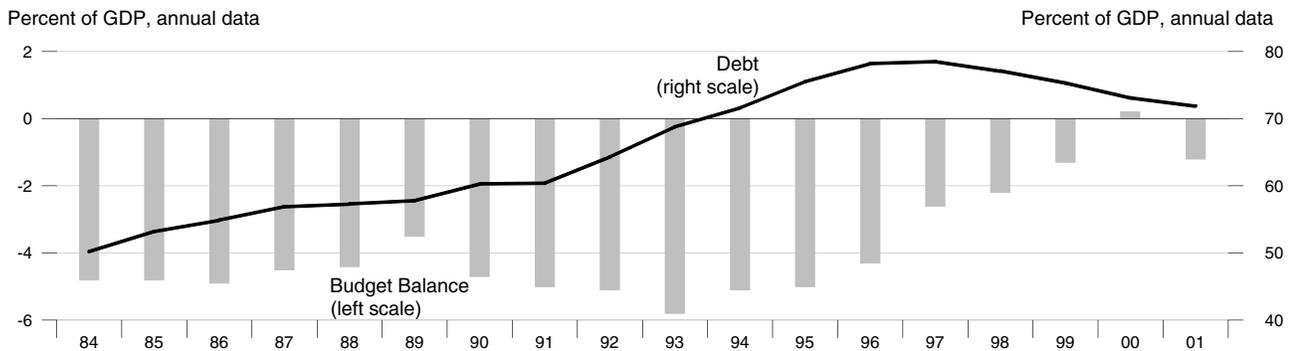
### Labor Force Indicators



### Inflation

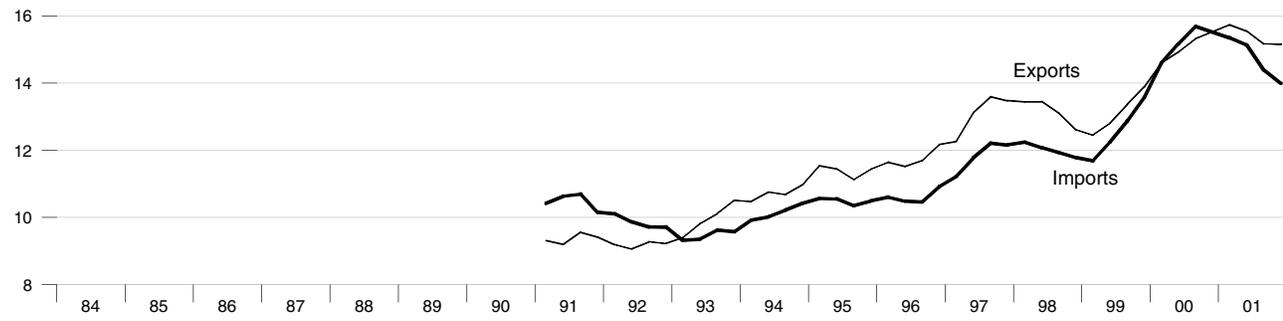


### Government Debt and Budget Balance



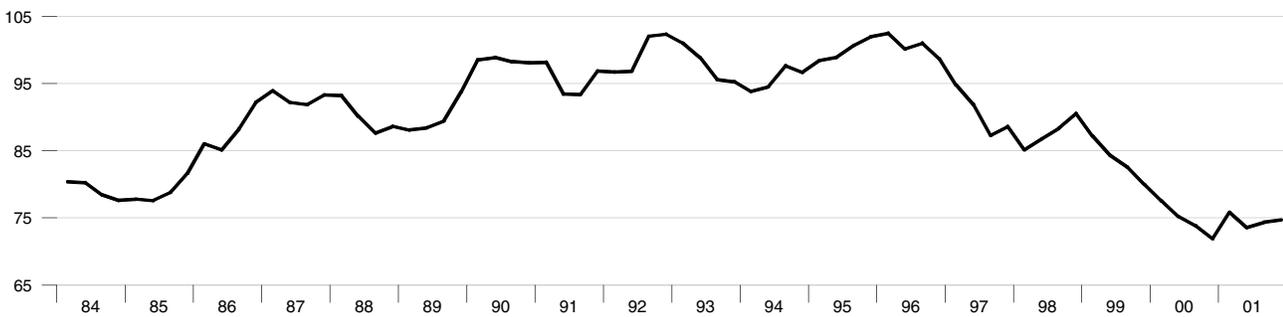
**International Trade - Goods**

Percent of GDP



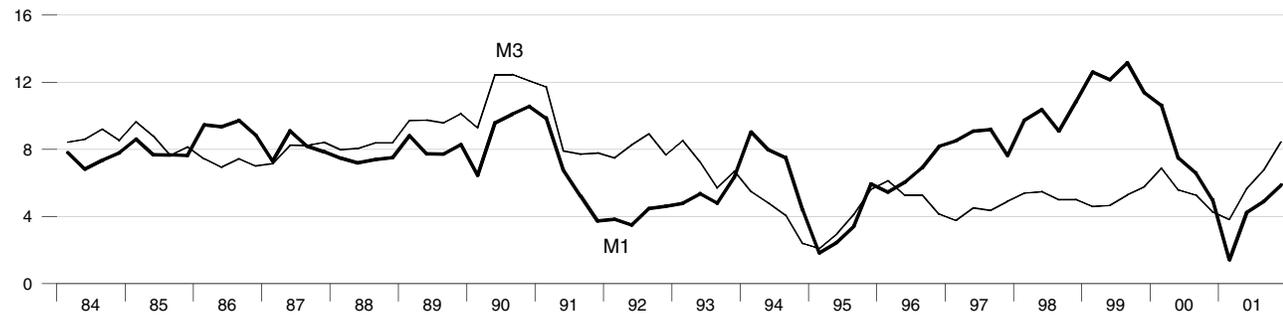
**Real Effective Exchange Rate**

Index 1995 = 100



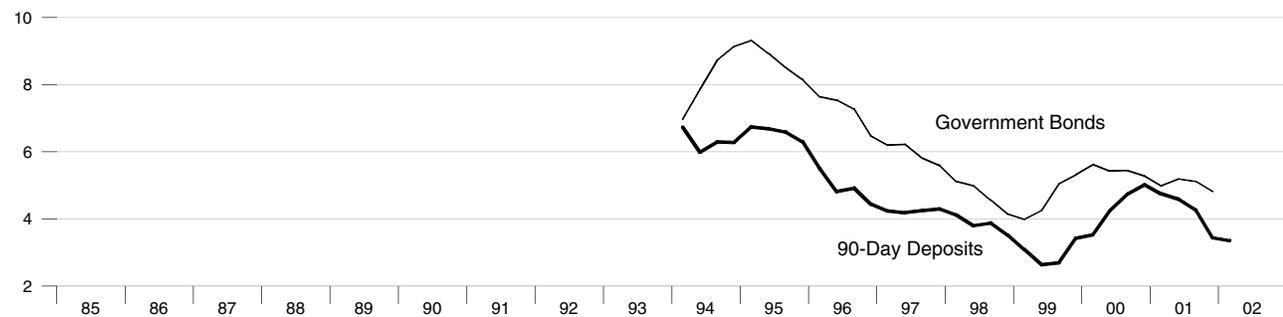
**Monetary Aggregates**

Percent change from year ago



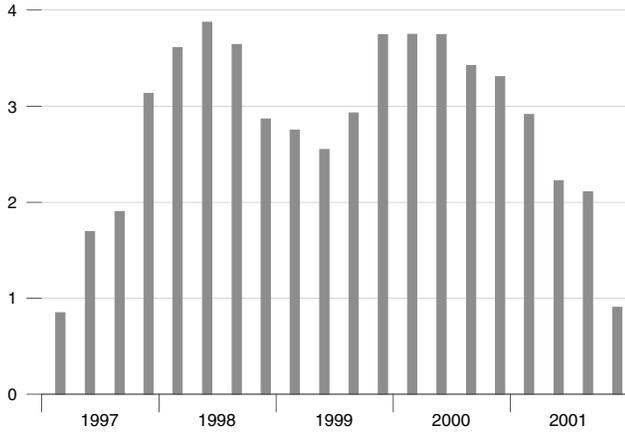
**Interest Rates**

Percent



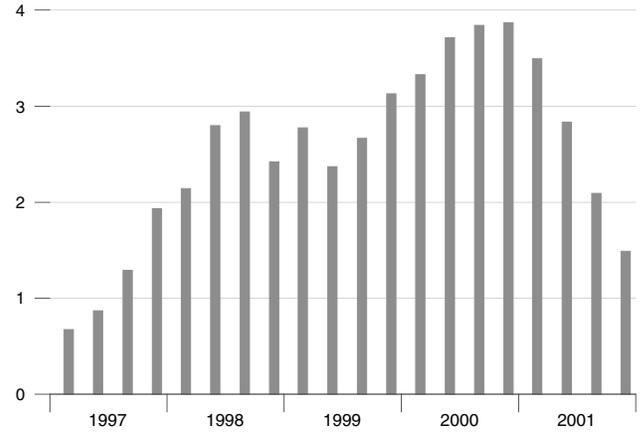
**Real GDP**

Percent change from year ago



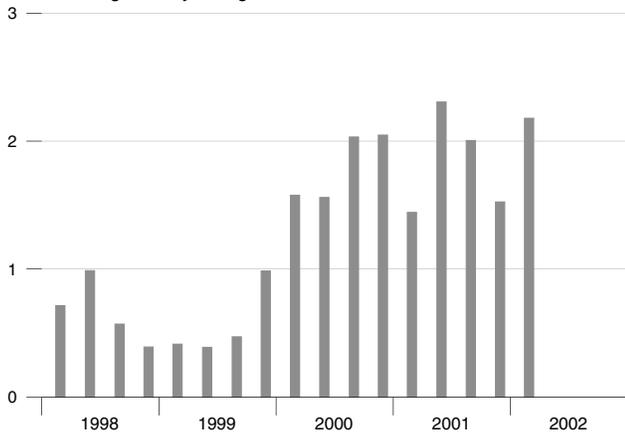
**Employment**

Percent change from year ago



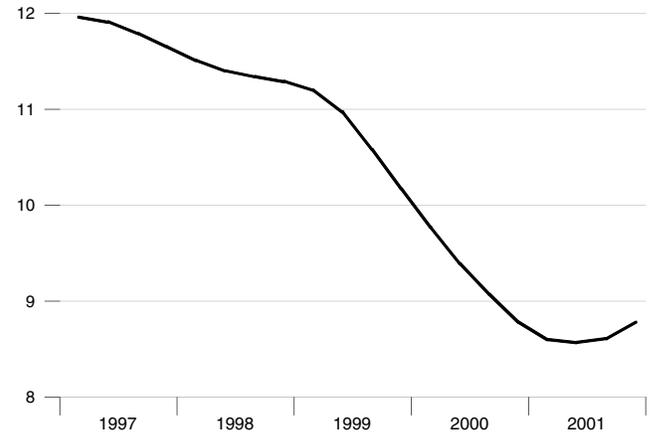
**Consumer Price Index**

Percent change from year ago



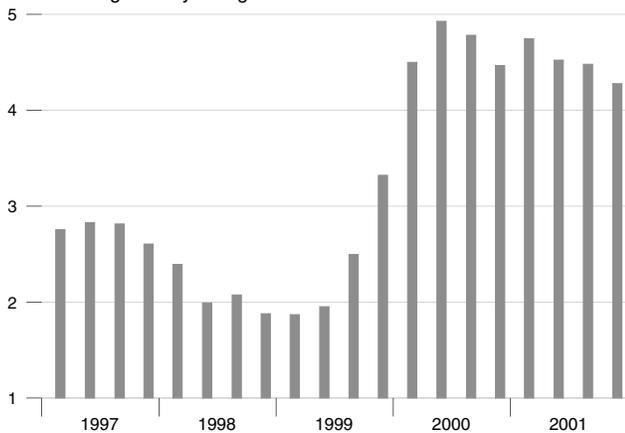
**Unemployment Rate**

Percent



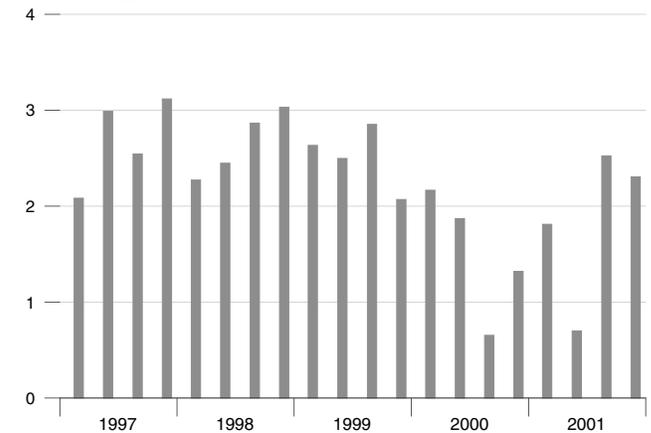
**Hourly Earnings**

Percent change from year ago



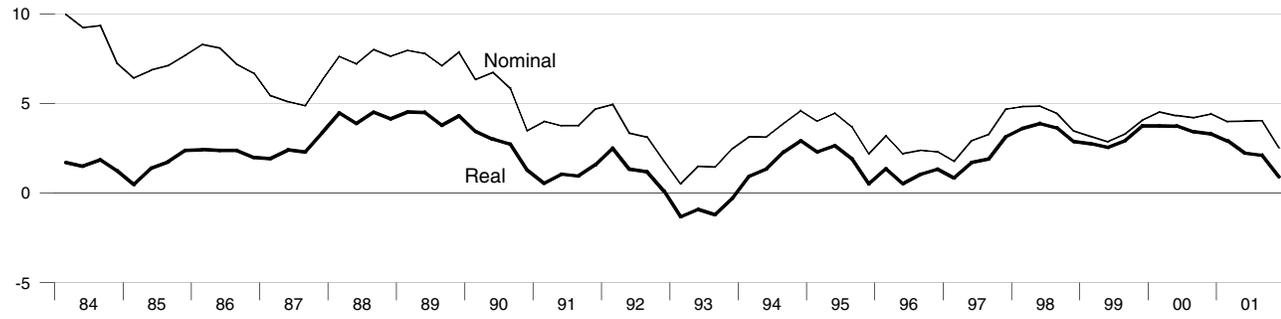
**Current Account Balance**

Percent of GDP



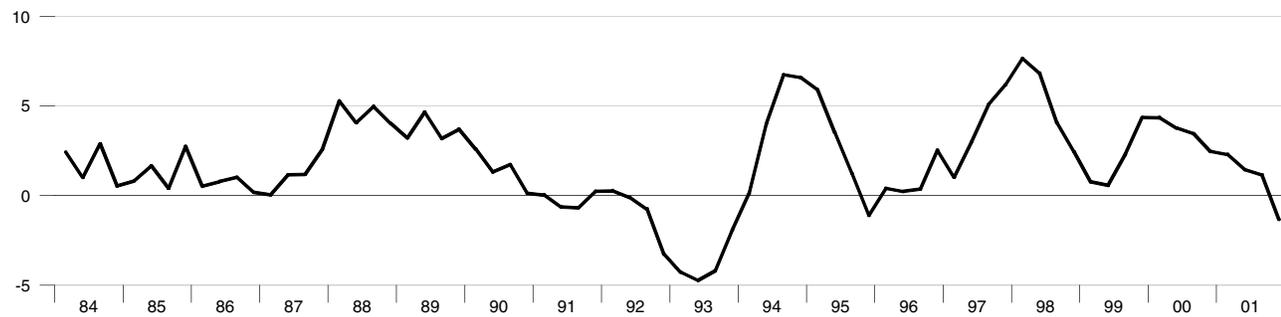
**GDP**

Percent change from year ago



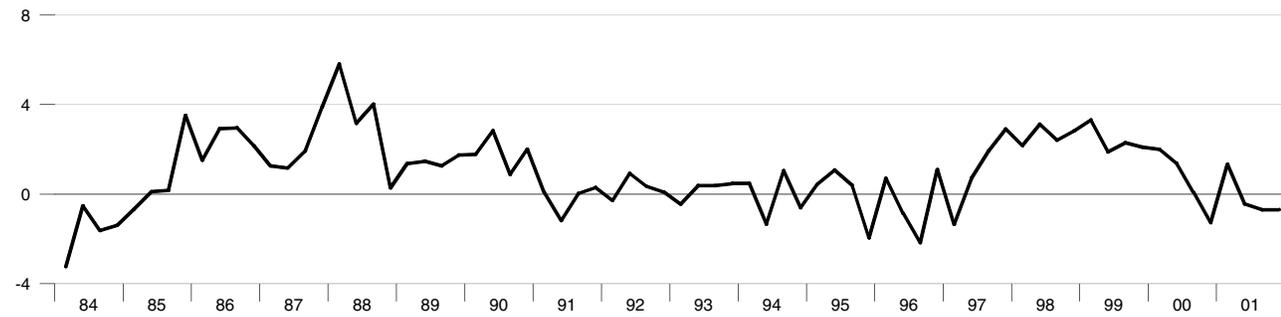
**Industrial Production**

Percent change from year ago



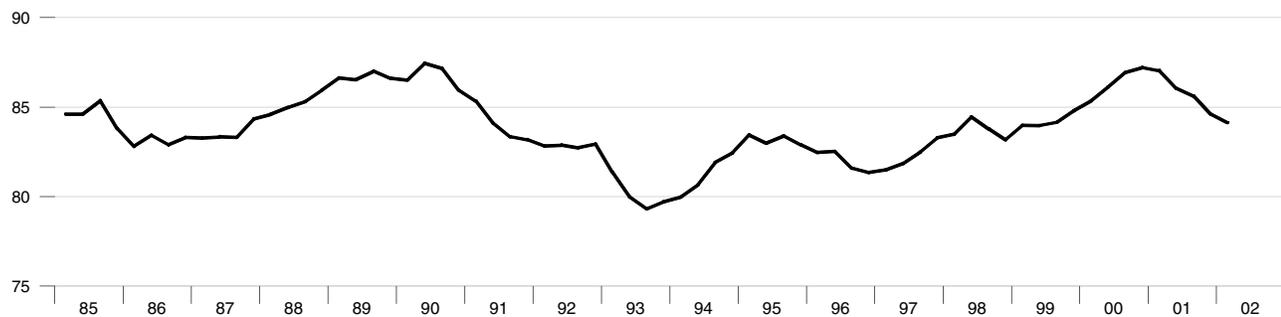
**Retail Sales**

Percent change from year ago



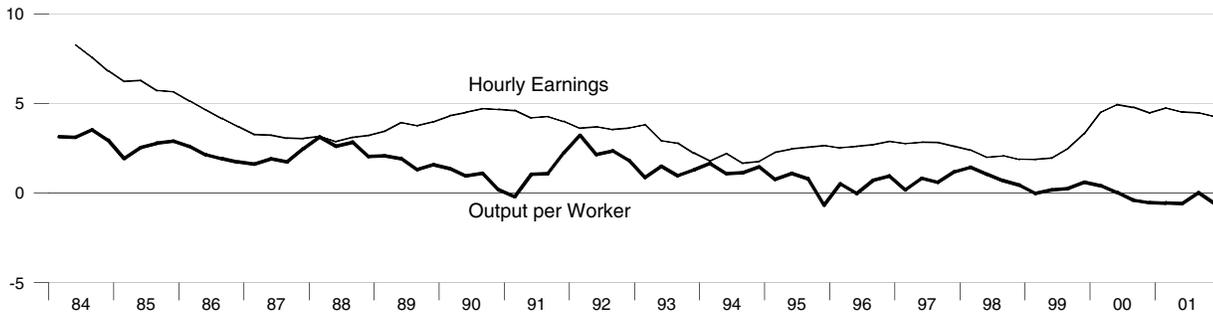
**Capacity Utilization**

Percent



### Hourly Earnings and Output per Worker

Percent change from year ago



### Labor Force Indicators

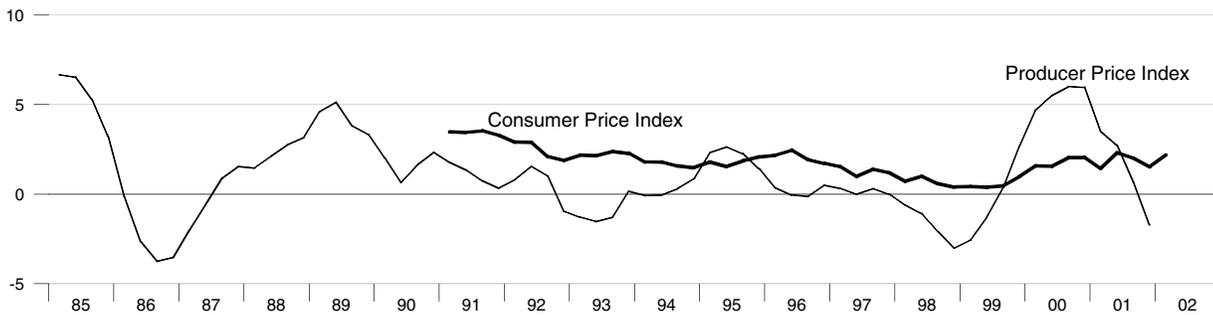
Percent change from year ago

Percent



### Inflation

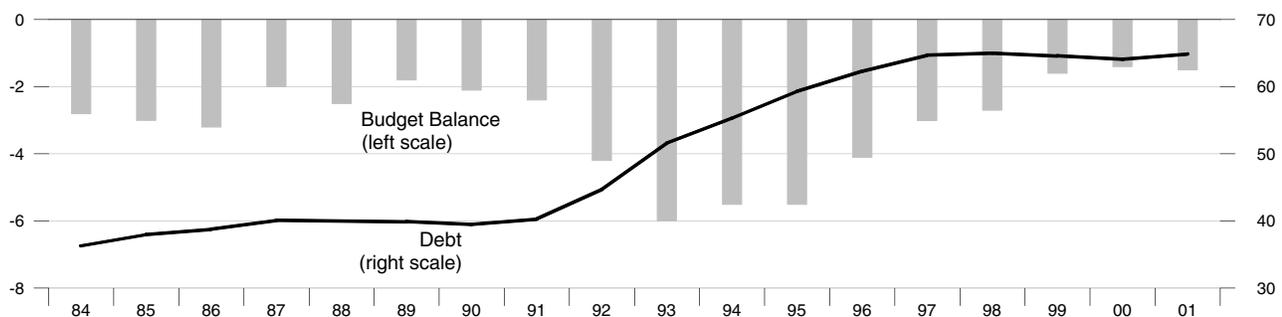
Percent change from year ago



### Government Debt and Budget Balance

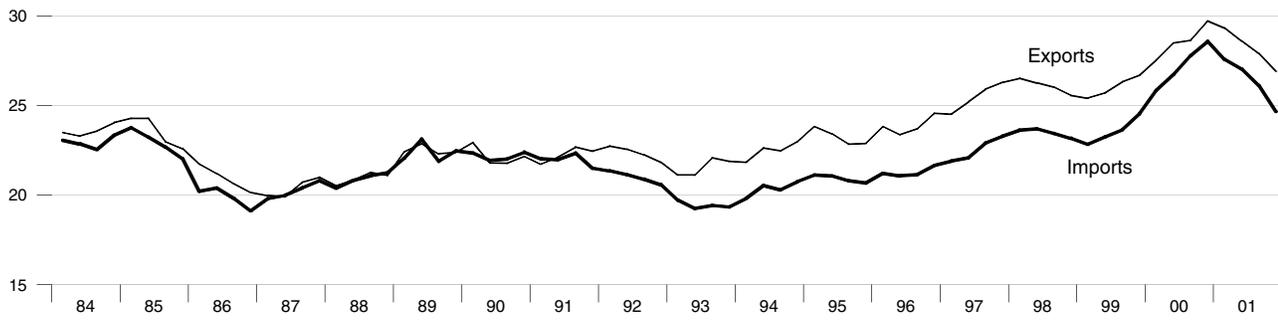
Percent of GDP, annual data

Percent of GDP, annual data



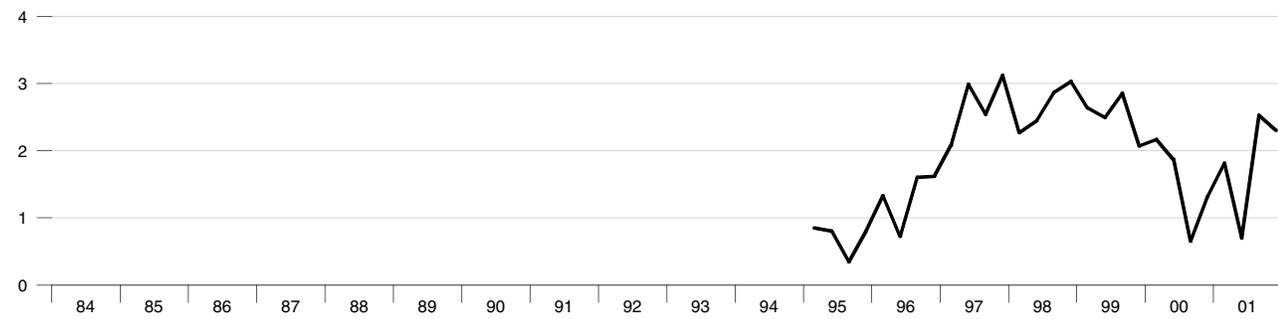
**International Trade - Goods and Services**

