

## Ownership-Based Trade

International trade data provide information about the importance of commerce among nations. Traditionally, trade statistics measure the movement of goods and services across international borders. From this geographic perspective, exports comprise the goods and services that are produced domestically and sold overseas, while imports measure the goods and services that are purchased from other nations for domestic consumption. In the modern world of multinational corporations and international economic integration, however, simple movements of the flow of goods across borders are not the only way to measure international trade.

An additional dimension of cross-border commerce follows from the establishment of foreign subsidiaries that produce and distribute goods outside a firm's home country. For example, when a U.S. corporation establishes a production facility in another country, goods produced and sold by the corporation in that foreign market are not included in traditional trade statistics, even though, in a sense, international transactions have taken place.

The U.S. Department of Commerce has recently compiled statistics that measure international trade by ownership, rather than location of production.<sup>1</sup> This alternative measure of cross-country commerce adjusts imports and exports to account for the sales of domestic affiliates abroad and foreign affiliates in the United States. In making this adjustment, only the *net* receipts accruing to the parent companies are included. To the extent that a U.S. company hires foreign labor and capital at its overseas subsidiaries, payments to these factors of production are properly measured as accruing to the foreign country rather than the U.S. corporation. So, for instance, in 1999 (the last year for which data are available), sales by foreign affiliates of U.S. companies totaled nearly \$2.6 trillion; after subtracting local costs and intra-firm transactions, however, net receipts of U.S. parent companies were only \$122 billion. In the same year, sales by U.S. affiliates of foreign companies were \$2.0 trillion, but, after adjusting for imports from the parent company and local costs of

production, net payments to foreign parent companies were only \$54 billion.

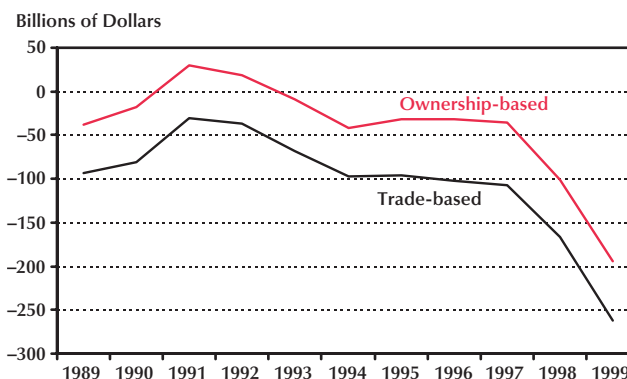
Because the United States is home to many multinational corporations that do business around the world, trade statistics based on location of the parent company provide a different picture of this country's trade position. In particular, because net receipts of U.S. parent companies from their foreign affiliates are larger than the net receipts of foreign firms doing business in the United States, ownership-based measures of trade show a smaller U.S. trade deficit. The accompanying figure illustrates the difference for goods and services trade. Note that, in 1991 and 1992, the ownership-based measure showed a surplus, whereas the trade-based measure registered a deficit. In 1999, the traditional trade-based measure of the balance on goods and services showed a deficit of \$261.8 billion, while the comparable ownership-based statistic measured the deficit at only \$194.8 billion.

In today's complex globalized economy, no measure of international transactions is perfect. Nevertheless, by comparing differing concepts of international transactions, we can gain a broader perspective on the importance of cross-border commerce.

—Michael R. Pakko

<sup>1</sup>See Lowe, Jeffery H. "An Ownership-Based Framework of the U.S. Current Account, 1989-99." *Survey of Current Business*, April 2002, pp. 25-27.