Percent of GDP



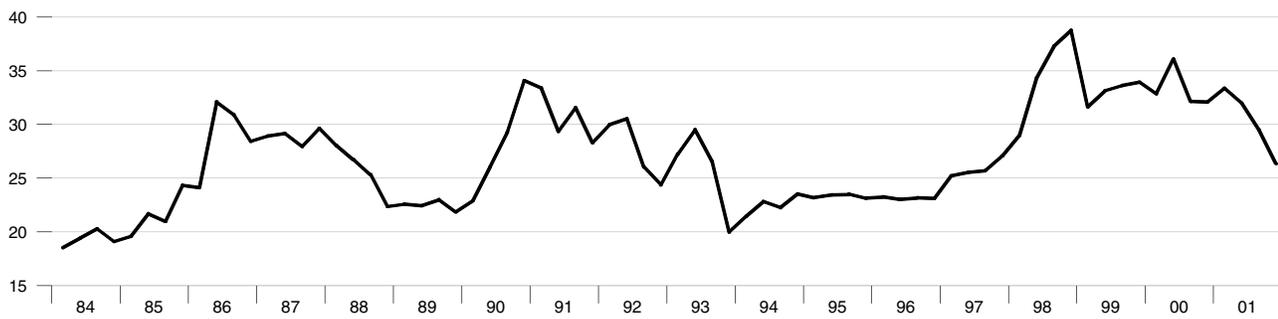
**Current Account Balance**

Percent of GDP



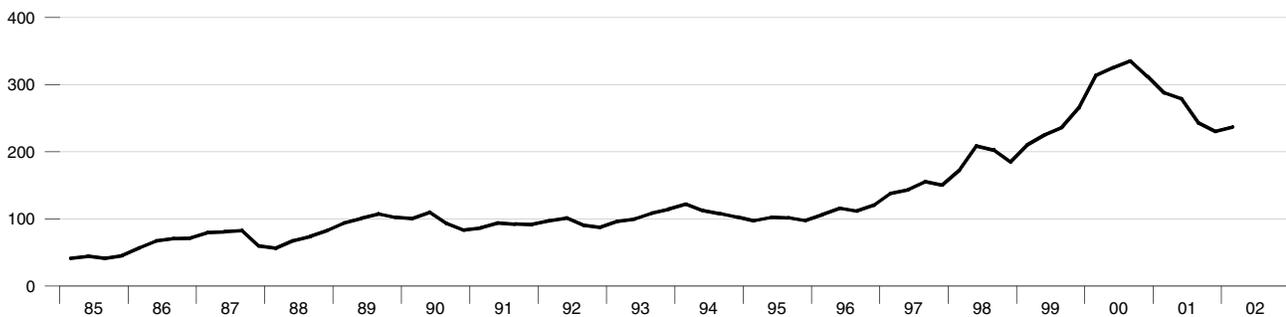
**Foreign Exchange Reserves**

Billions of US\$



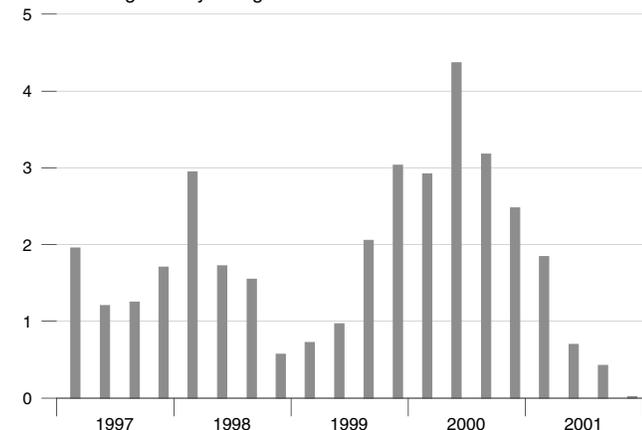
**Stock Exchange Index - SBF 250**

1995 = 100



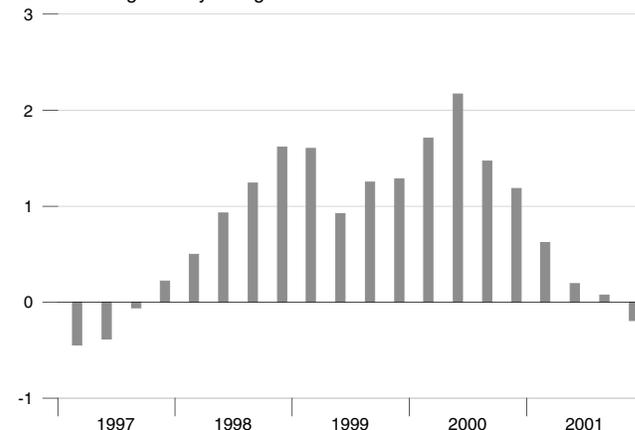
**Real GDP**

Percent change from year ago



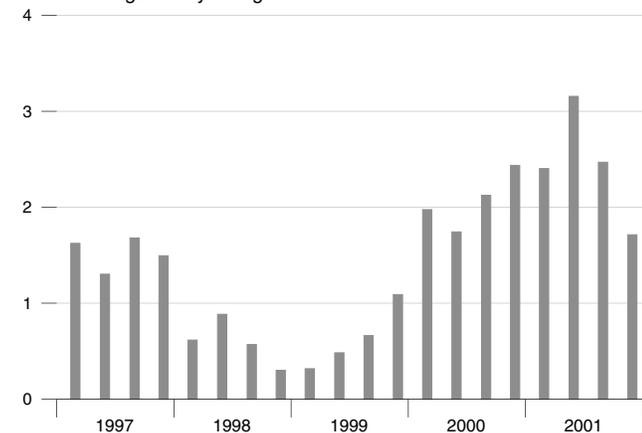
**Employment**

Percent change from year ago



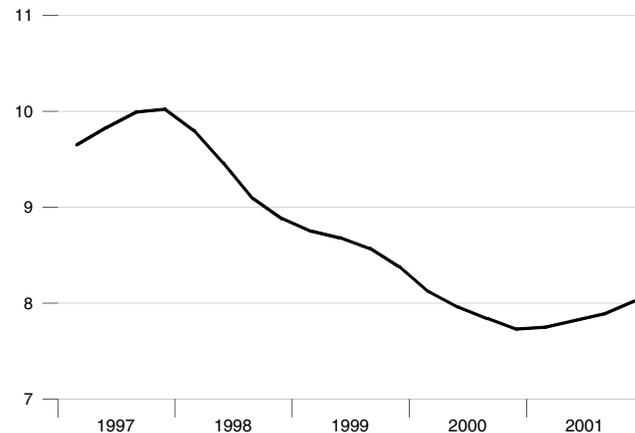
**Consumer Price Index**

Percent change from year ago



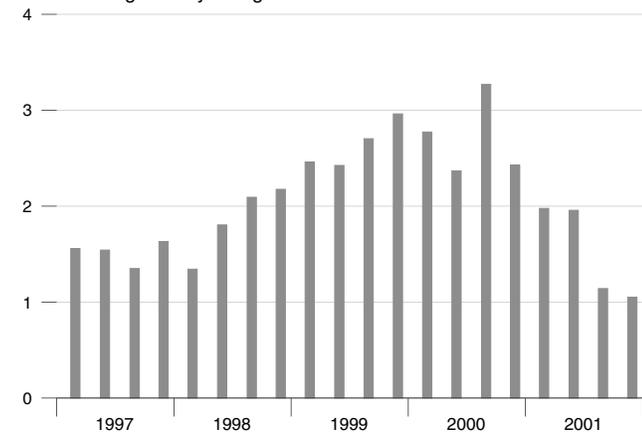
**Unemployment Rate**

Percent



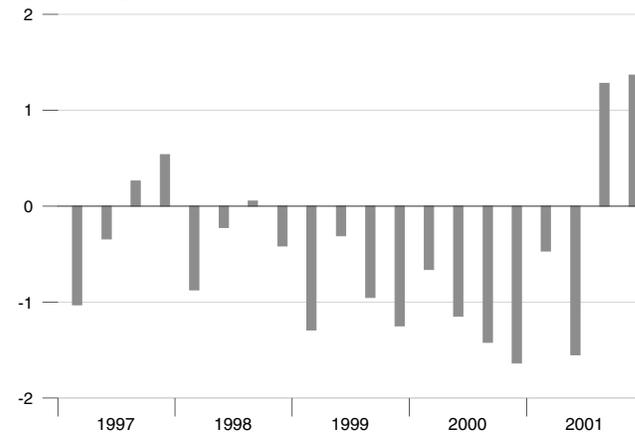
**Hourly Earnings**

Percent change from year ago



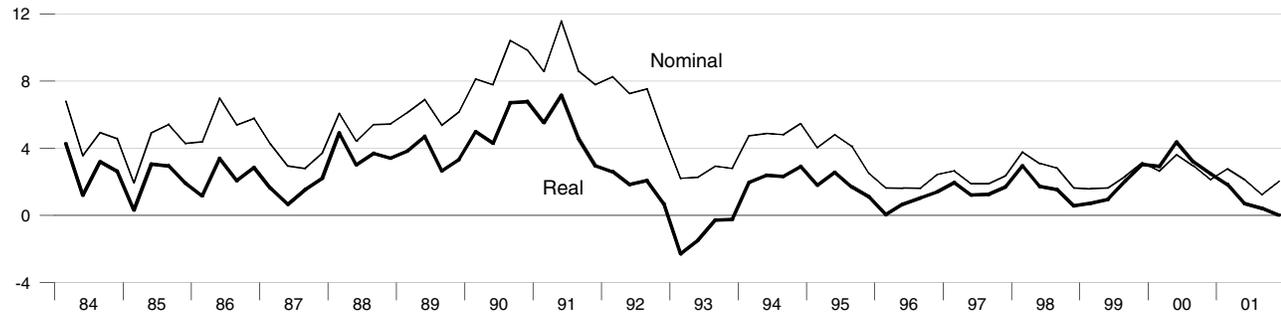
**Current Account Balance**

Percent of GDP



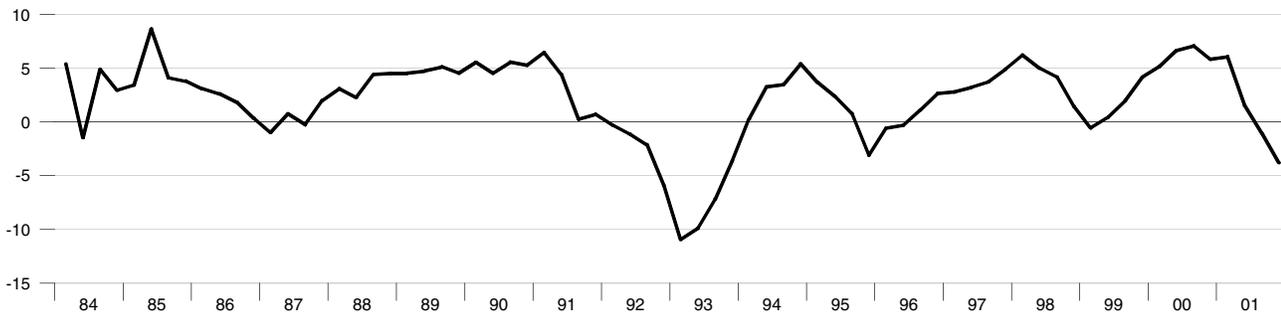
### GDP

Percent change from year ago



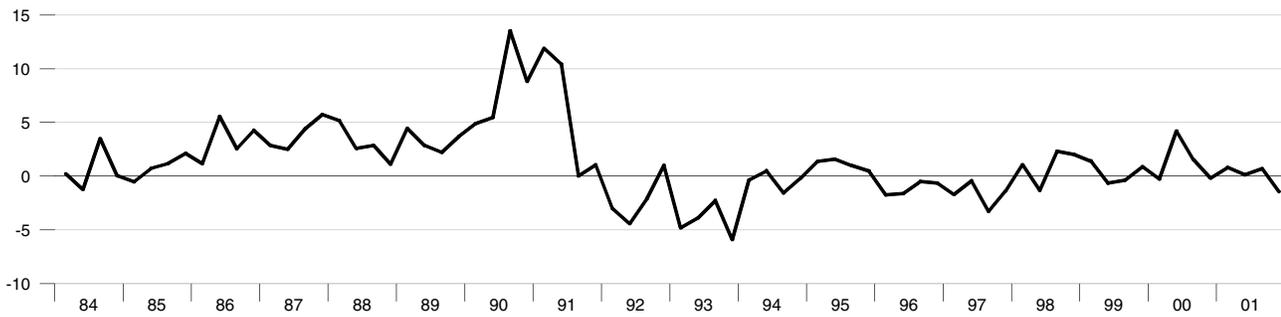
### Industrial Production

Percent change from year ago



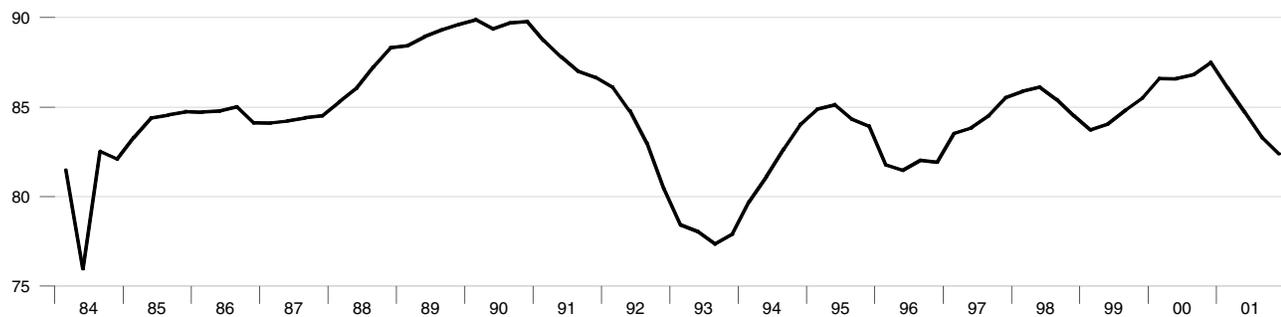
### Retail Sales

Percent change from year ago



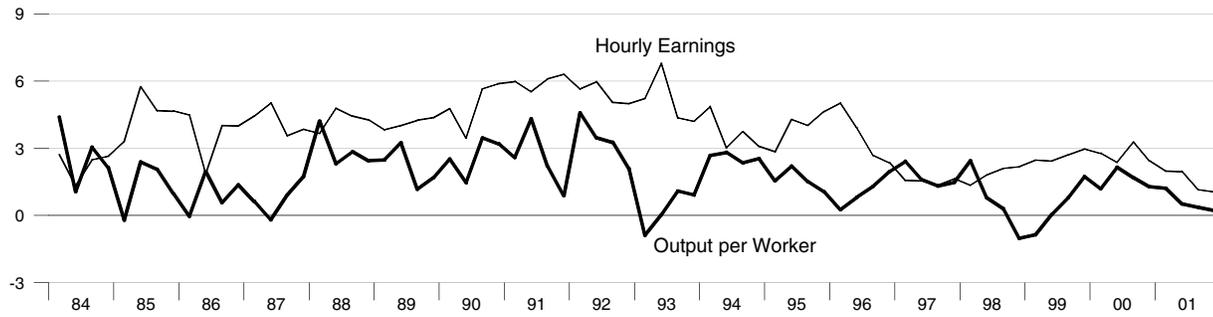
### Capacity Utilization

Percent



### Hourly Earnings and Output per Worker

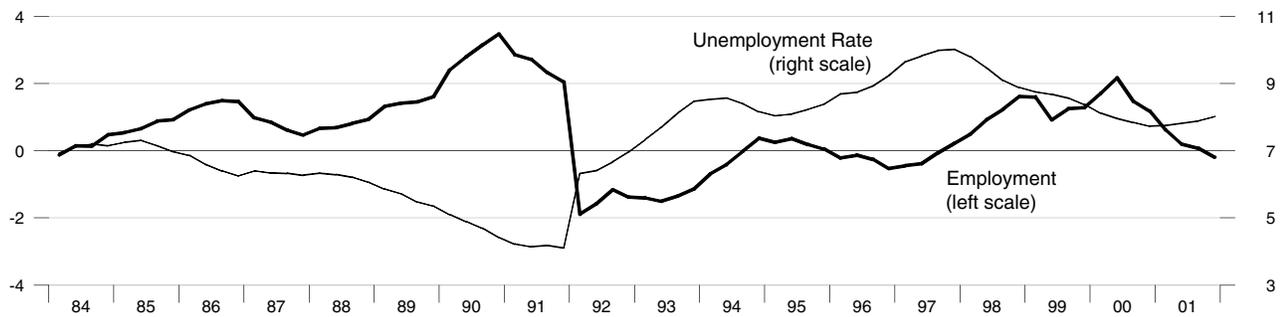
Percent change from year ago



### Labor Force Indicators

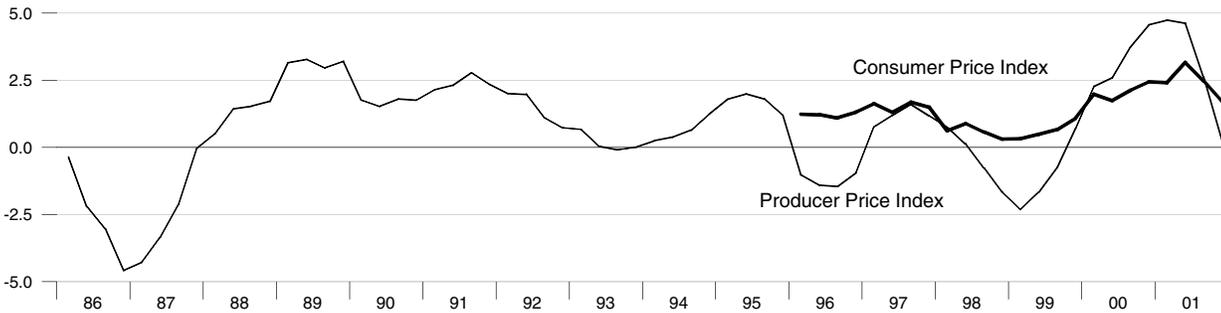
Percent change from year ago

Percent



### Inflation

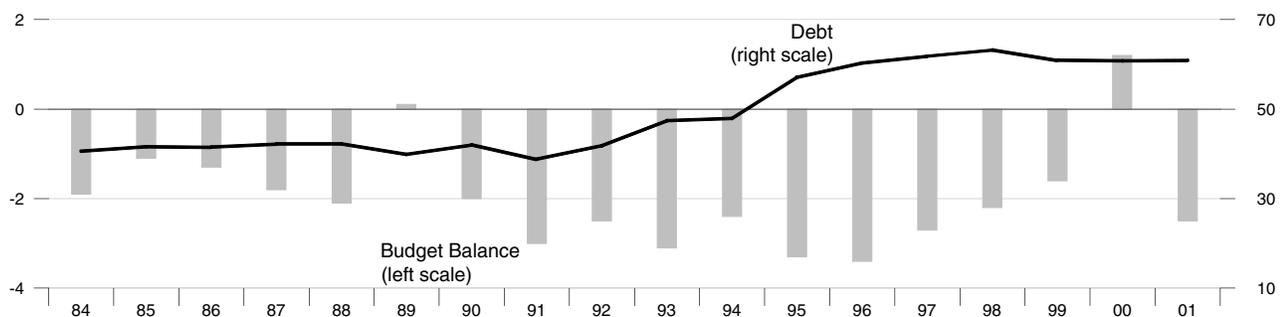
Percent change from year ago



### Government Debt and Budget Balance

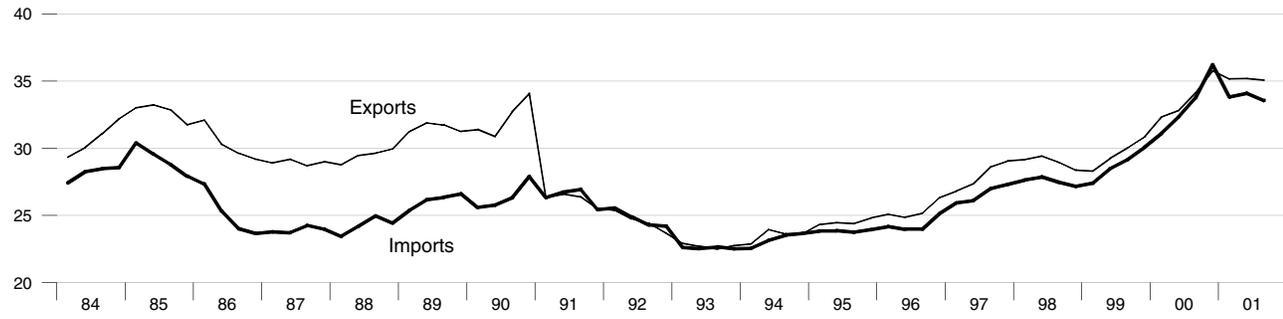
Percent of GDP, annual data

Percent of GDP, annual data



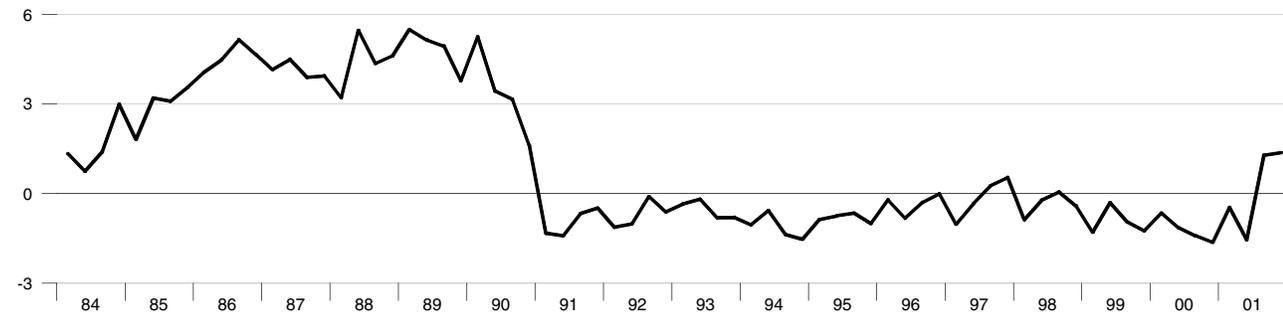
**International Trade - Goods and Services**

Percent of GDP



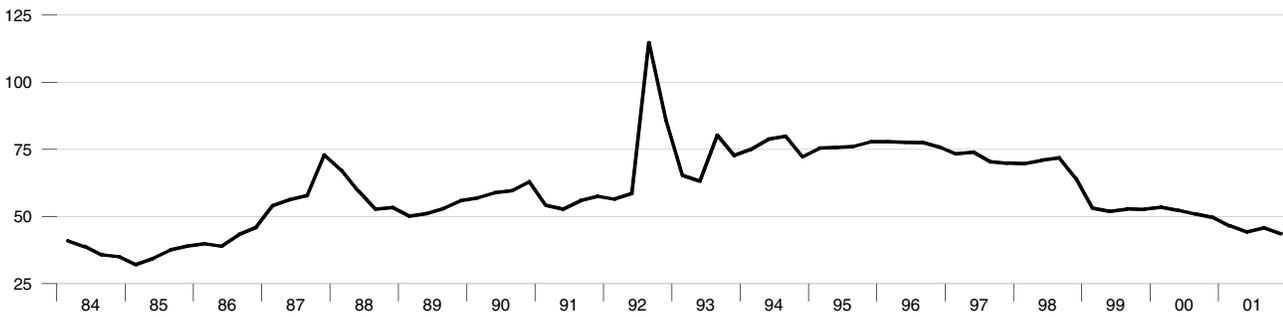
**Current Account Balance**

Percent of GDP



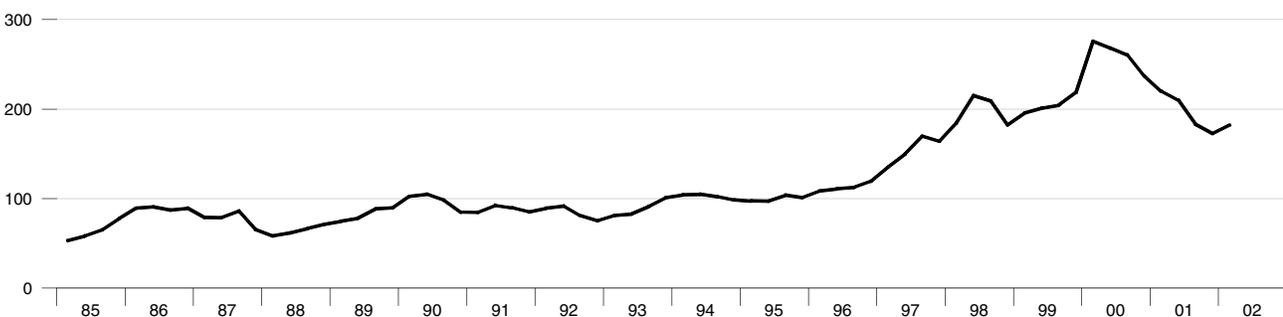
**Foreign Exchange Reserves**

Billions of US\$



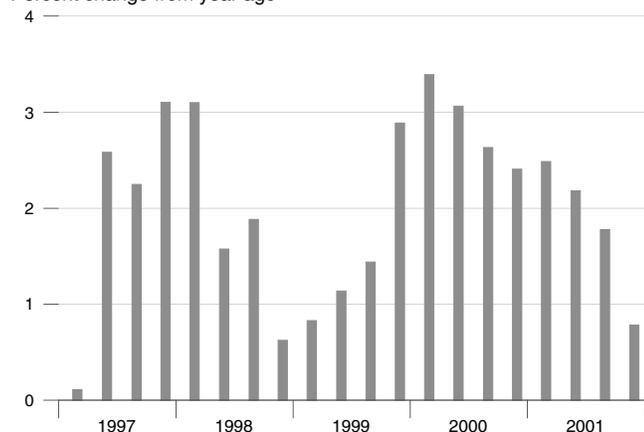
**Stock Exchange Index - CDAX**

1995 = 100



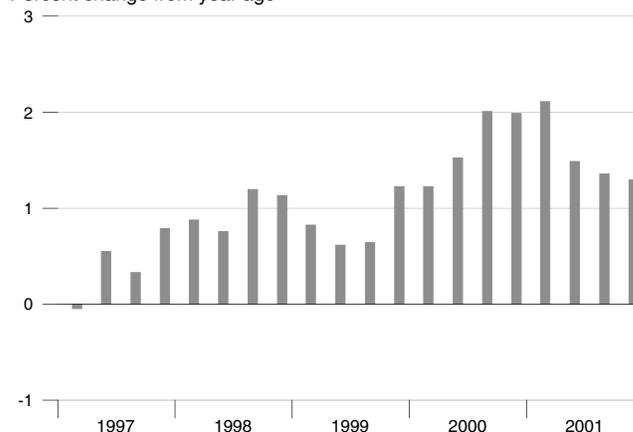
### Real GDP

Percent change from year ago



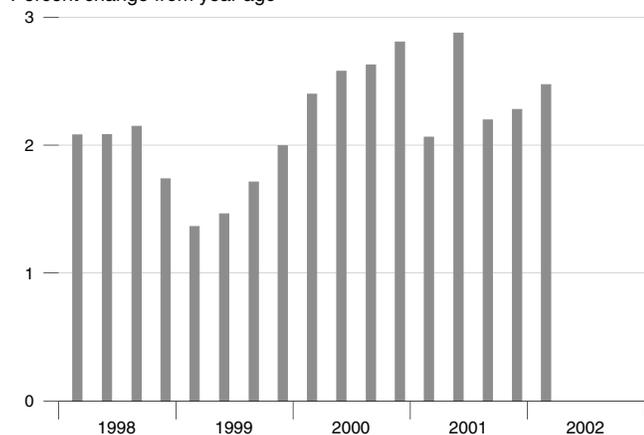
### Employment

Percent change from year ago



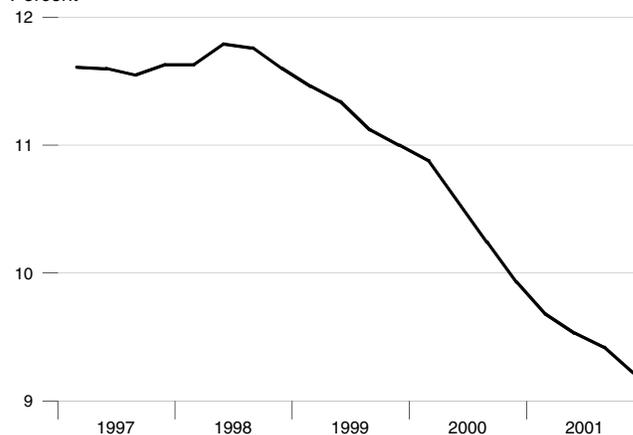
### Consumer Price Index

Percent change from year ago



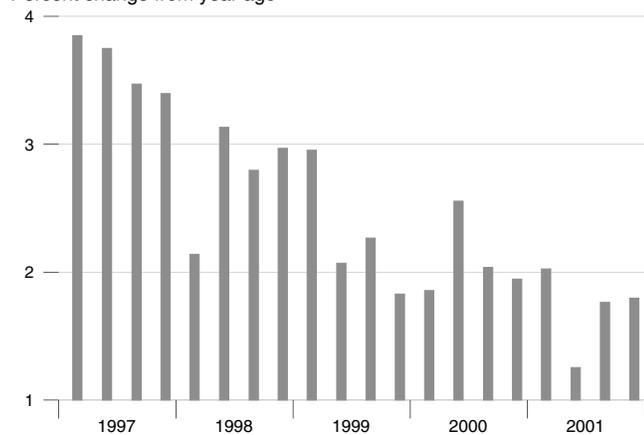
### Unemployment Rate

Percent



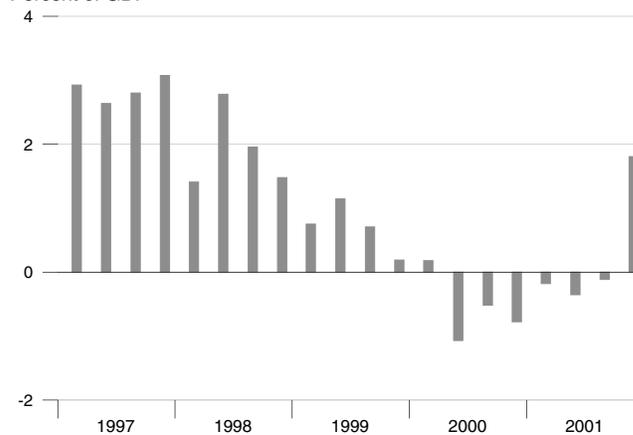
### Hourly Earnings

Percent change from year ago



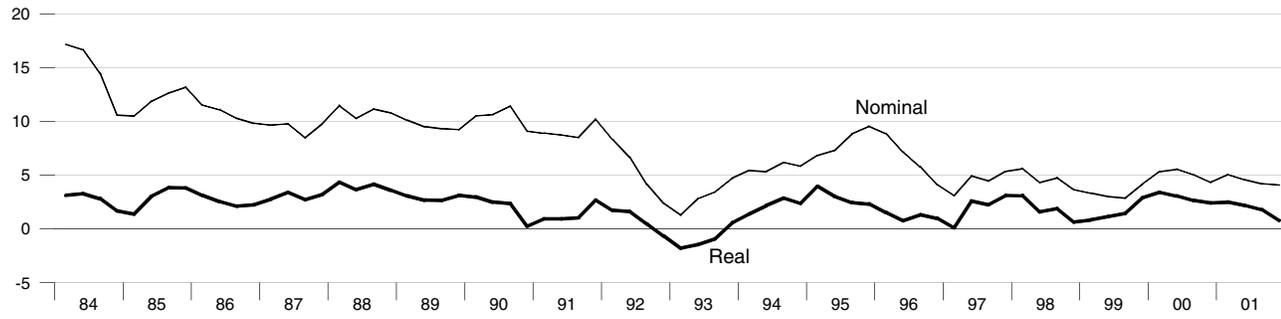
### Current Account Balance

Percent of GDP



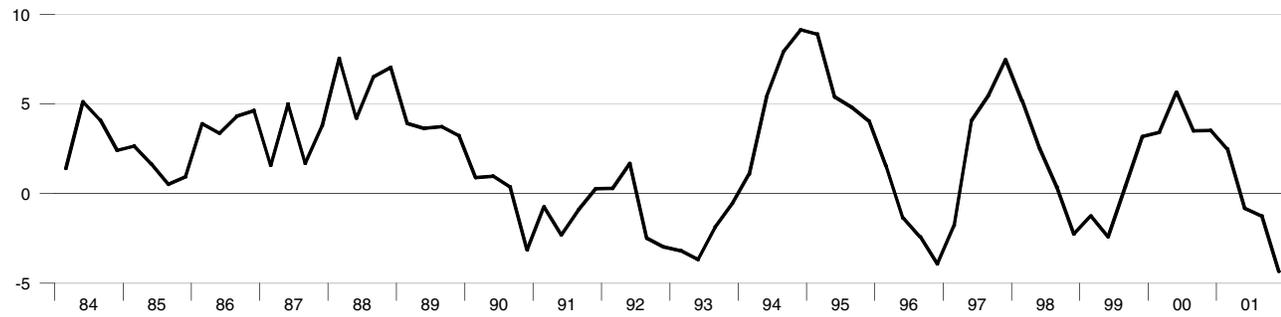
**GDP**

Percent change from year ago



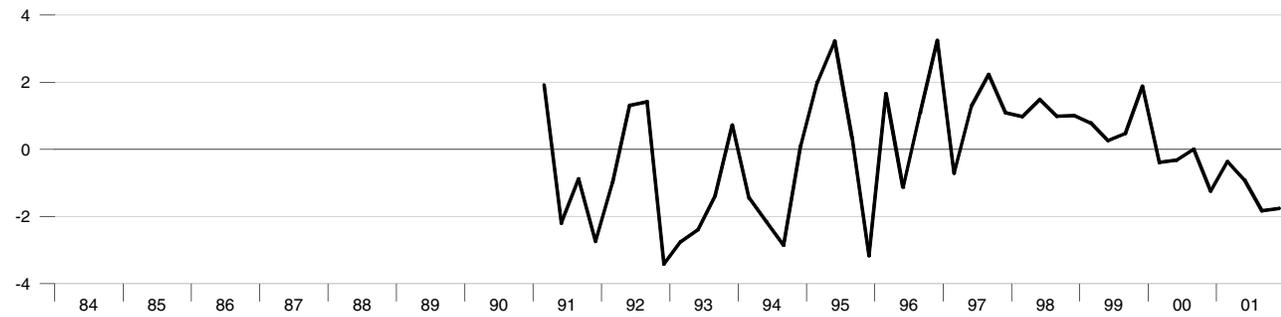
**Industrial Production**

Percent change from year ago



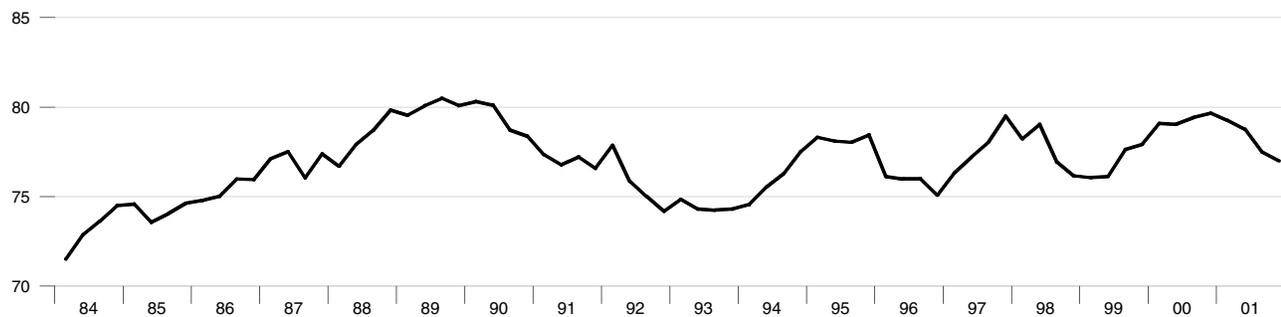
**Retail Sales**

Percent change from year ago

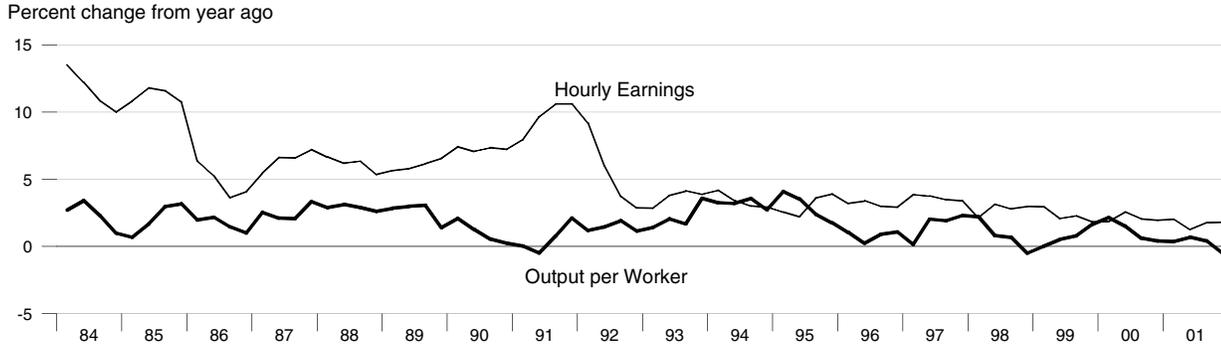


**Capacity Utilization**

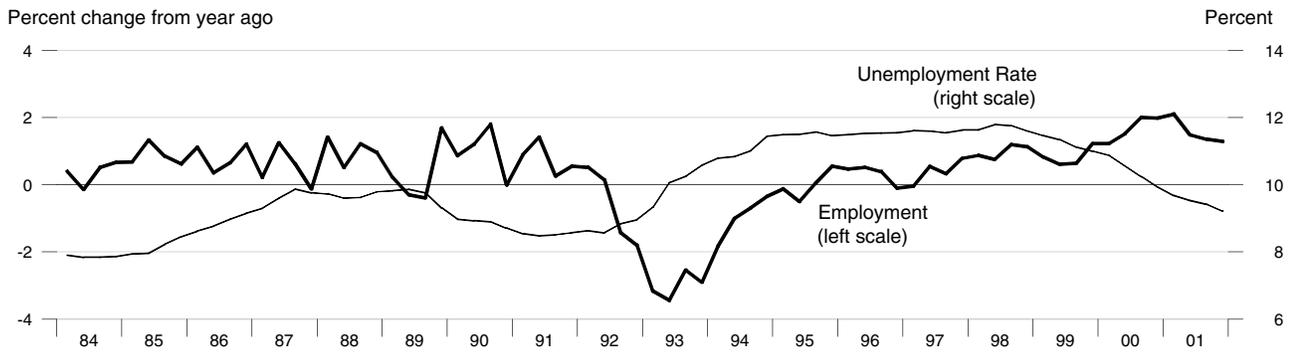
Percent



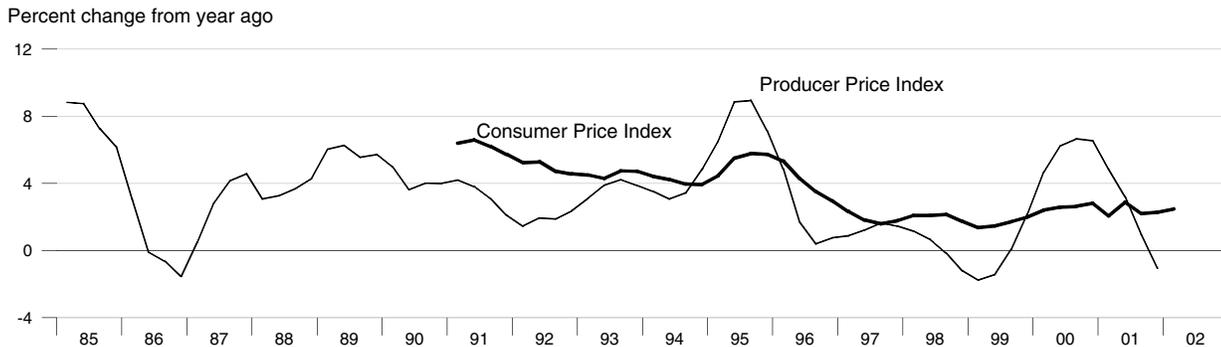
### Hourly Earnings and Output per Worker