### Balance on Goods and Services



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

1. Charts and tables contain data that were current through July 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.

We welcome your comments addressed to:

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**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         | 5.46 | 5.81 | 5.70 | 5.20 | 4.81 | 4.62 | 3.53 | 2.64 | 1.97  | 0.59  | 0.83  | 2.14  |
| Euro Area      | 2.22 | 2.88 | 3.72 | 3.80 | 4.07 | 3.28 | 2.93 | 2.45 | 1.59  | 1.36  | 0.42  | 0.30  |
| France         | 2.67 | 3.22 | 4.13 | 4.55 | 4.44 | 3.85 | 3.75 | 3.00 | 2.05  | 2.04  | 0.31  | 0.32  |
| Germany        | 0.97 | 2.05 | 3.03 | 2.92 | 4.37 | 3.18 | 2.48 | 1.84 | 0.70  | 0.43  | 0.02  | -0.21 |
| Italy          | 1.03 | 1.44 | 2.99 | 3.18 | 3.06 | 2.63 | 2.51 | 2.59 | 2.28  | 1.78  | 0.59  | 0.00  |
| Japan          | 1.27 | 2.06 | 0.58 | 3.63 | 2.32 | 0.72 | 2.33 | 1.35 | -0.67 | -0.51 | -2.02 | -1.65 |
| United Kingdom | 1.90 | 2.37 | 3.19 | 3.43 | 3.62 | 3.05 | 2.25 | 2.29 | 2.10  | 1.85  | 1.50  | 1.15  |
| United States  | 3.89 | 4.02 | 4.41 | 4.23 | 5.22 | 4.38 | 2.81 | 2.55 | 1.22  | 0.54  | 0.48  | 1.65  |

**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         | 6.48 | 8.66 | 8.81  | 9.25 | 9.18 | 8.63  | 7.46 | 6.15  | 4.00  | 0.69  | -0.42 | 0.52  |
| Euro Area      | 4.36 | 4.58 | 4.80  | 4.93 | 5.19 | 4.68  | 4.40 | 4.64  | 3.97  | 3.52  | 2.96  | 2.60  |
| France         | 3.23 | 3.71 | 4.44  | 5.10 | 4.79 | 4.37  | 4.57 | 3.94  | 3.50  | 3.80  | 1.93  | 2.14  |
| Germany        | 1.64 | 2.33 | 3.13  | 2.64 | 3.60 | 2.93  | 2.13 | 2.76  | 2.12  | 1.23  | 2.03  | 2.01  |
| Italy          | 2.81 | 3.05 | 4.34  | 5.13 | 5.64 | 5.21  | 4.34 | 5.31  | 4.57  | 4.10  | 3.90  | 2.07  |
| Japan          | 0.09 | 0.42 | -1.26 | 1.68 | 0.14 | -1.02 | 0.31 | -0.54 | -2.16 | -1.90 | -3.14 | -2.55 |
| United Kingdom | 4.61 | 5.01 | 5.56  | 5.66 | 6.03 | 5.28  | 4.33 | 4.70  | 4.35  | 3.05  | 3.76  | 4.57  |
| United States  | 5.34 | 5.45 | 5.99  | 6.33 | 7.60 | 6.88  | 5.31 | 4.89  | 3.50  | 2.89  | 2.35  | 3.04  |

**Consumer Price Index**

Percent change from year ago

|                | 99.3  | 99.4  | 00.1  | 00.2  | 00.3  | 00.4  | 01.1  | 01.2  | 01.3  | 01.4  | 02.1  | 02.2 |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Canada         | 2.15  | 2.36  | 2.69  | 2.44  | 2.71  | 3.08  | 2.79  | 3.59  | 2.69  | 1.10  | 1.54  | .    |
| Euro Area      | 1.16  | 1.56  | 2.16  | 1.98  | 2.50  | 2.69  | 2.29  | 3.09  | 2.53  | 2.24  | 2.59  | 2.10 |
| France         | 0.47  | 1.00  | 1.59  | 1.54  | 2.03  | 2.06  | 1.45  | 2.29  | 2.01  | 1.53  | 2.18  | 1.69 |
| Germany        | 0.67  | 1.10  | 1.96  | 1.74  | 2.13  | 2.45  | 2.38  | 3.16  | 2.47  | 1.72  | 1.95  | 1.11 |
| Italy          | 1.72  | 1.98  | 2.42  | 2.57  | 2.63  | 2.80  | 2.08  | 2.86  | 2.20  | 2.28  | 2.48  | 2.33 |
| Japan          | -0.00 | -1.00 | -0.62 | -0.66 | -0.64 | -0.77 | -0.45 | -0.72 | -0.77 | -1.00 | -1.41 | .    |
| United Kingdom | 1.18  | 1.44  | 2.31  | 3.14  | 3.20  | 3.07  | 2.55  | 1.92  | 1.80  | 1.04  | 1.21  | .    |
| United States  | 2.33  | 2.62  | 3.22  | 3.31  | 3.53  | 3.38  | 3.41  | 3.38  | 2.66  | 1.89  | 1.25  | 1.30 |