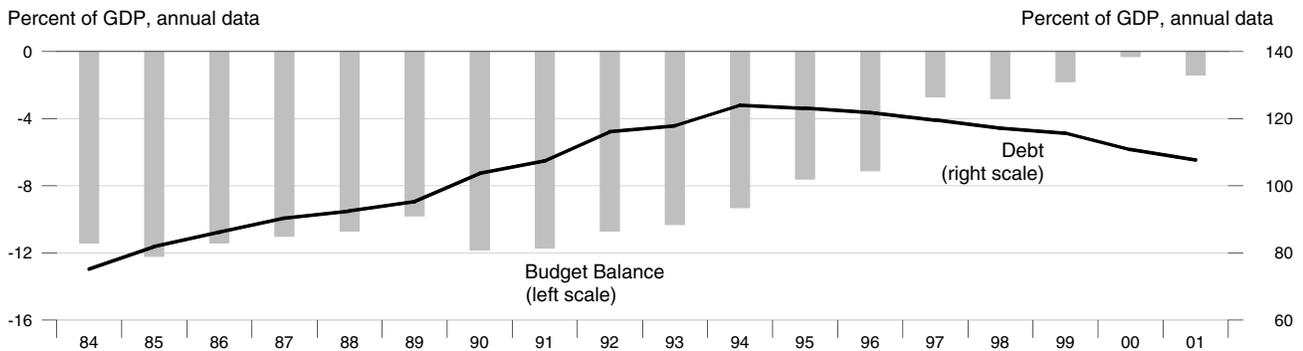
### Labor Force Indicators



### Inflation

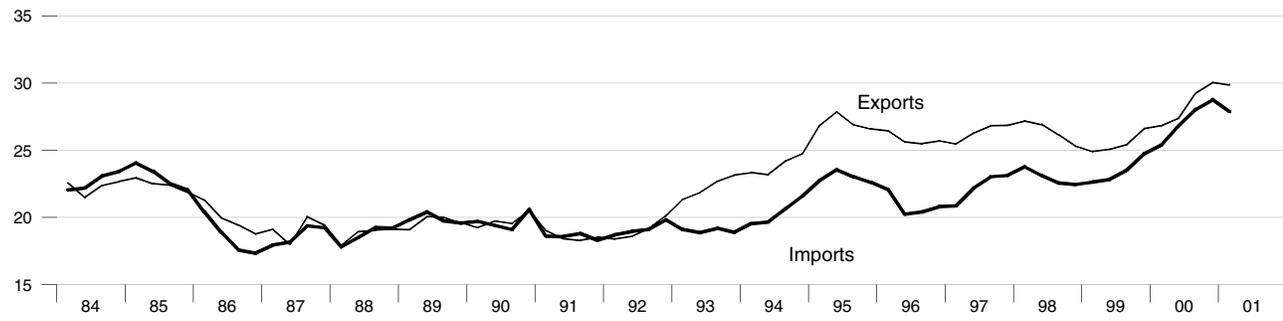


### Government Debt and Budget Balance



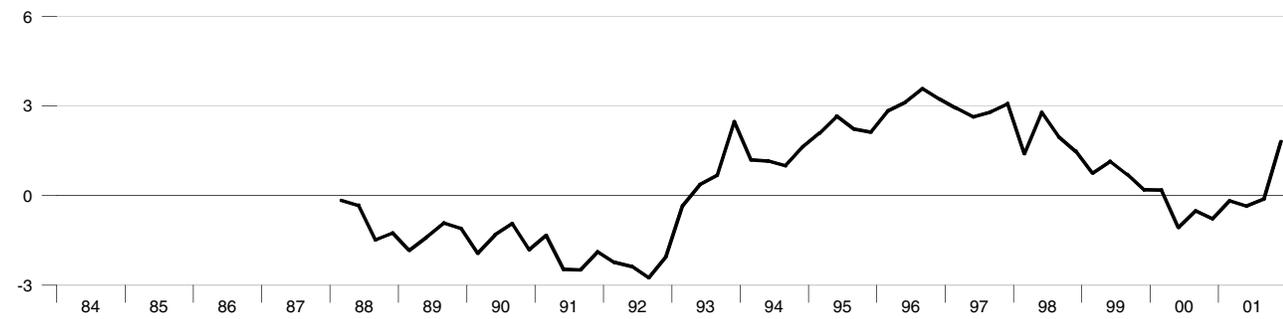
**International Trade - Goods and Services**

Percent of GDP



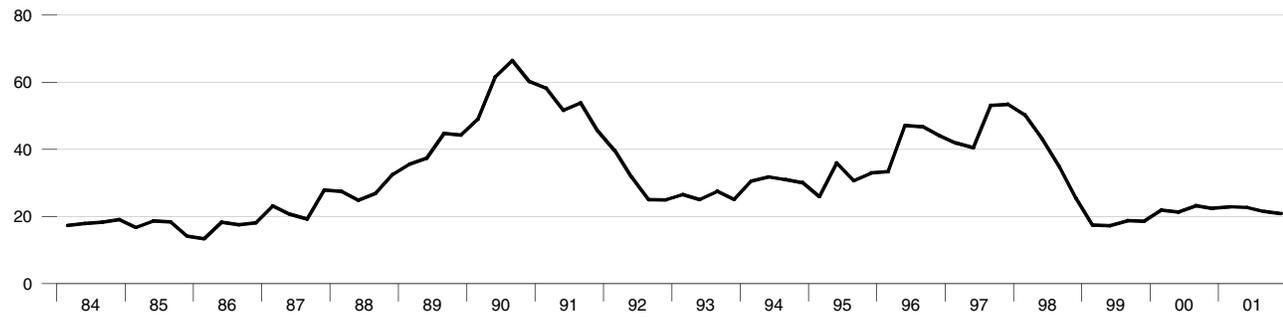
**Current Account Balance**

Percent of GDP



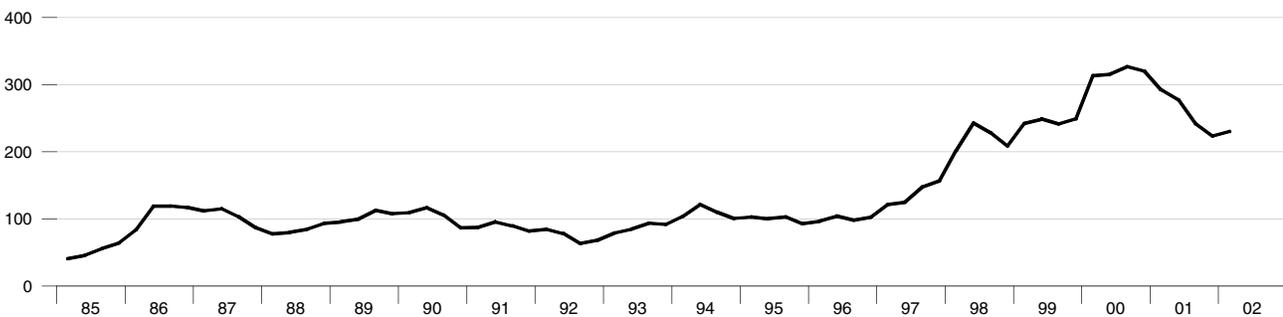
**Foreign Exchange Reserves**

Billions of US\$



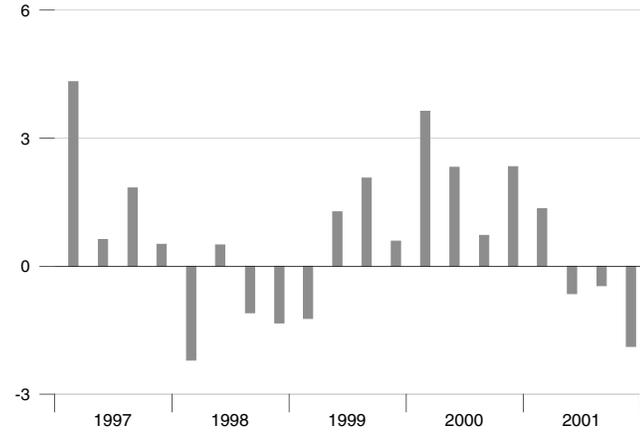
**Stock Exchange Index - Milan Stock Exchange**

1995 = 100



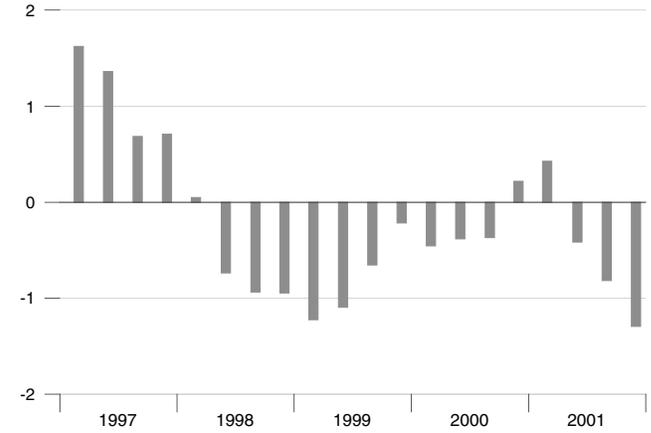
**Real GDP**

Percent change from year ago



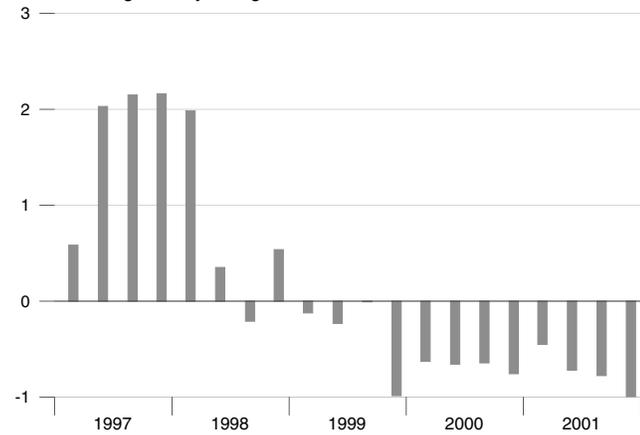
**Employment**

Percent change from year ago



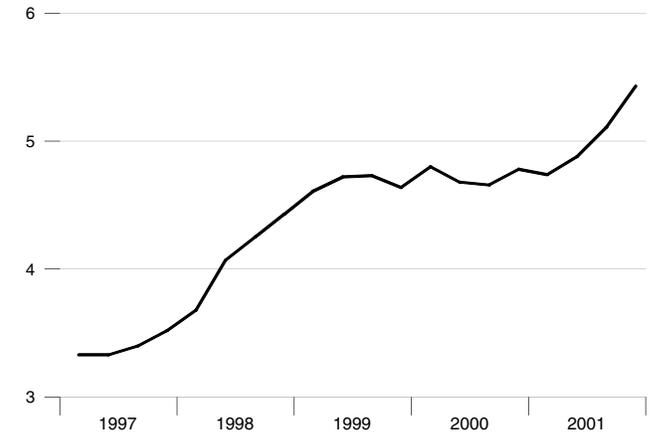
**Consumer Price Index**

Percent change from year ago



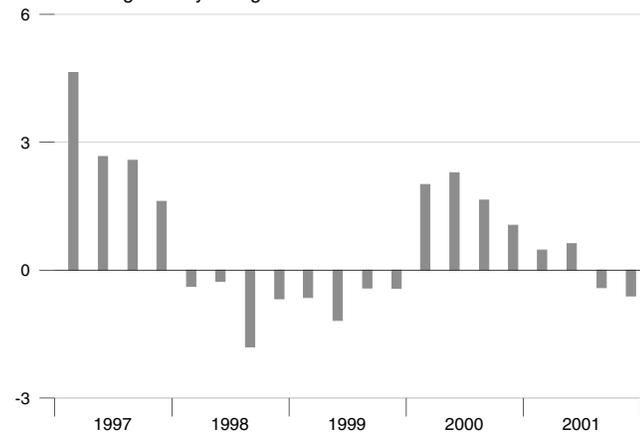
**Unemployment Rate**

Percent



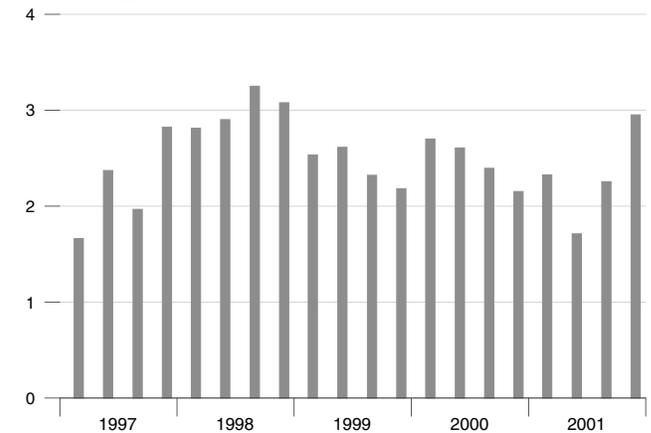
**Monthly Earnings**

Percent change from year ago



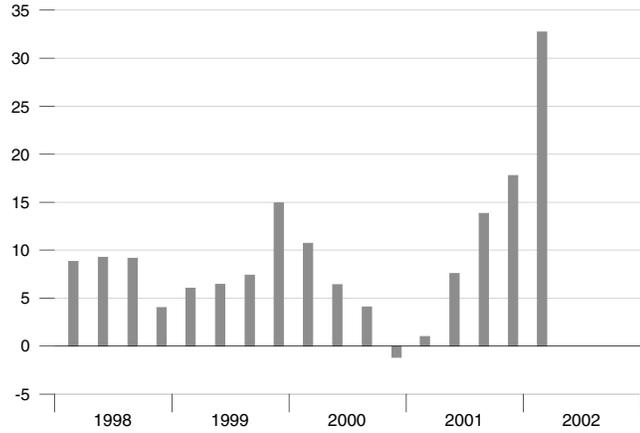
**Current Account Balance**

Percent of GDP



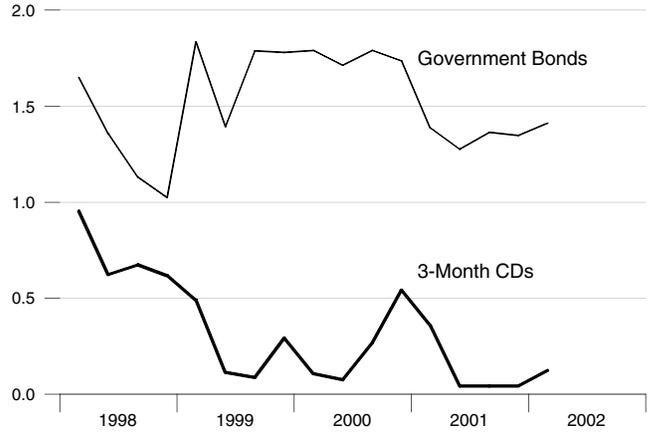
**Adjusted Monetary Base**

Percent change from year ago



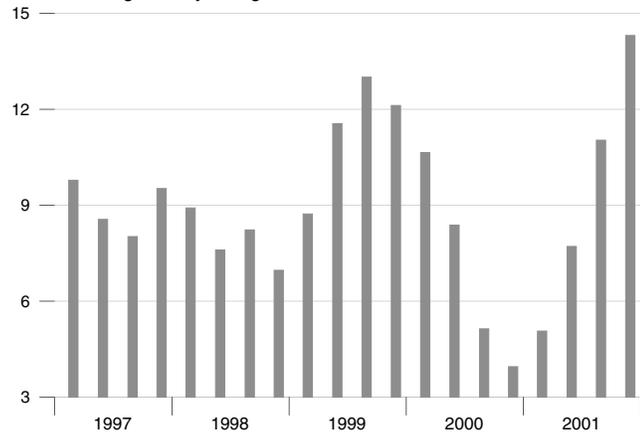
**Interest Rates**

Percent



**M1**

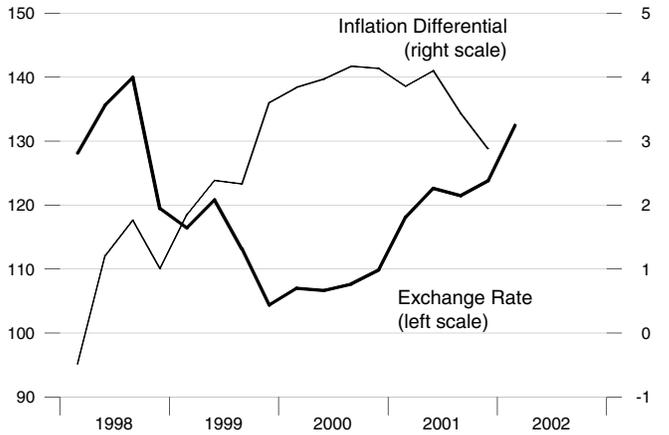
Percent change from year ago



**Exchange Rate and Inflation Differential**

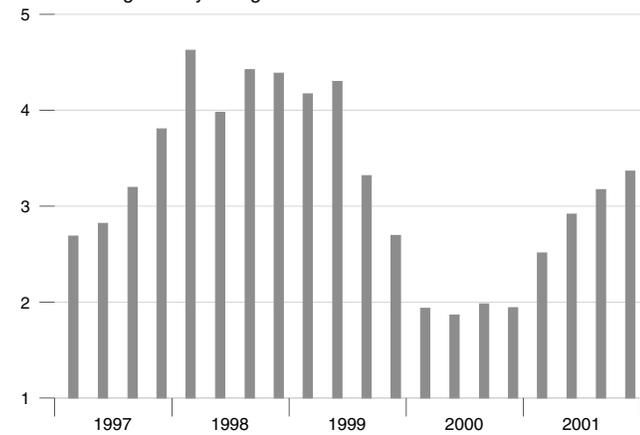
Yen/US\$

Percent



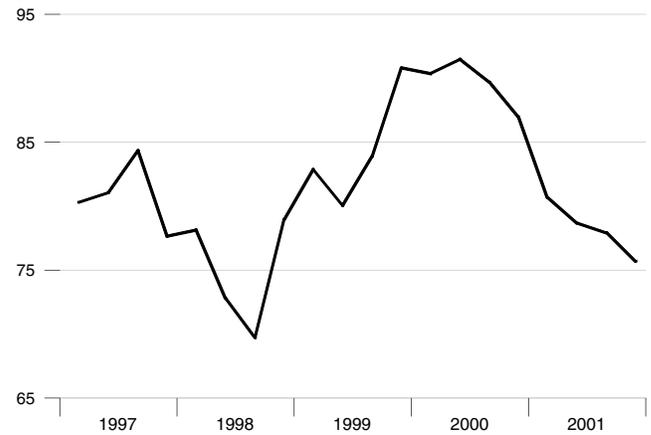
**M2**

Percent change from year ago



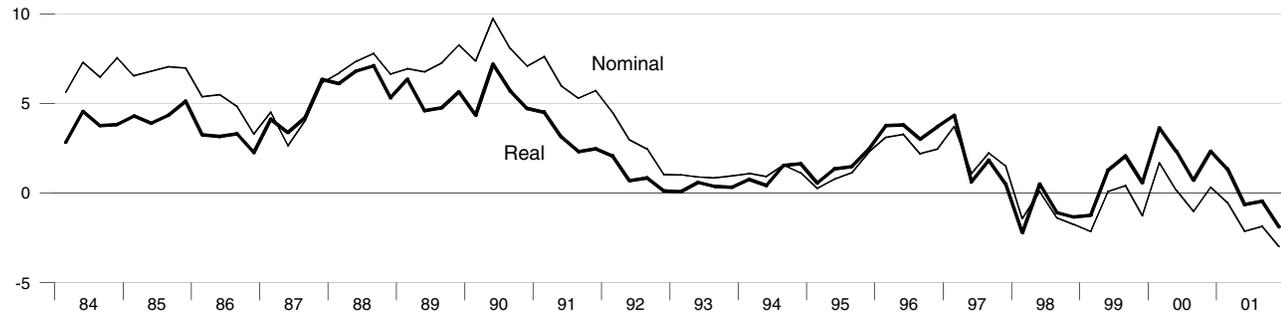
**Real Effective Exchange Rate**

Index 1995 = 100



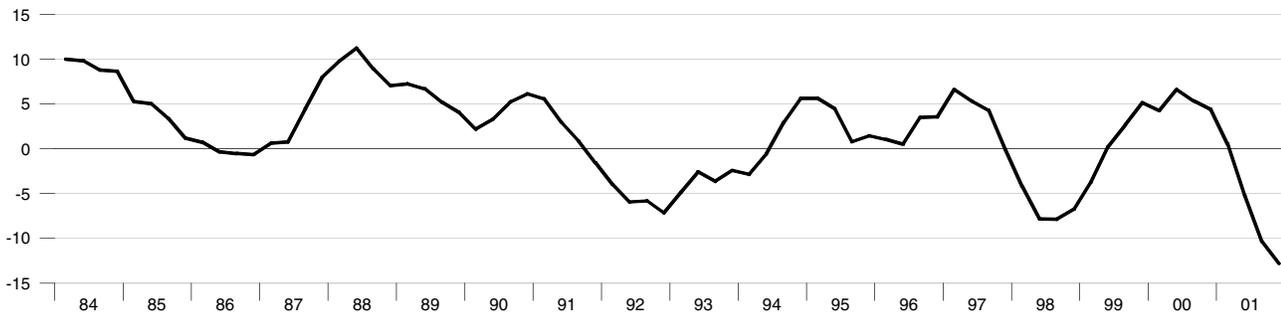
**GDP**

Percent change from year ago



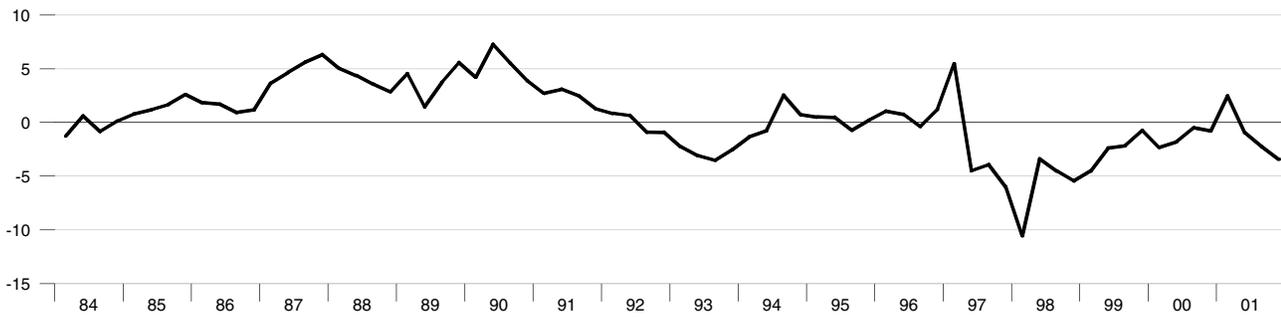
**Industrial Production**

Percent change from year ago



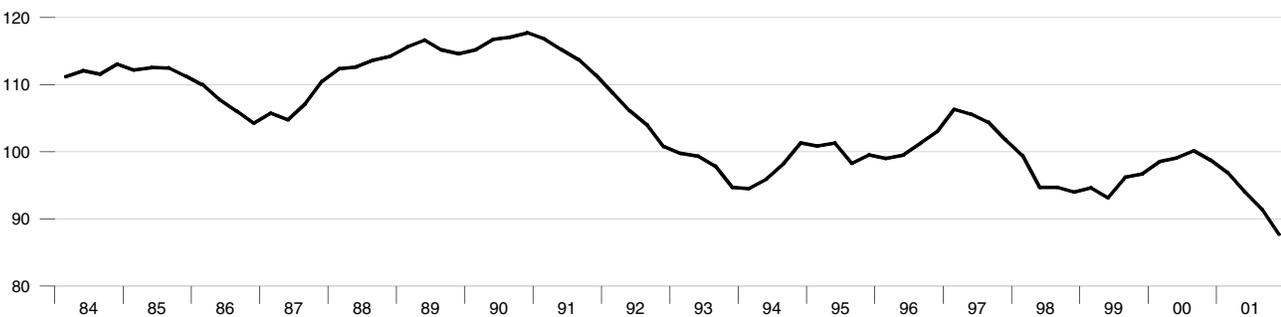
**Retail Sales**

Percent change from year ago



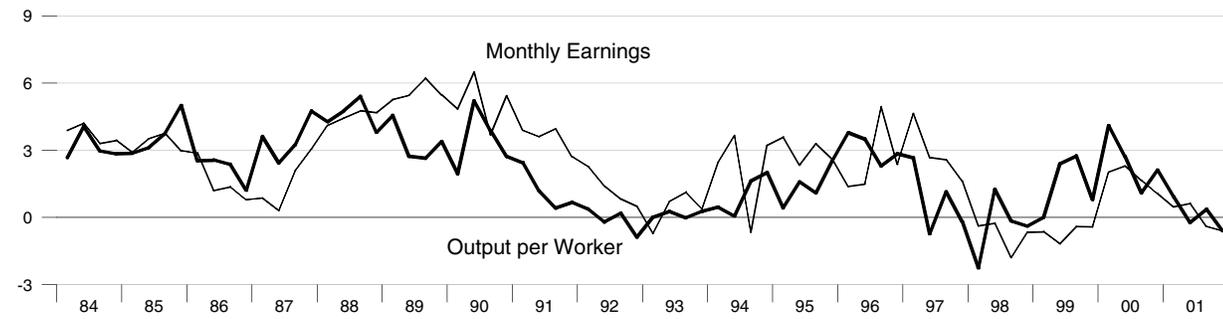
**Capacity Utilization**

1995 = 100



### Monthly Earnings and Output per Worker

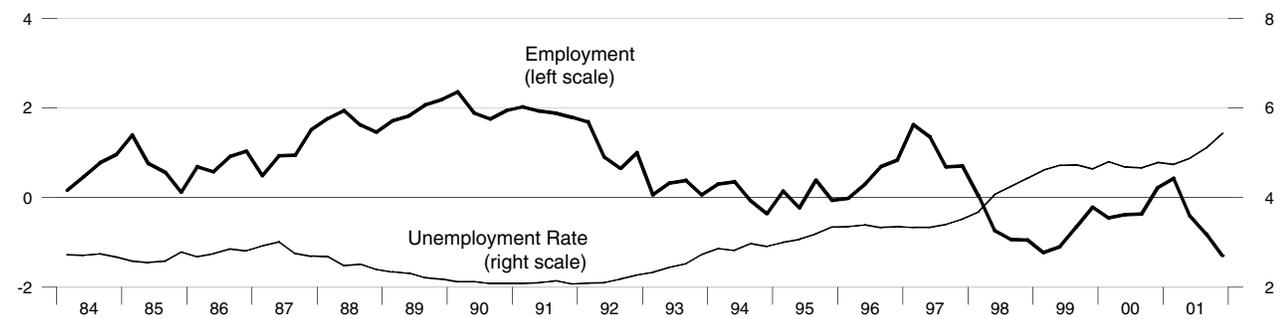
Percent change from year ago



### Labor Force Indicators

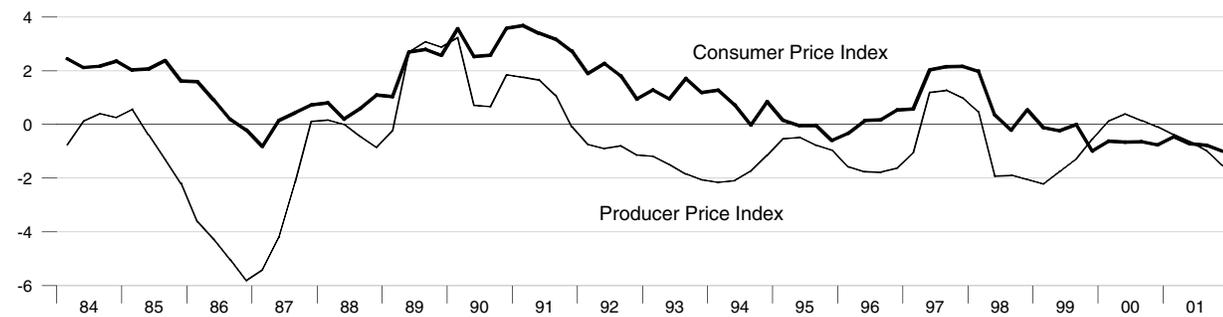
Percent change from year ago

Percent



### Inflation

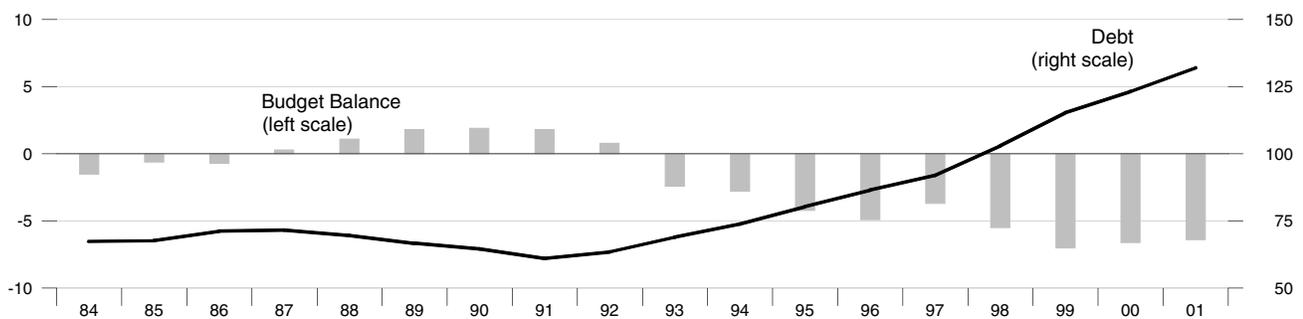
Percent change from year ago



### Government Debt and Budget Balance

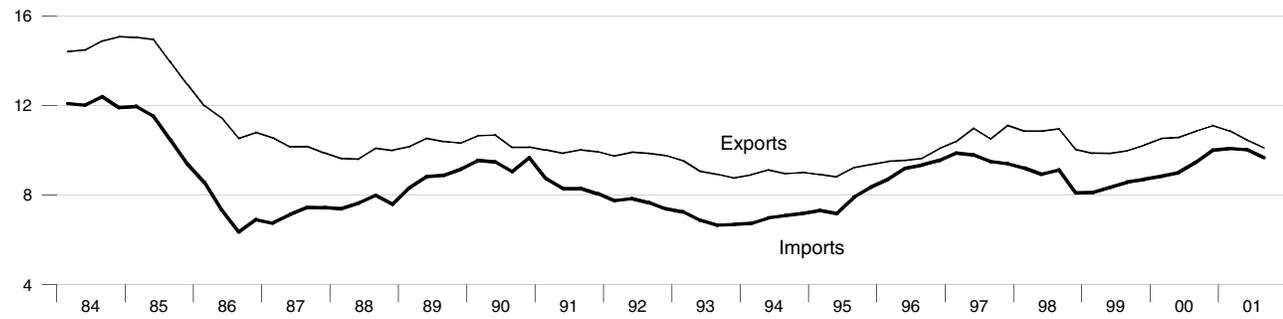
Percent of GDP, annual data

Percent of GDP, annual data



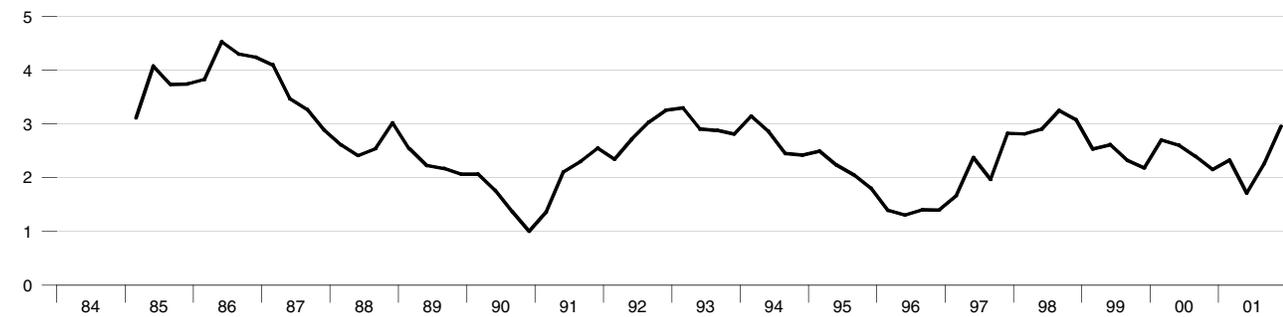
**International Trade - Goods and Services**

Percent of GDP



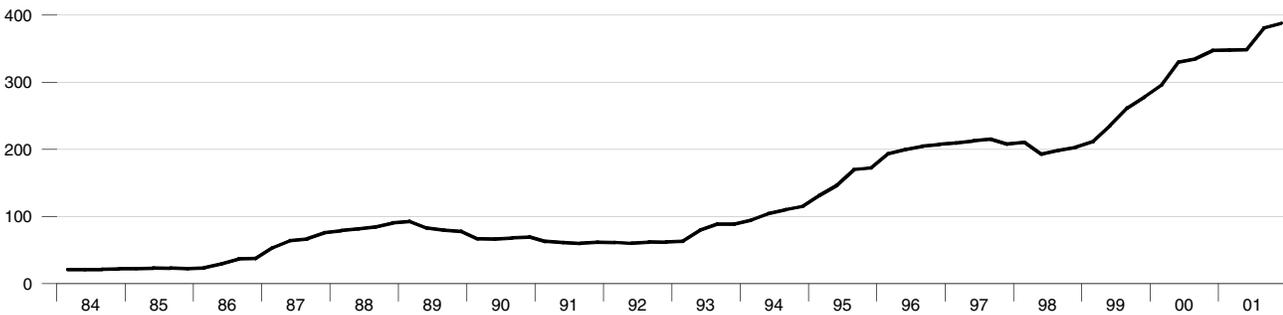
**Current Account Balance**

Percent of GDP



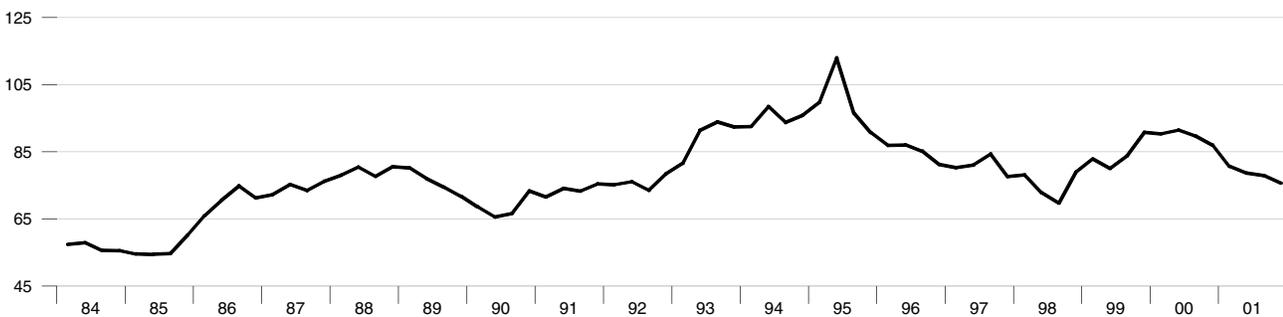
**Foreign Exchange Reserves**

Billions of US\$



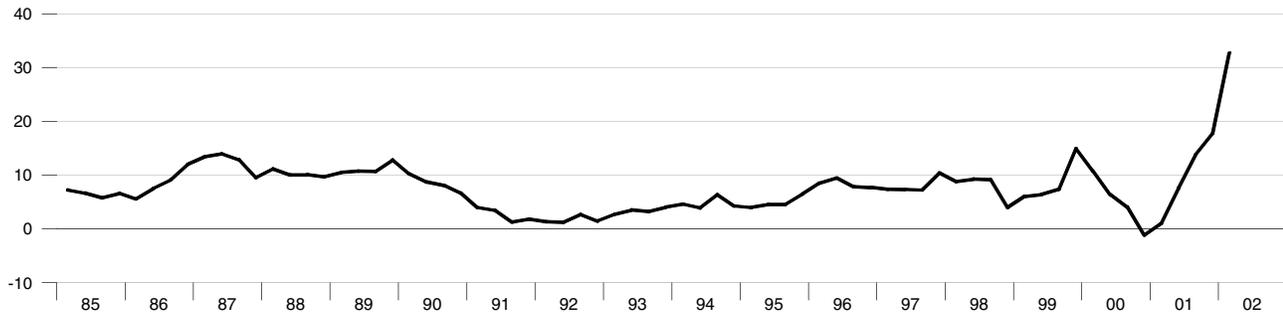
**Real Effective Exchange Rate**

Index 1995 = 100



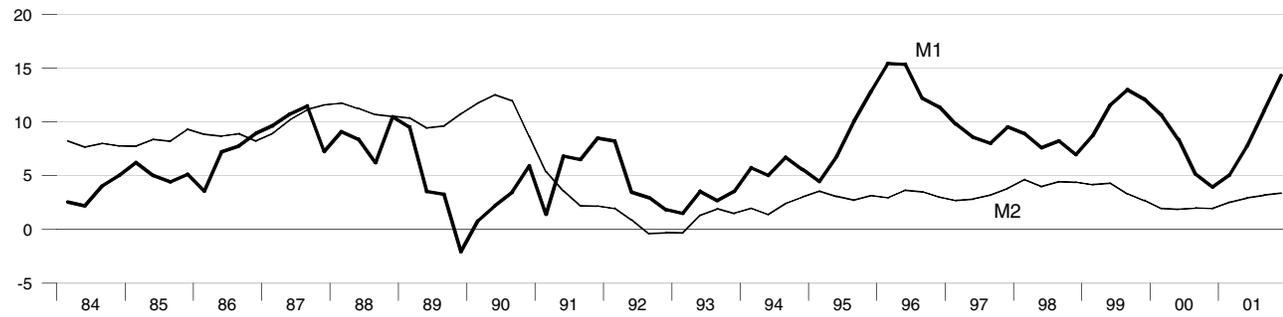
**Adjusted Monetary Base**

Percent change from year ago



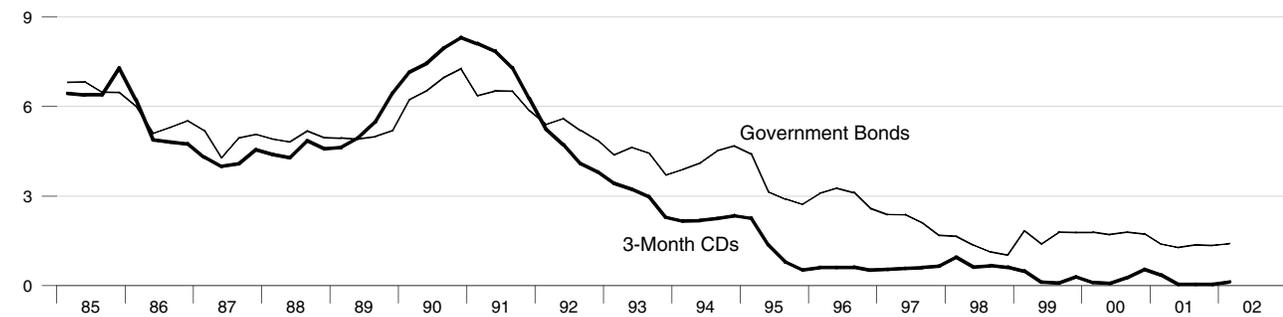
**Monetary Aggregates**

Percent change from year ago



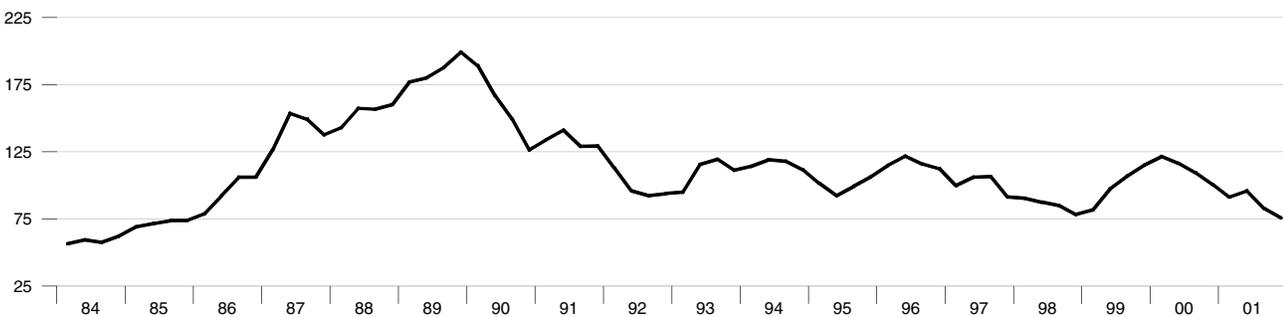
**Interest Rates**

Percent



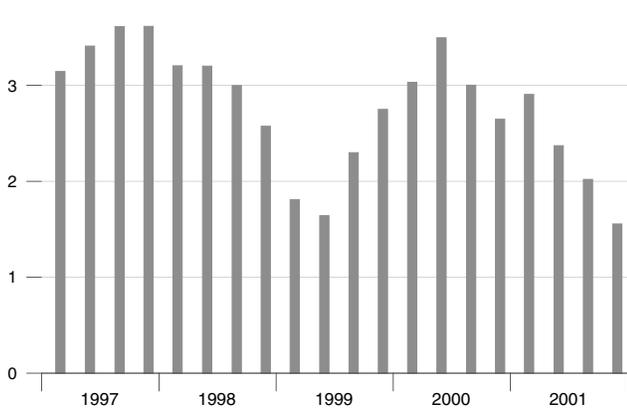
**Stock Exchange Index - Tokyo Stock Exchange**