**Employment**

Percent change from year ago

|                | 99.3  | 99.4  | 00.1  | 00.2  | 00.3  | 00.4 | 01.1 | 01.2  | 01.3  | 01.4  | 02.1  | 02.2  |
|----------------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|
| Canada         | 2.70  | 2.73  | 3.02  | 2.76  | 2.34  | 2.30 | 1.64 | 1.48  | 1.11  | 0.47  | 0.91  | 1.58  |
| Euro Area      | 1.62  | 1.64  | 1.75  | 2.06  | 2.09  | 2.13 | 1.90 | 1.39  | 1.12  | 0.88  | .     | .     |
| France         | 2.66  | 3.13  | 3.33  | 3.71  | 3.84  | 3.87 | 3.50 | 2.83  | 2.09  | 1.57  | 1.17  | .     |
| Germany        | 1.25  | 1.28  | 1.71  | 2.17  | 1.47  | 1.18 | 0.62 | 0.19  | 0.08  | -0.19 | -0.37 | .     |
| Italy          | 0.63  | 0.98  | 1.18  | 1.50  | 2.05  | 2.23 | 1.99 | 1.52  | 1.39  | 1.35  | 1.78  | .     |
| Japan          | -0.66 | -0.22 | -0.46 | -0.38 | -0.37 | 0.22 | 0.43 | -0.42 | -0.82 | -1.30 | -1.46 | .     |
| United Kingdom | 1.76  | 1.99  | 1.71  | 1.72  | 1.16  | 1.35 | 1.14 | 0.87  | 0.60  | 0.34  | 0.29  | .     |
| United States  | 1.54  | 1.50  | 1.58  | 1.51  | 1.05  | 1.01 | 0.60 | -0.02 | -0.11 | -0.99 | -1.41 | -0.79 |

**Unemployment Rate**

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         | 7.87  | 7.52  | 6.97  | 6.77  | 6.69  | 6.92  | 6.87 | 6.95 | 7.04 | 7.20 | 7.66 | 7.82 |
| Euro Area      | 9.60  | 9.40  | 9.10  | 8.80  | 8.50  | 8.40  | 8.10 | 8.00 | 8.00 | 8.00 | 8.10 | 8.20 |
| France         | 10.98 | 10.59 | 10.17 | 9.77  | 9.40  | 9.07  | 8.77 | 8.58 | 8.56 | 8.61 | 8.77 | 8.97 |
| Germany        | 8.49  | 8.38  | 8.19  | 7.94  | 7.78  | 7.69  | 7.58 | 7.63 | 7.70 | 7.77 | 7.90 | 7.98 |
| Italy          | 11.31 | 11.18 | 11.05 | 10.90 | 10.53 | 10.26 | 9.92 | 9.70 | 9.47 | 9.42 | 9.21 | 9.05 |
| Japan          | 4.72  | 4.73  | 4.64  | 4.80  | 4.68  | 4.66  | 4.78 | 4.74 | 4.88 | 5.11 | 5.43 | 5.28 |
| United Kingdom | 5.89  | 5.73  | 5.67  | 5.59  | 5.35  | 5.22  | 5.12 | 5.01 | 4.94 | 5.04 | 5.08 | 5.06 |
| United States  | 4.26  | 4.25  | 4.10  | 4.02  | 4.00  | 4.06  | 3.97 | 4.19 | 4.47 | 4.84 | 5.61 | 5.62 |

**Reserve Money**

Percent change from year ago

|                | 99.3 | 99.4  | 00.1  | 00.2 | 00.3 | 00.4  | 01.1 | 01.2 | 01.3  | 01.4  | 02.1  | 02.2  |
|----------------|------|-------|-------|------|------|-------|------|------|-------|-------|-------|-------|
| Canada         | 9.09 | 25.03 | 6.96  | 4.91 | 1.78 | -7.96 | 3.06 | 6.95 | 7.31  | 4.21  | 7.20  | .     |
| Japan          | 7.34 | 14.93 | 10.80 | 6.33 | 4.01 | -1.16 | 1.08 | 7.50 | 13.84 | 17.78 | 32.66 | 26.92 |
| United Kingdom | 7.69 | 9.39  | 9.70  | 8.11 | 7.81 | 6.39  | 6.60 | 7.06 | 7.08  | 7.55  | 7.43  | .     |
| United States  | 9.09 | 12.87 | 10.57 | 7.36 | 5.56 | 0.64  | 1.97 | 4.25 | 7.61  | 8.49  | 9.67  | 10.31 |

**Narrow Money**

Percent change from year ago

|                | 99.3  | 99.4  | 00.1  | 00.2  | 00.3  | 00.4  | 01.1  | 01.2  | 01.3  | 01.4  | 02.1  | 02.2  |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Canada         | 2.08  | 3.47  | 9.94  | 15.21 | 17.71 | 17.59 | 13.13 | 11.37 | 8.18  | 13.76 | 14.35 | .     |
| Euro Area      | 12.97 | 11.12 | 10.67 | 7.48  | 6.66  | 5.32  | 2.77  | 5.43  | 5.94  | 6.74  | 5.92  | .     |
| Japan          | 13.09 | 12.16 | 10.53 | 8.37  | 5.22  | 3.98  | 4.96  | 7.73  | 11.04 | 14.30 | 23.63 | .     |
| United Kingdom | 7.10  | 7.42  | 6.92  | 6.92  | 6.92  | 7.21  | 8.56  | 9.66  | 10.07 | 9.90  | 9.32  | .     |
| United States  | 12.28 | 9.58  | 8.40  | 7.73  | 8.01  | 8.22  | 10.87 | 14.48 | 16.95 | 20.50 | 17.89 | 13.76 |

**Broad Money**

Percent change from year ago

|                | 99.3 | 99.4 | 00.1 | 00.2 | 00.3 | 00.4 | 01.1 | 01.2 | 01.3 | 01.4  | 02.1 | 02.2 |
|----------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Canada         | 2.93 | 3.76 | 5.65 | 7.09 | 7.52 | 7.12 | 5.72 | 5.16 | 4.37 | 5.66  | 5.90 | .    |
| Euro Area      | 5.03 | 5.43 | 6.90 | 5.49 | 5.16 | 4.17 | 6.44 | 8.43 | 9.50 | 11.18 | 7.30 | .    |
| Japan          | 3.32 | 2.70 | 1.93 | 1.86 | 1.99 | 1.95 | 2.50 | 2.92 | 3.18 | 3.37  | 3.69 | .    |
| United Kingdom | 3.29 | 4.20 | 5.43 | 6.94 | 8.99 | 8.49 | 8.34 | 7.62 | 7.81 | 6.41  | 5.80 | .    |
| United States  | 7.62 | 6.34 | 6.03 | 6.14 | 6.07 | 6.13 | 7.12 | 8.09 | 9.40 | 10.31 | 9.25 | 7.59 |