1995 = 100



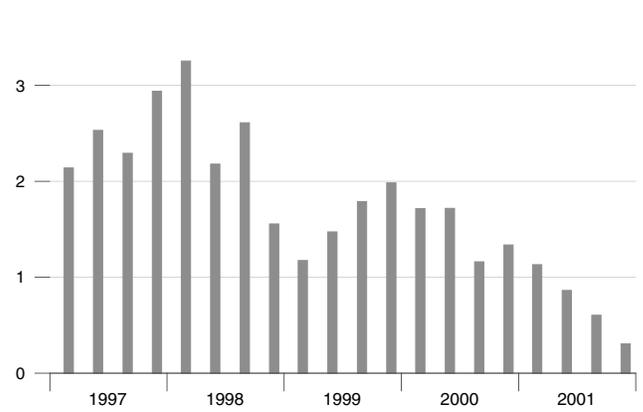
**Real GDP**

Percent change from year ago  
4



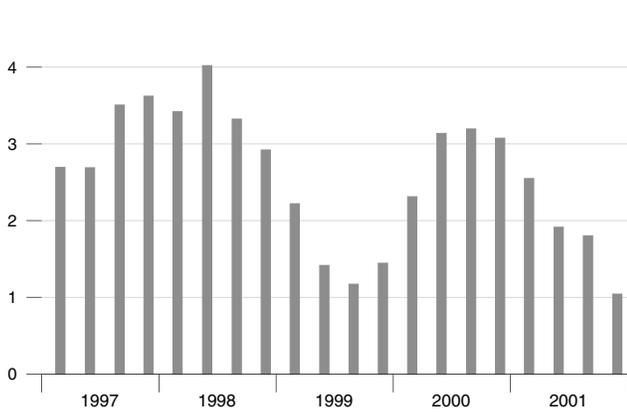
**Employment**

Percent change from year ago  
4



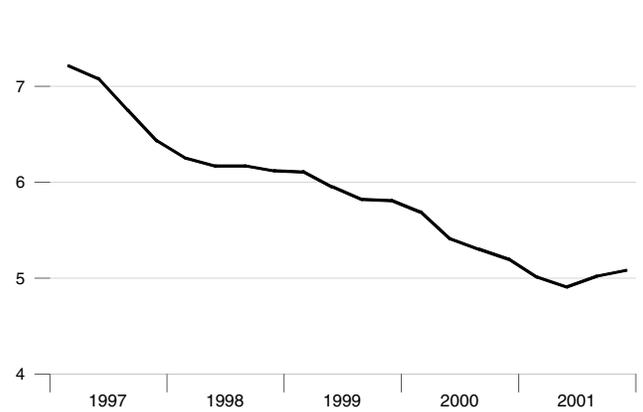
**Consumer Price Index**

Percent change from year ago  
5



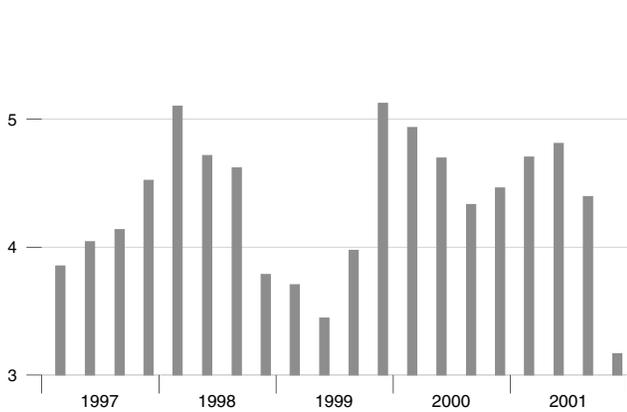
**Unemployment Rate**

Percent  
8



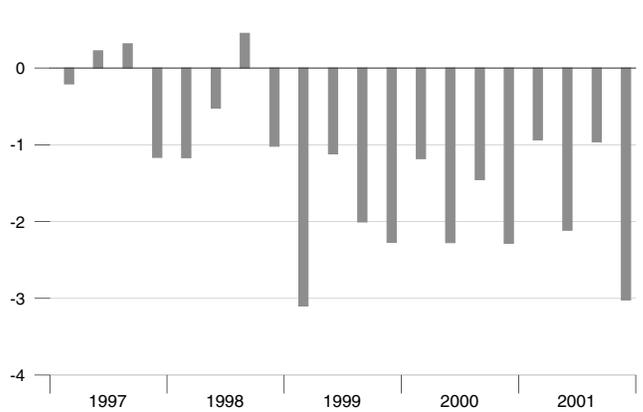
**Weekly Earnings**

Percent change from year ago  
6



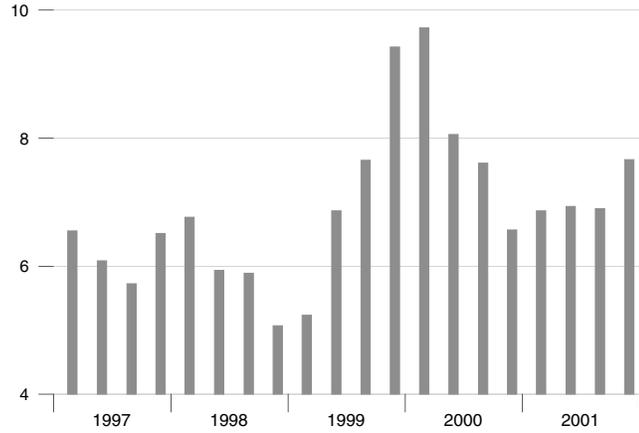
**Current Account Balance**

Percent of GDP  
1



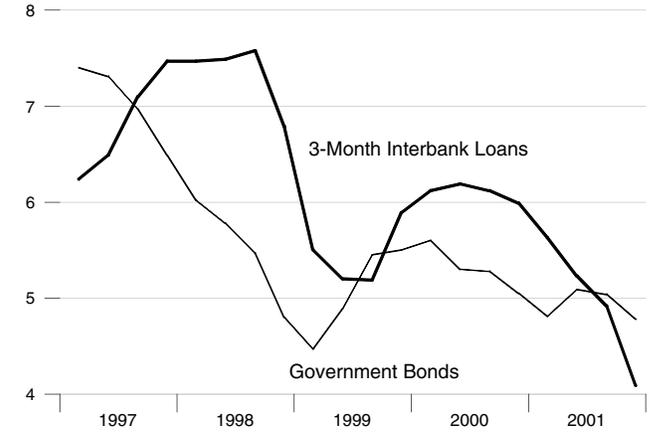
**M0**

Percent change from year ago



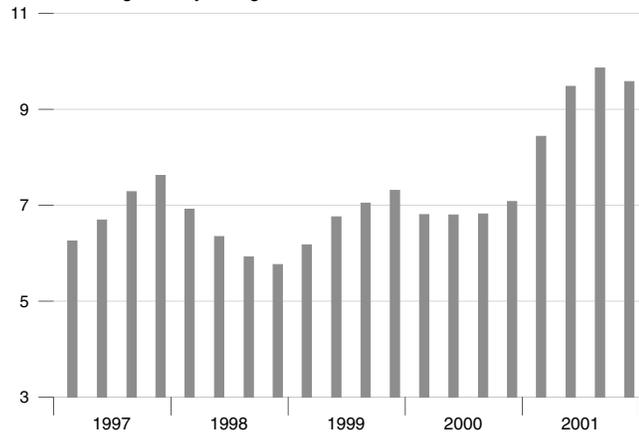
**Interest Rates**

Percent



**M2**

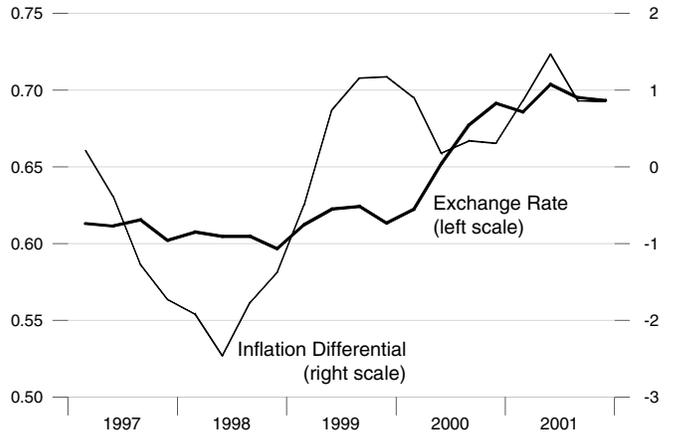
Percent change from year ago



**Exchange Rate and Inflation Differential**

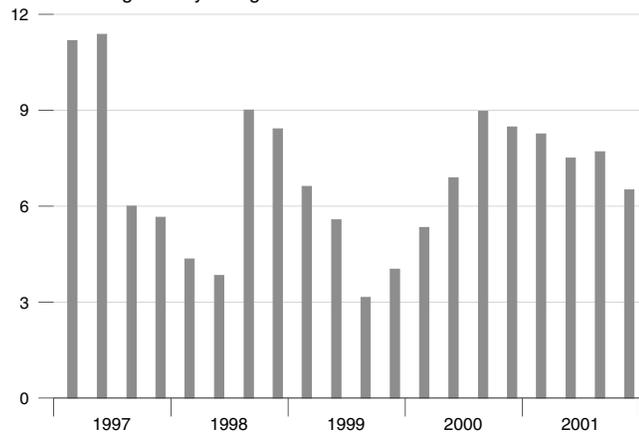
Pounds/US\$

Percent



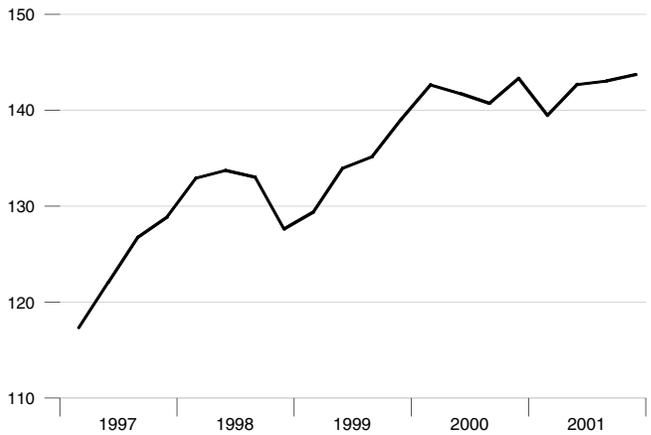
**M4**

Percent change from year ago



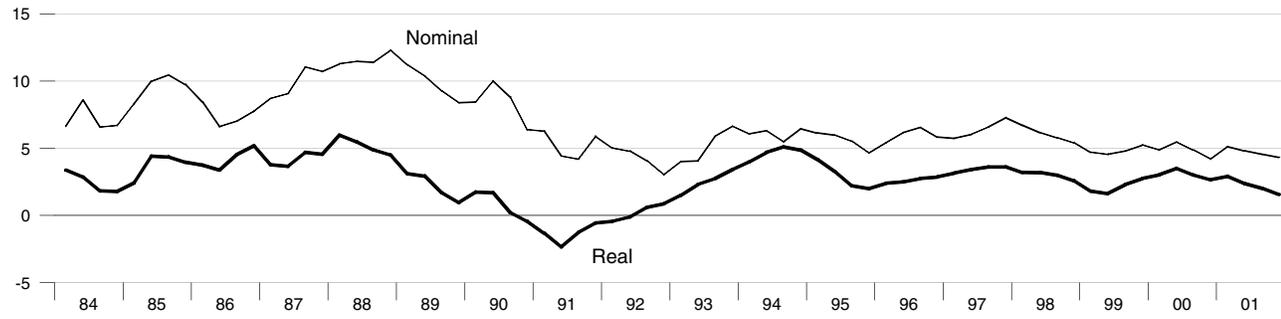
**Real Effective Exchange Rate**

Index 1995 = 100



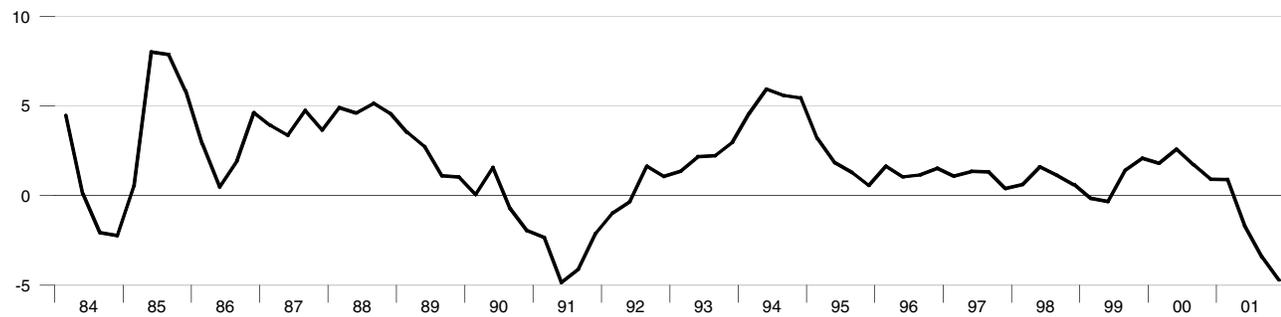
### GDP

Percent change from year ago



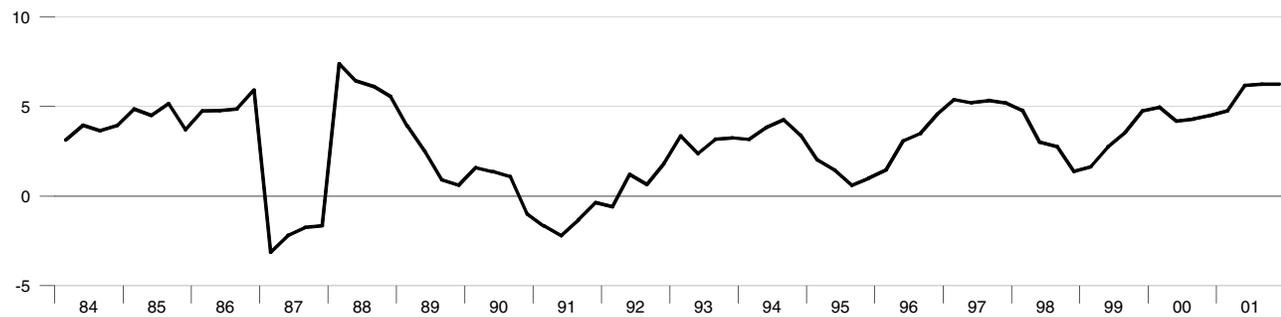
### Industrial Production

Percent change from year ago



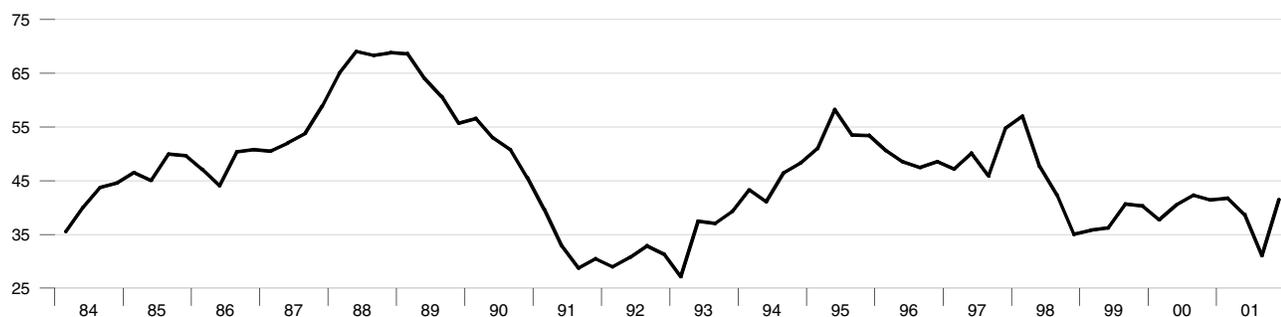
### Retail Sales

Percent change from year ago

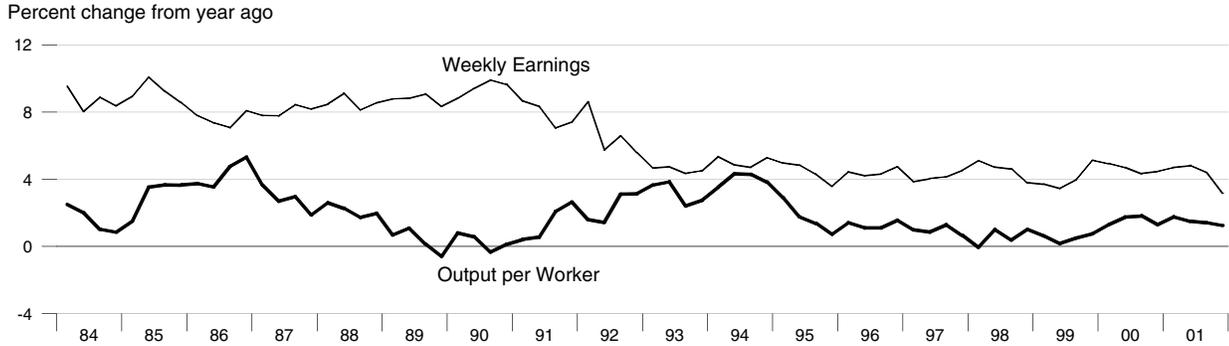


### Firms Operating at Capacity

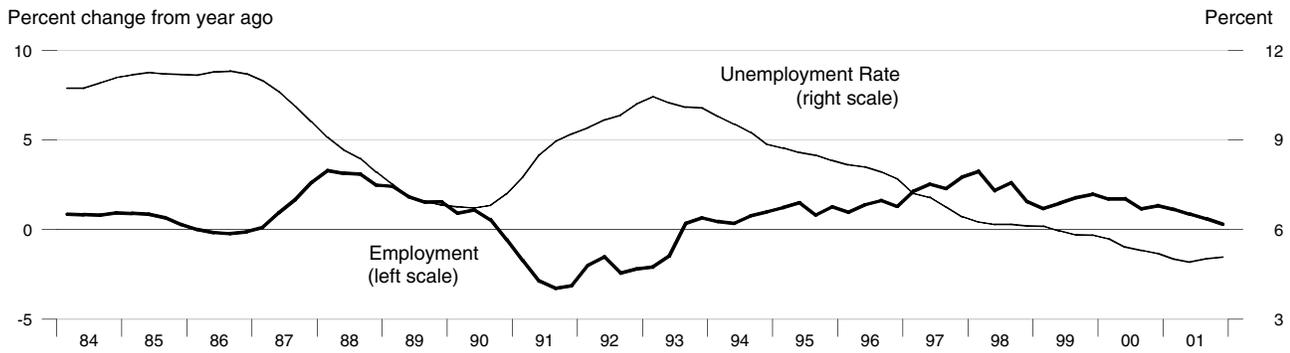
Percent



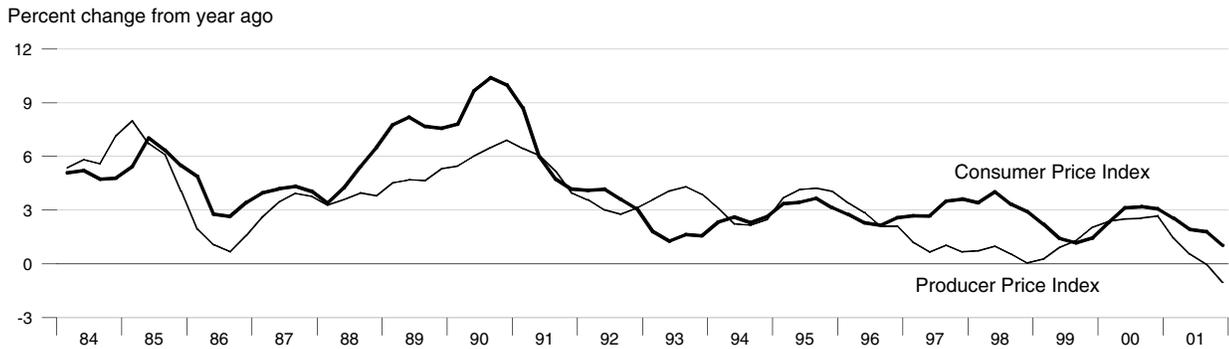
### Weekly Earnings and Output per Worker



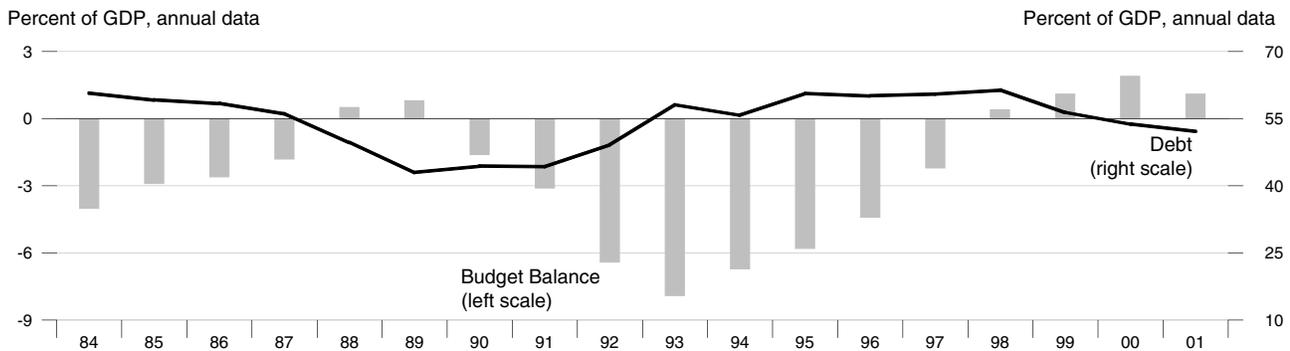
### Labor Force Indicators



### Inflation

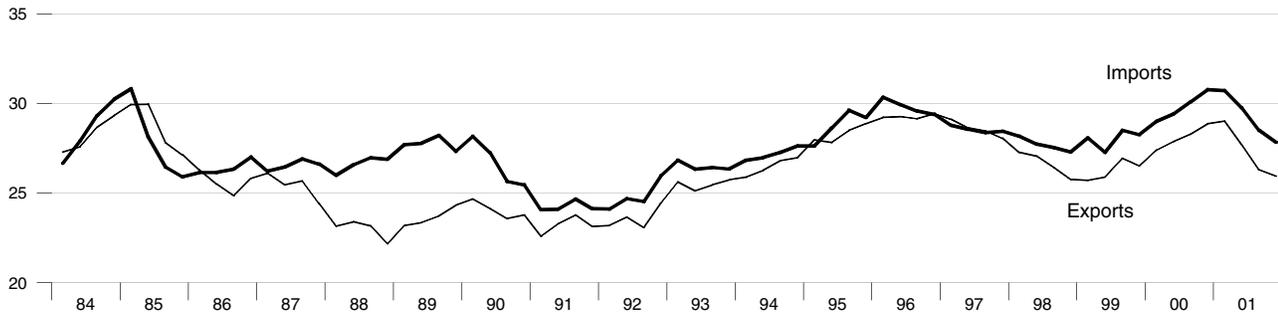


### Government Debt and Budget Balance



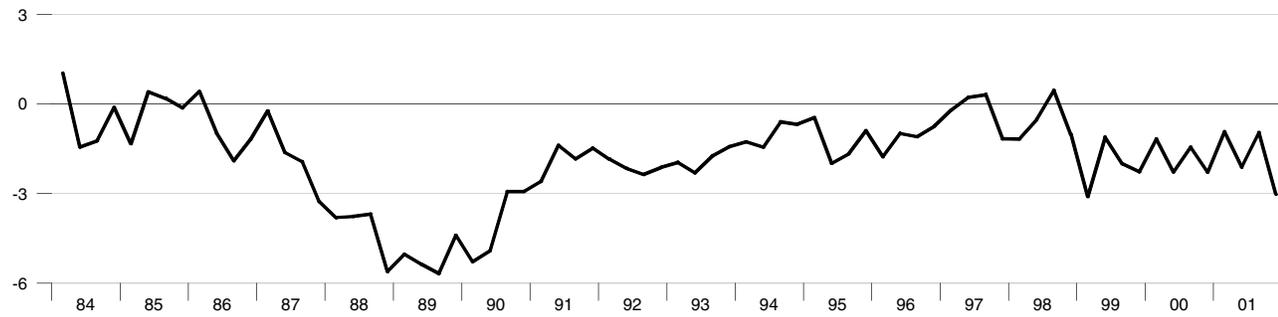
### International Trade - Goods and Services