**Short-Term Interest Rates**

Percent

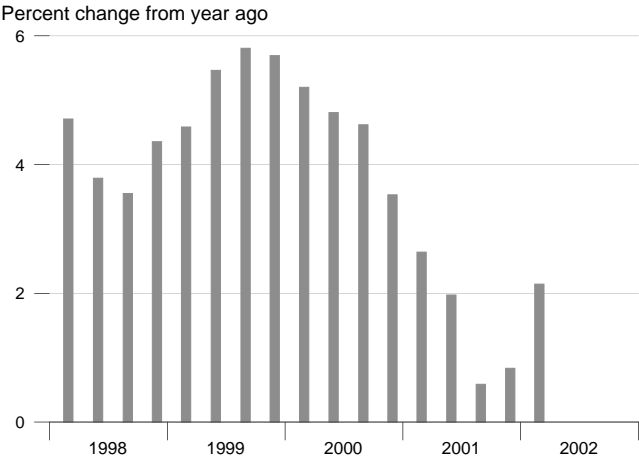
|                | 99.3 | 99.4 | 00.1 | 00.2 | 00.3 | 00.4 | 01.1 | 01.2 | 01.3 | 01.4 | 02.1 | 02.2 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Canada         | 4.82 | 5.04 | 5.28 | 6.12 | 5.90 | 5.81 | 5.10 | 4.48 | 3.95 | 2.39 | 2.11 | 2.58 |
| Euro Area      | 2.70 | 3.43 | 3.54 | 4.26 | 4.74 | 5.02 | 4.75 | 4.59 | 4.27 | 3.44 | 3.36 | 3.44 |
| Japan          | 0.09 | 0.29 | 0.11 | 0.08 | 0.27 | 0.54 | 0.36 | 0.04 | 0.04 | 0.04 | 0.12 | 0.04 |
| United Kingdom | 5.19 | 5.90 | 6.12 | 6.19 | 6.12 | 5.99 | 5.64 | 5.23 | 4.92 | 4.09 | 4.01 | .    |
| United States  | 5.38 | 6.06 | 6.03 | 6.57 | 6.63 | 6.59 | 5.26 | 4.10 | 3.34 | 2.06 | 1.82 | 1.83 |

**Long-Term Interest Rates**

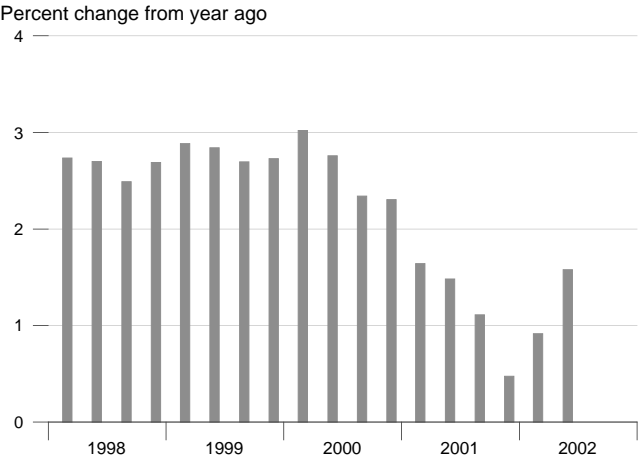
Percent

|                | 99.3 | 99.4 | 00.1 | 00.2 | 00.3 | 00.4 | 01.1 | 01.2 | 01.3 | 01.4 | 02.1 | 02.2 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Canada         | 5.78 | 6.21 | 6.20 | 5.96 | 5.81 | 5.72 | 5.67 | 5.95 | 5.90 | 5.64 | 5.77 | .    |
| Euro Area      | 5.05 | 5.32 | 5.62 | 5.43 | 5.44 | 5.28 | 4.99 | 5.19 | 5.12 | 4.82 | 5.14 | 5.25 |
| France         | 5.20 | 5.71 | 5.93 | 5.90 | 5.99 | 5.75 | 5.48 | 5.55 | 5.34 | 5.15 | 5.46 | .    |
| Germany        | 4.87 | 5.16 | 5.46 | 5.26 | 5.25 | 5.08 | 4.75 | 4.96 | 4.88 | 4.60 | 4.98 | 5.11 |
| Italy          | 5.12 | 5.38 | 5.69 | 5.55 | 5.59 | 5.48 | 5.16 | 5.37 | 5.27 | 4.94 | 5.25 | 5.36 |
| Japan          | 1.79 | 1.78 | 1.79 | 1.71 | 1.79 | 1.74 | 1.39 | 1.28 | 1.36 | 1.35 | 1.41 | 1.28 |
| United Kingdom | 5.46 | 5.50 | 5.60 | 5.30 | 5.28 | 5.05 | 4.81 | 5.10 | 5.05 | 4.79 | 5.05 | .    |
| United States  | 6.34 | 6.55 | 6.54 | 6.29 | 6.06 | 5.85 | 5.56 | 5.81 | 5.59 | 5.44 | 5.70 | 5.72 |