Percent of GDP



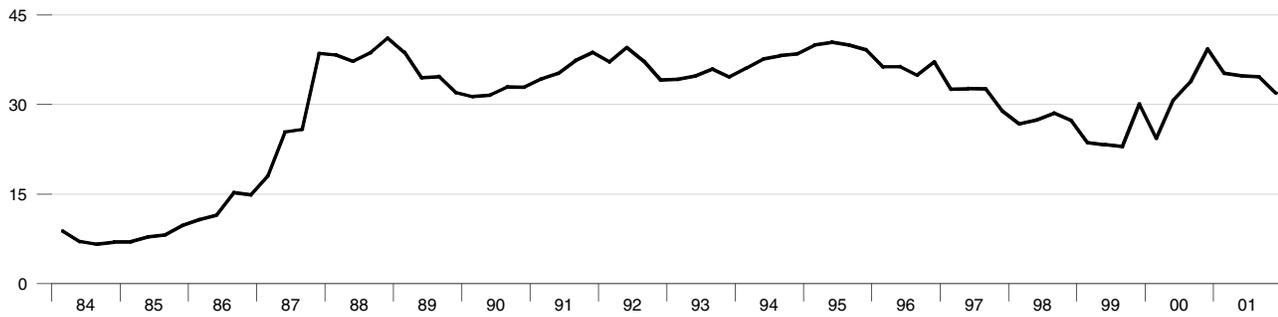
### Current Account Balance

Percent of GDP



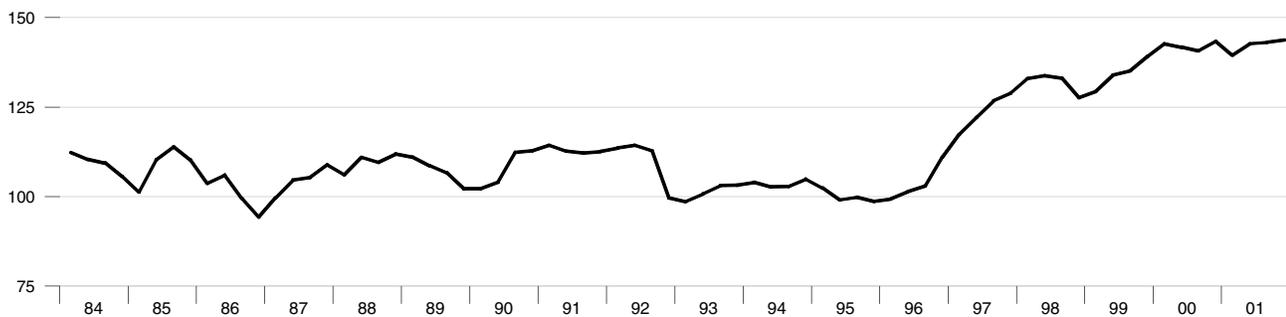
### Foreign Exchange Reserves

Billions of US\$



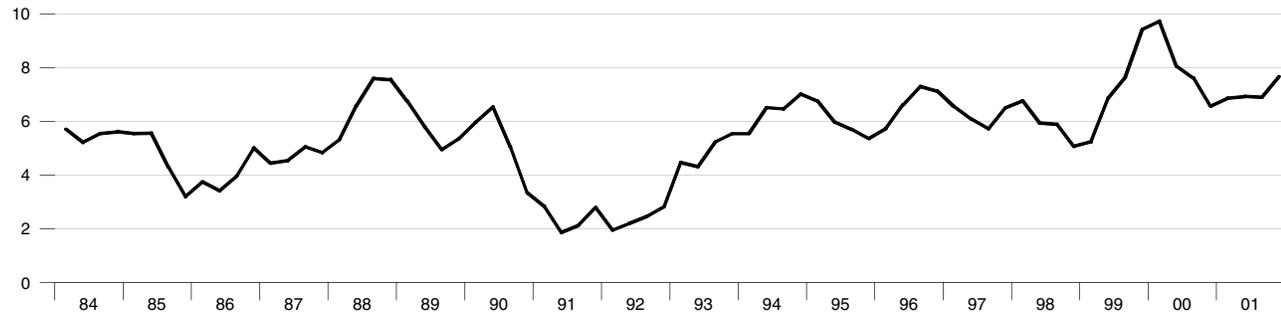
### Real Effective Exchange Rate

Index 1995 = 100



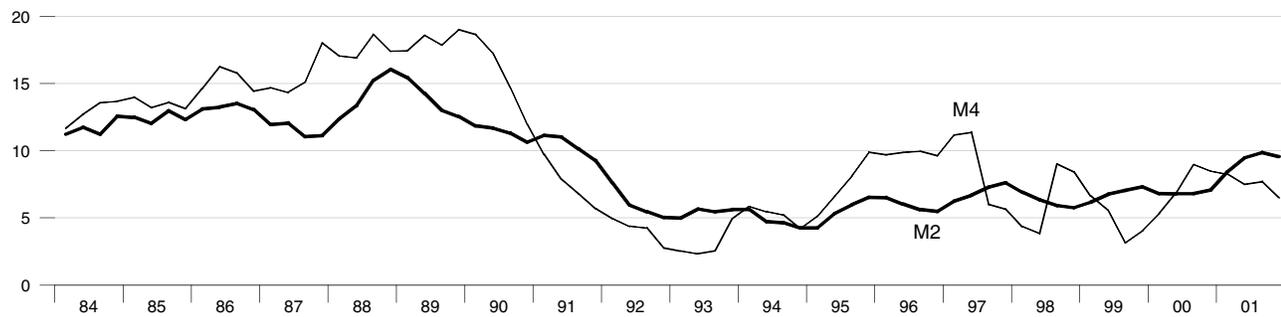
**M0**

Percent change from year ago



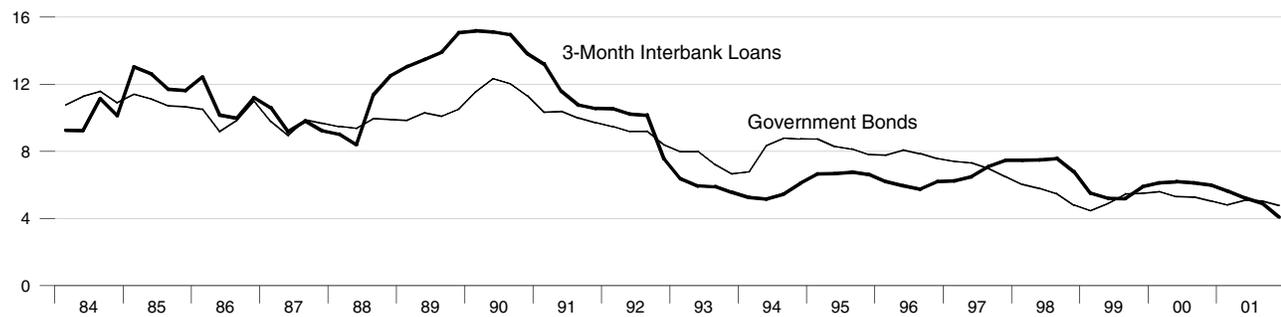
**Monetary Aggregates**

Percent change from year ago



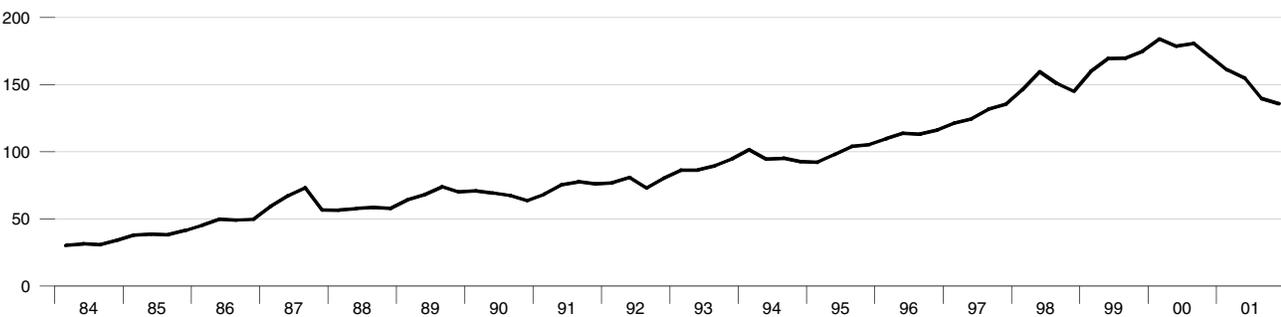
**Interest Rates**

Percent



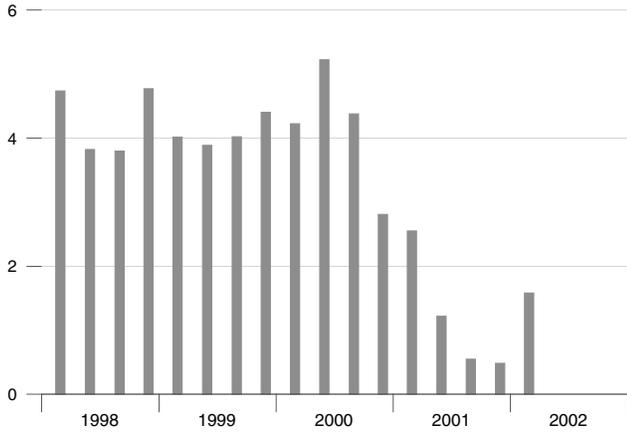
**Stock Exchange Index - Financial Times Stock Exchange**