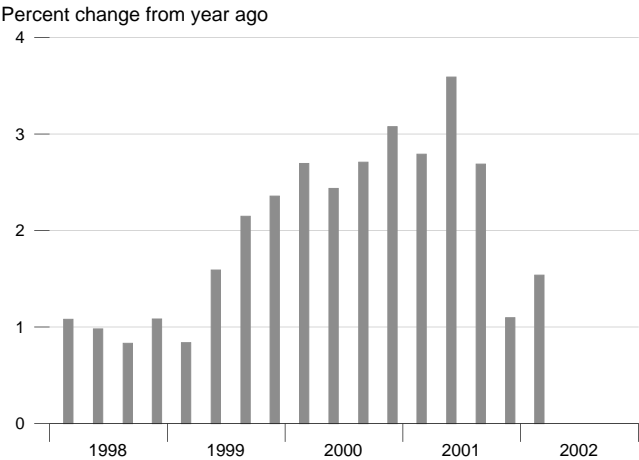
Real GDP



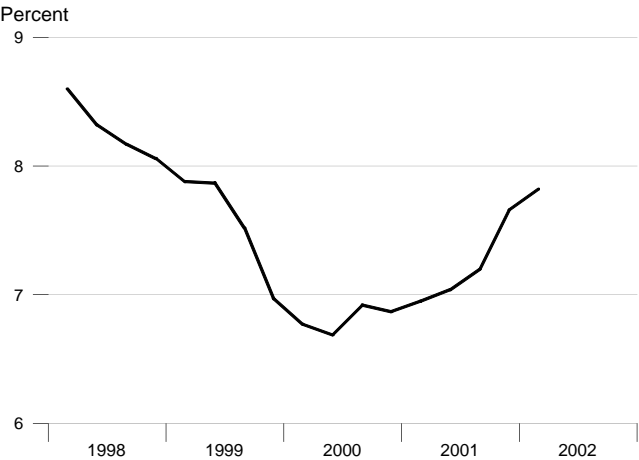
Employment



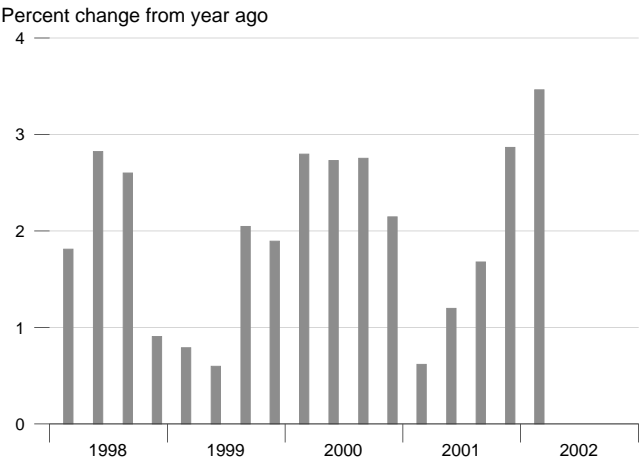
Consumer Price Index



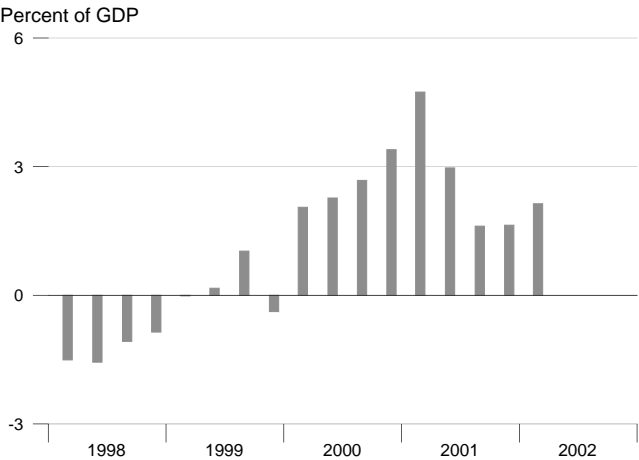
Unemployment Rate