1995 = 100



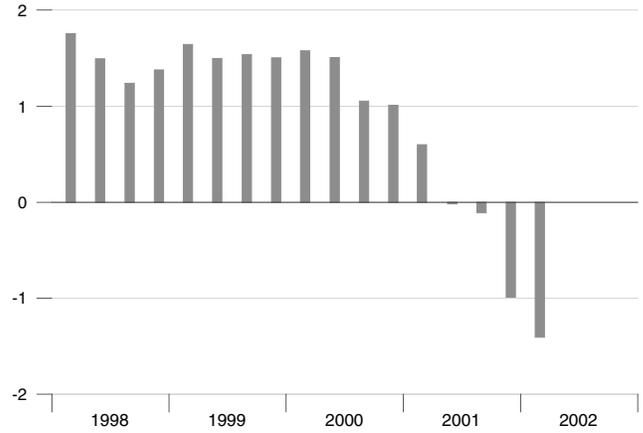
**Real GDP**

Percent change from year ago



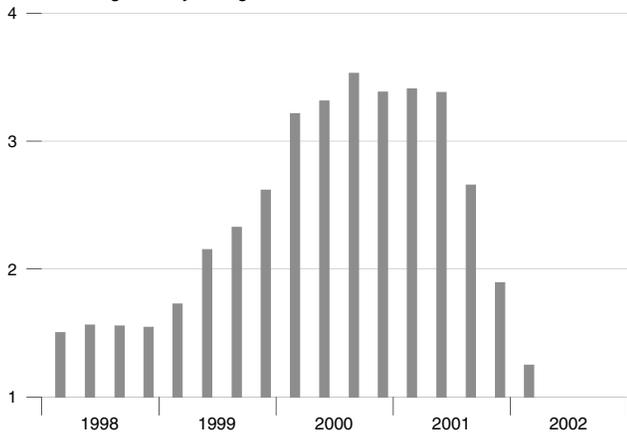
**Employment**

Percent change from year ago



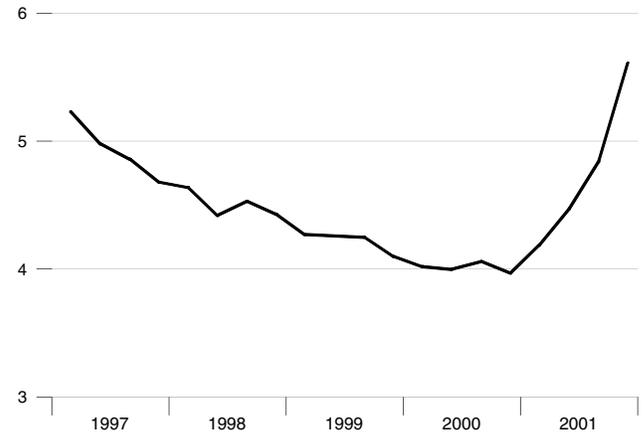
**Consumer Price Index**

Percent change from year ago



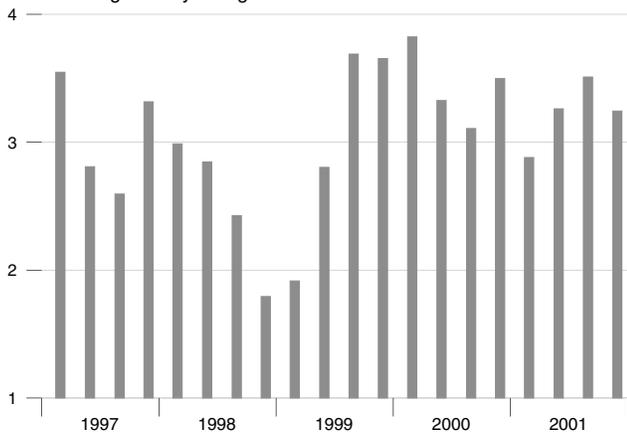
**Unemployment Rate**

Percent



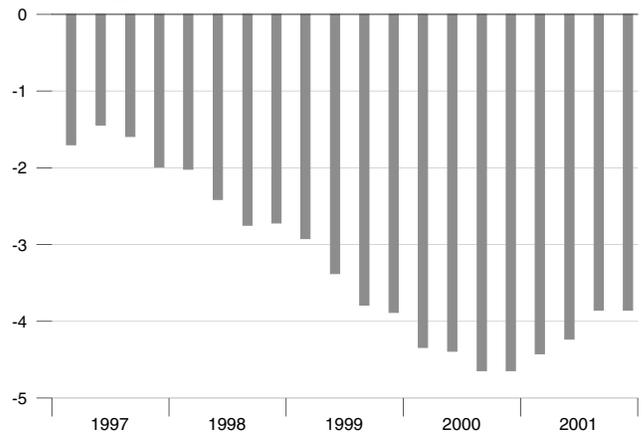
**Hourly Earnings**

Percent change from year ago



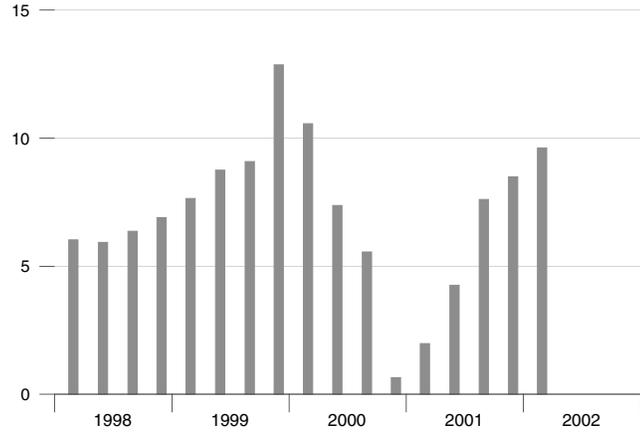
**Current Account Balance**

Percent of GDP



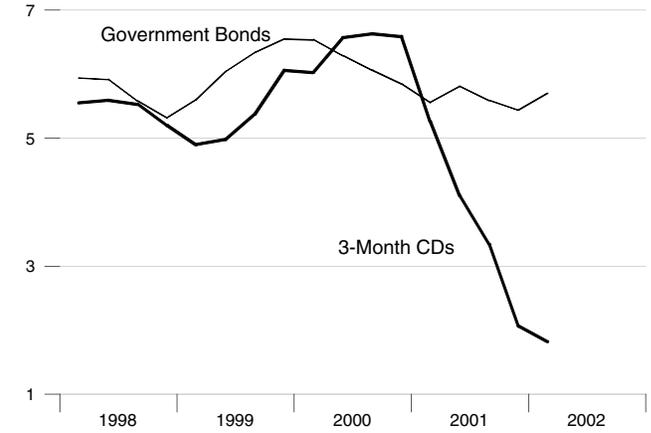
**Adjusted Monetary Base**

Percent change from year ago



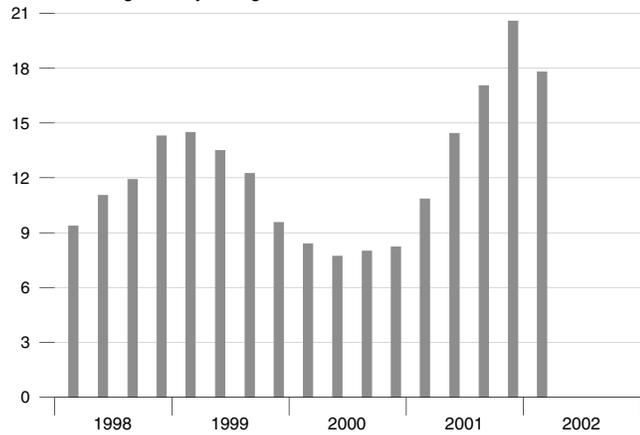
**Interest Rates**

Percent



**MZM**

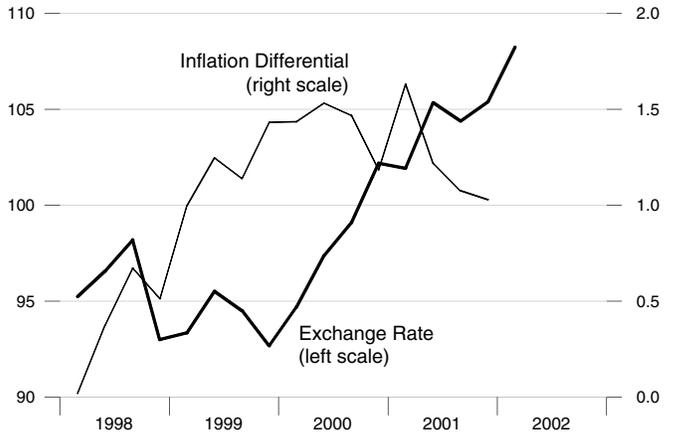
Percent change from year ago



**Exchange Rate and Inflation Differential**

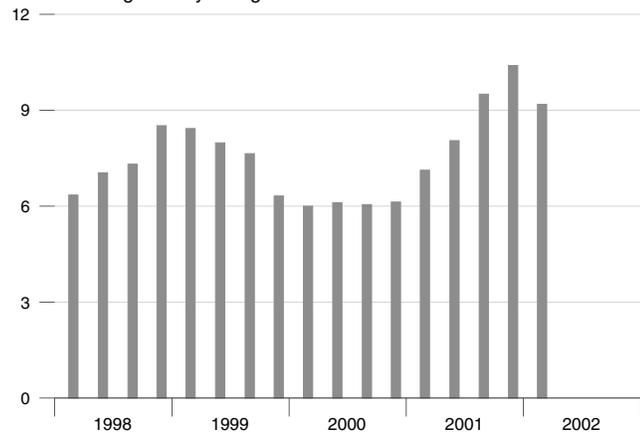
TWEX, March 1973 = 100

Percent



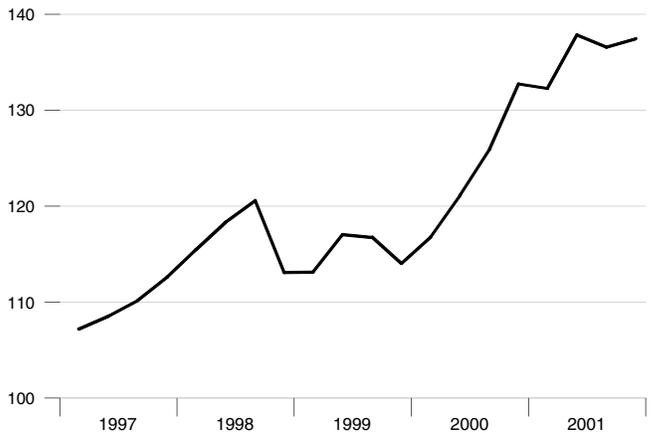
**M2**

Percent change from year ago



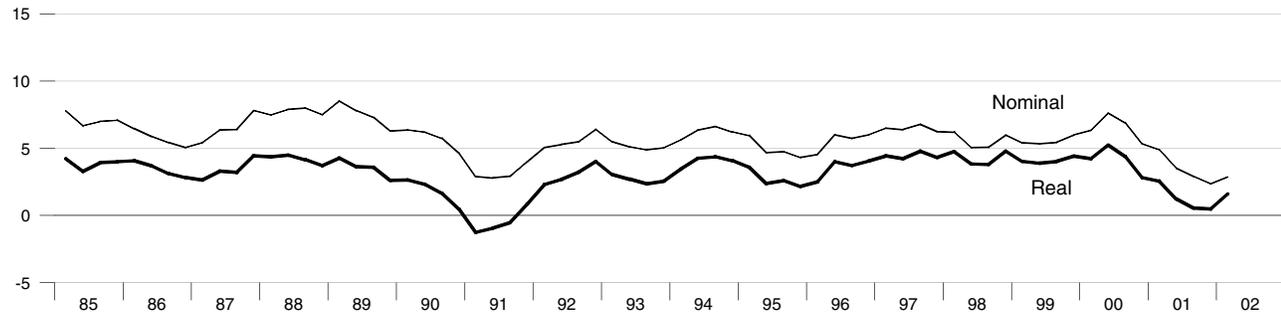
**Real Effective Exchange Rate**

Index 1995 = 100



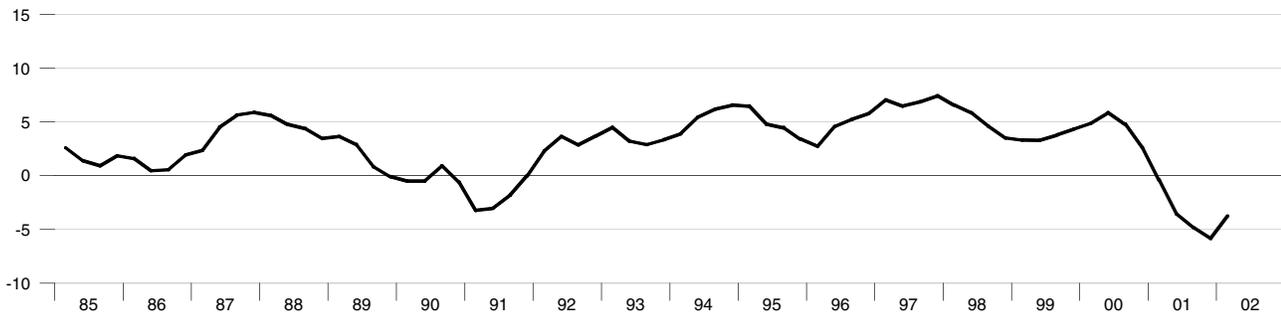
### GDP

Percent change from year ago



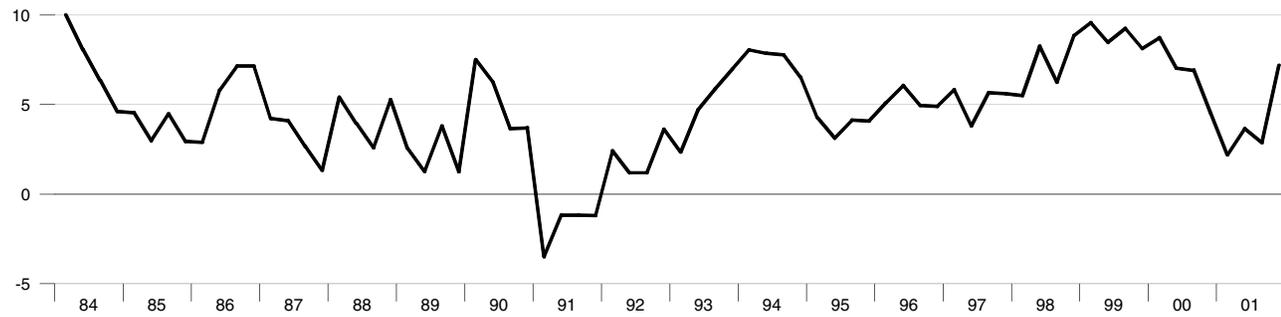
### Industrial Production

Percent change from year ago



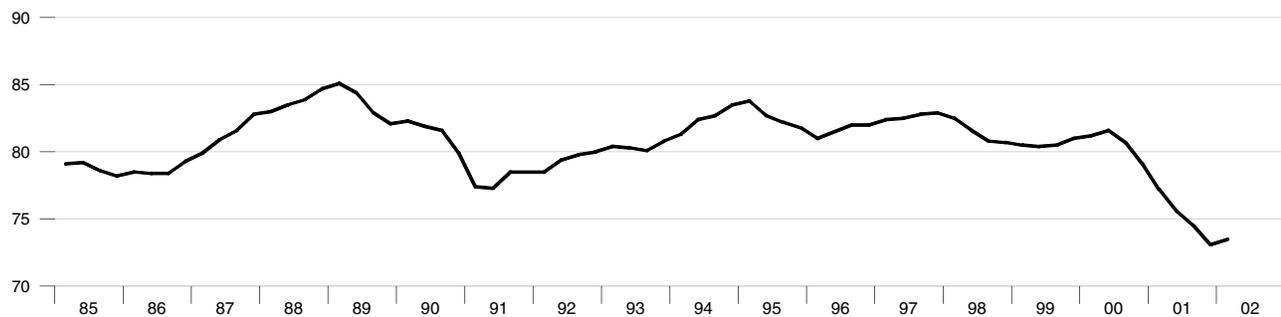
### Retail Sales

Percent change from year ago

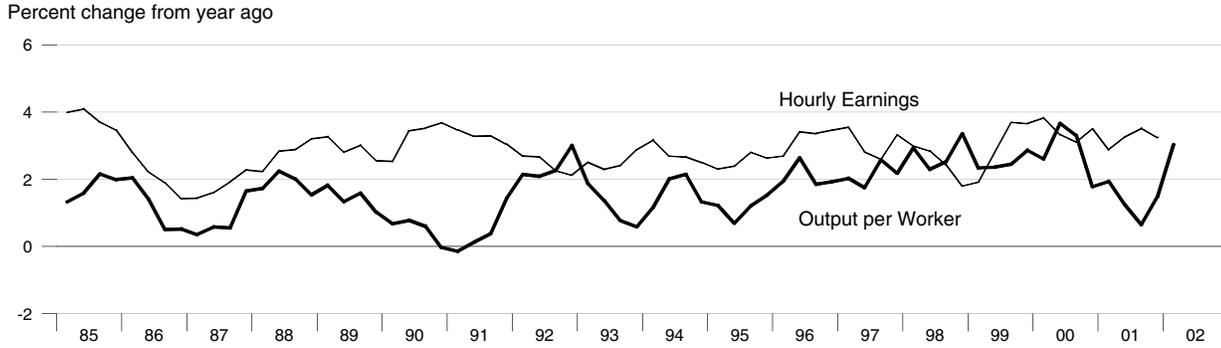


### Capacity Utilization

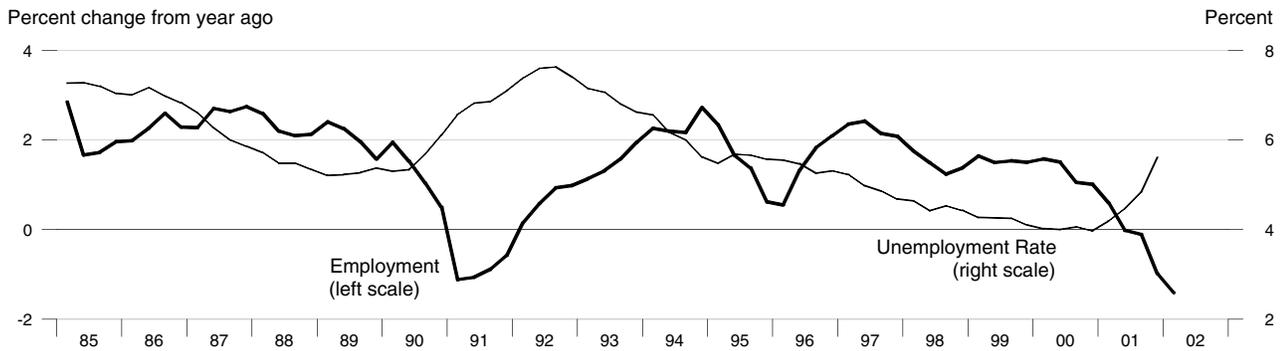
Percent



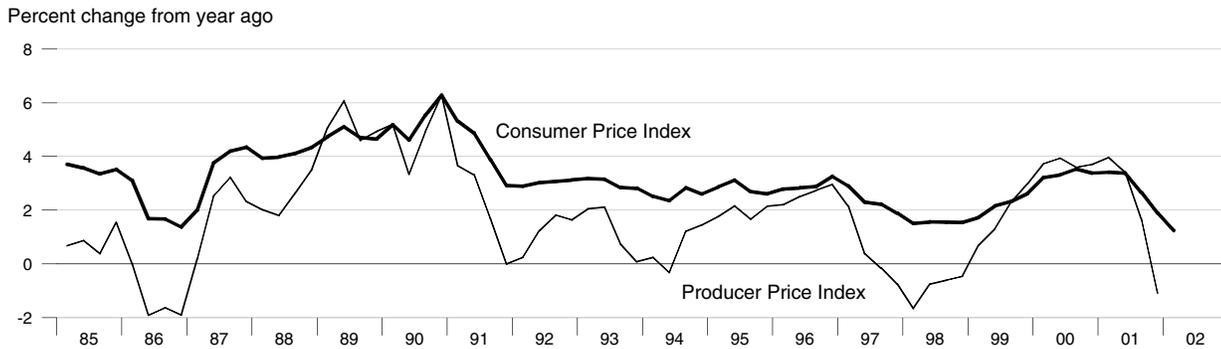
### Hourly Earnings and Output per Worker



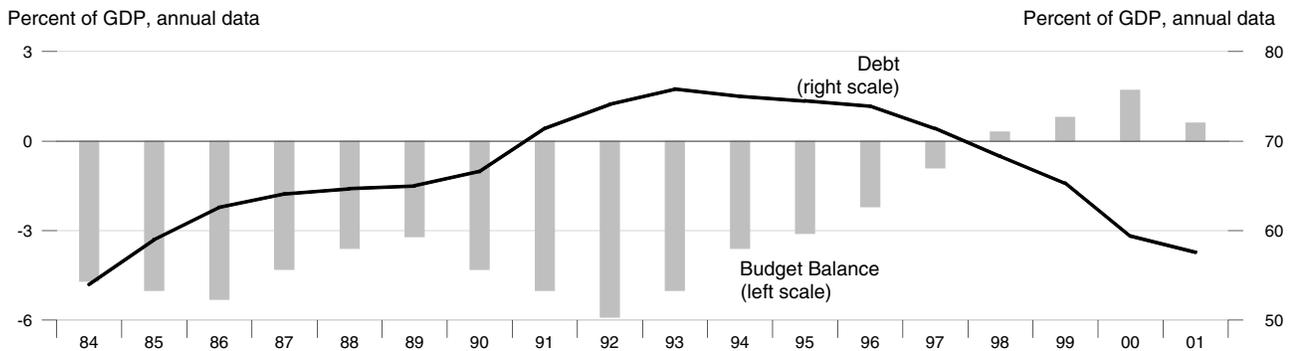
### Labor Force Indicators



### Inflation

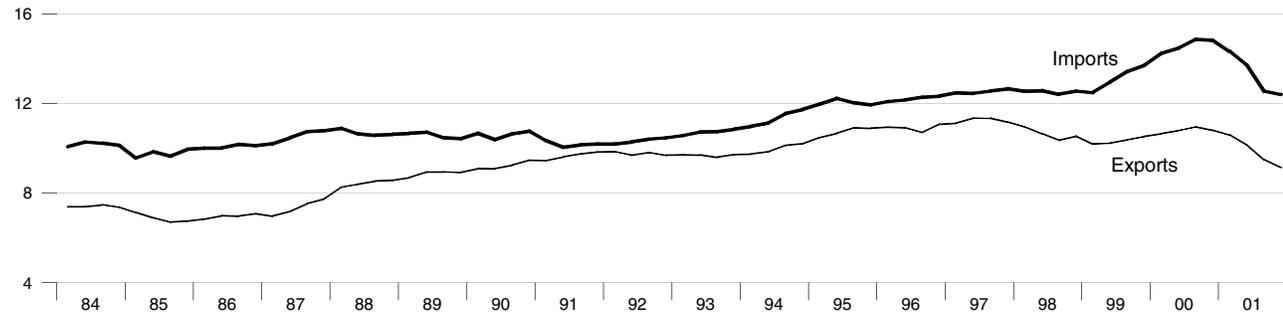


### Government Debt and Budget Balance



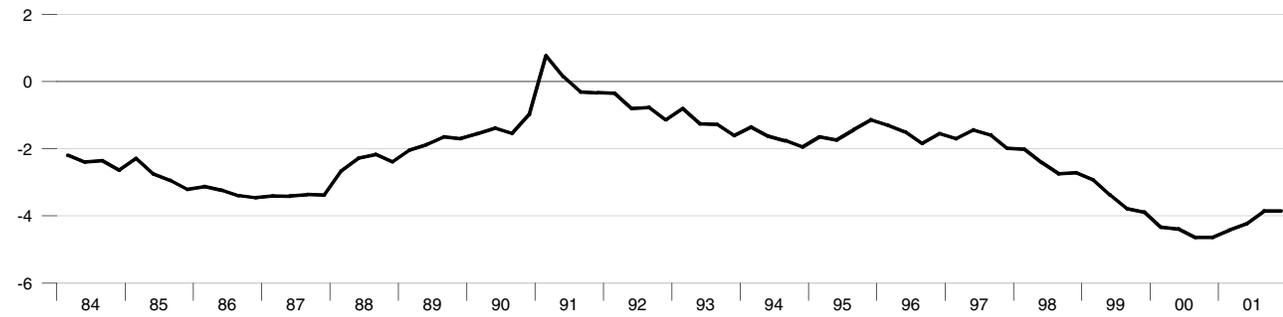
### International Trade - Goods and Services

Percent of GDP



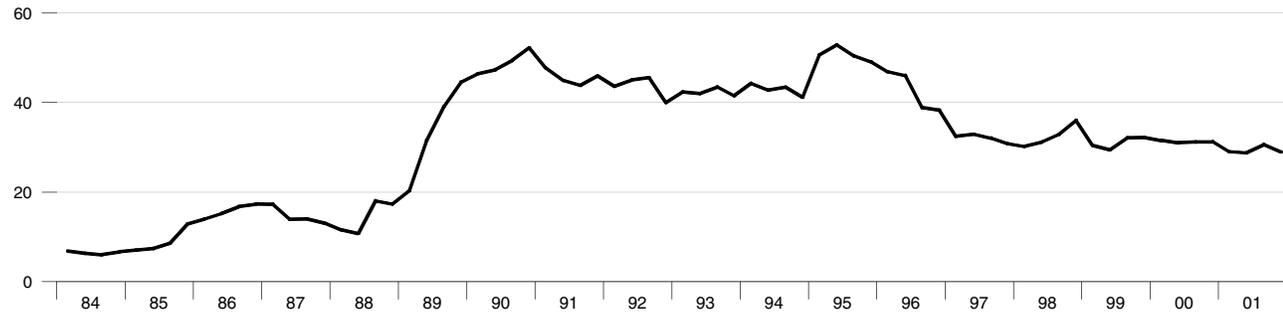
### Current Account Balance

Percent of GDP



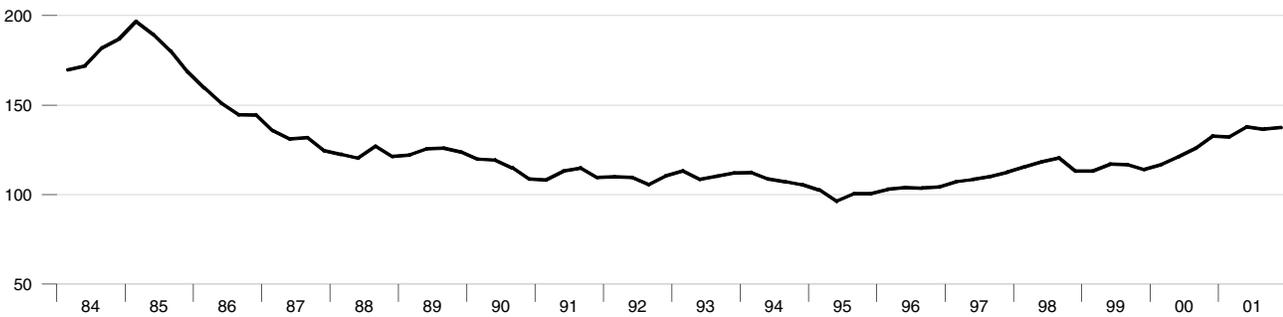
### Foreign Exchange Reserves

Billions of US\$



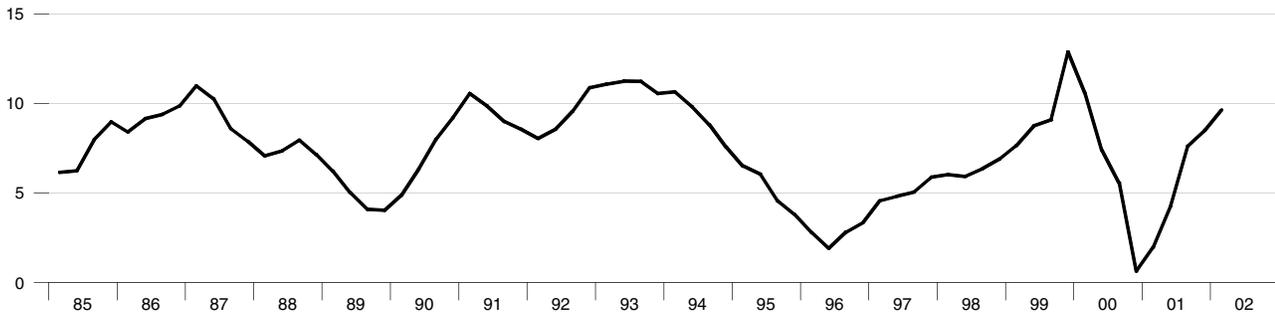
### Real Effective Exchange Rate

Index 1995 = 100



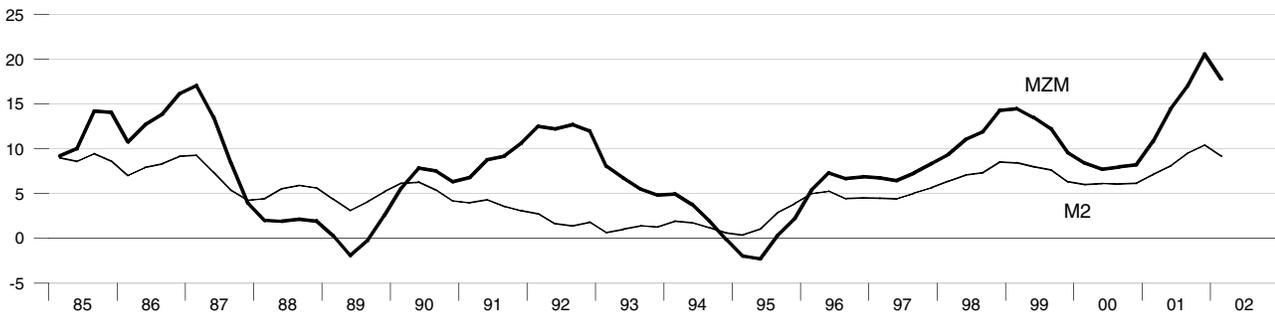
**Adjusted Monetary Base**

Percent change from year ago



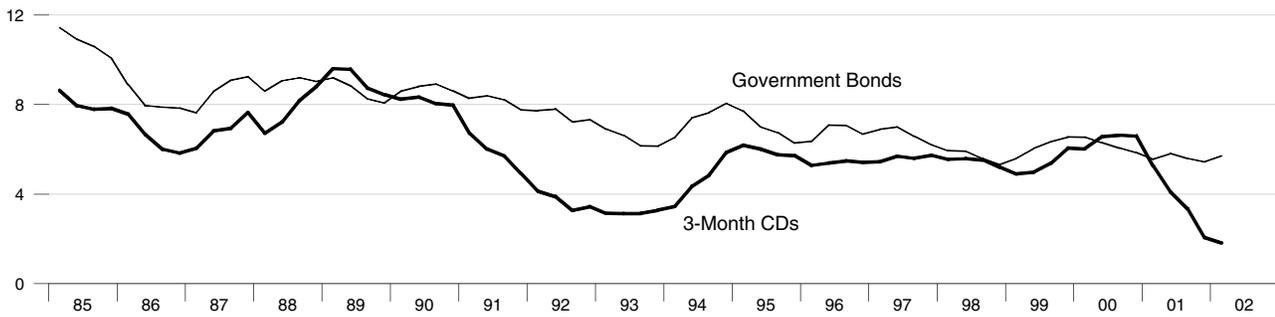
**Monetary Aggregates**

Percent change from year ago



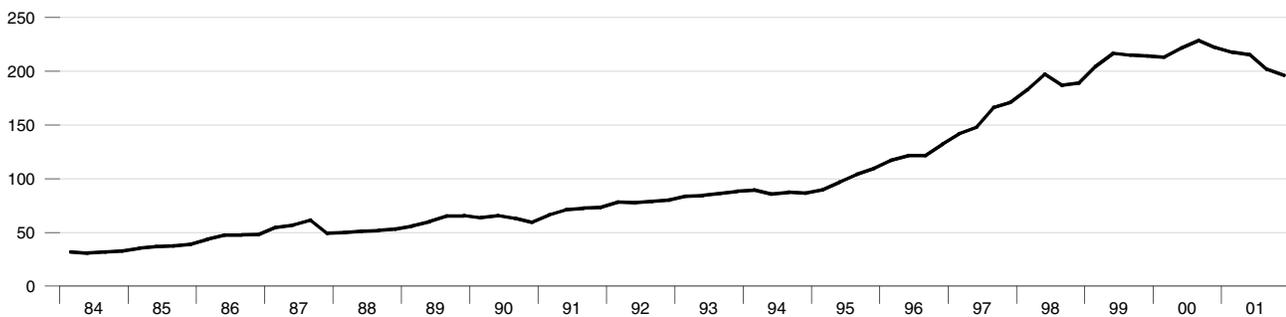
**Interest Rates**

Percent



**Stock Exchange Index - New York Stock Exchange**

1995 = 100



## 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.

**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 excluding construction for Italy; monthly earnings in manufacturing for Japan; and weekly earnings in manufacturing for the United Kingdom.

**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, the United States, and the euro area; industrial employment for France; and total employment for the United Kingdom.

Fluctuations in the dollar value of **Foreign Exchange Reserves** occur as a result of changes in reserve holdings and/or changes in the dollar value of the currencies held.

**Government Budget Balance** is the difference between general government current receipts and total outlays. Total outlays consist of current expenditures and net capital expenditures. **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.

**Inflation Differential** is the U.S. inflation rate minus the foreign inflation rate, as measured by the consumer price index. For the U.S. chart on page 41, the inflation differential is the U.S. inflation rate minus a weighted average of the inflation rates in countries whose currencies are used in the major currency trade-weighted exchange rate index. Starting in 1999, the euro-area harmonized consumer price index is used for the euro area. Prior to 1999, the inflation rates for the individual euro area countries (excluding Greece and Luxembourg) are used.

**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 Canada and 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 Japan, the United Kingdom, and the euro area.

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.

### M0

United Kingdom: notes and coins in circulation outside the Bank of England and bankers' operational deposits at the Bank of England.

### 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.

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

The trade-weighted exchange rate, **TWEX**, 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 franc. Prior to 1999, the currencies of the euro-area countries (with the exception of Greece) are used instead of the euro.

**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)

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

## France

BOG: exchange rate.  
Eurostat: 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: government debt and budget balance.

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

## Italy

BOG: exchange rate.  
Eurostat: producer price index.  
IMF: foreign exchange reserves, merchandise and service trade, and real effective exchange rate.  
Istituto Nazionale di Statistica: employment.  
OECD1: government debt and budget balance.  
OECD2: capacity utilization, consumer price index, 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: 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: 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 M0.

## United States

BOG: capacity utilization, exchange rate, industrial production index, M2, and interest rates.  
BEA: GDP, current account balance, and merchandise and service trade.  
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: government debt and budget balance.  
OECD2: hourly earnings, retail sales, stock exchange index, and unemployment.