Hourly Earnings

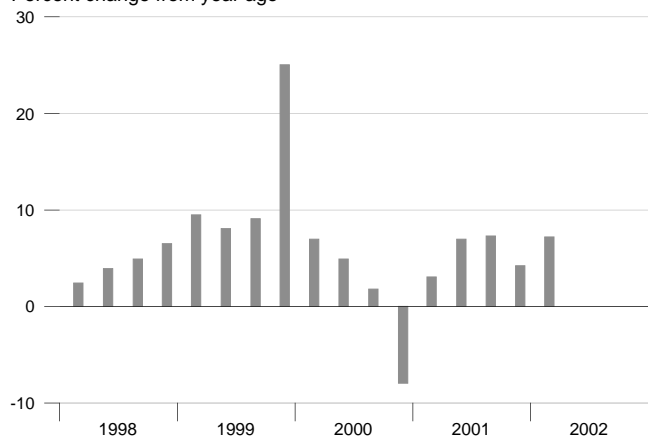


Current Account Balance



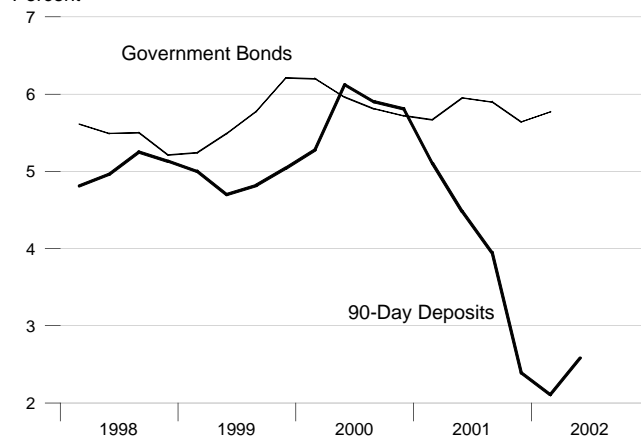
## Reserve Money

Percent change from year ago



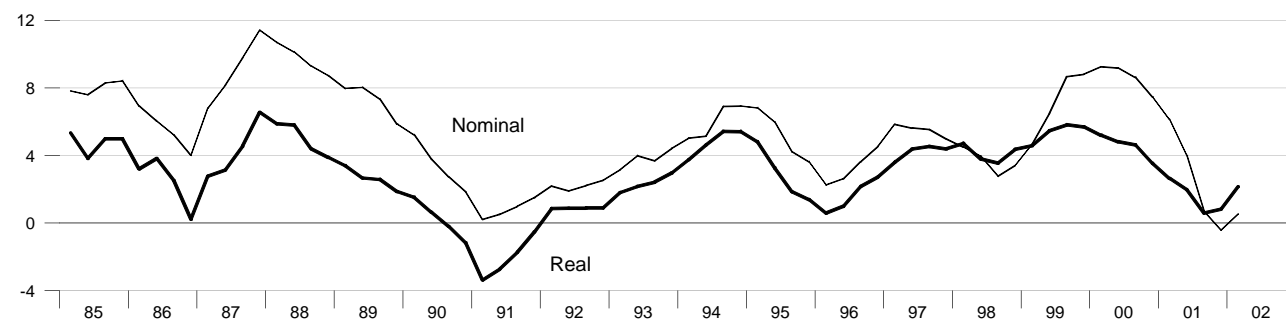
## Interest Rates

Percent



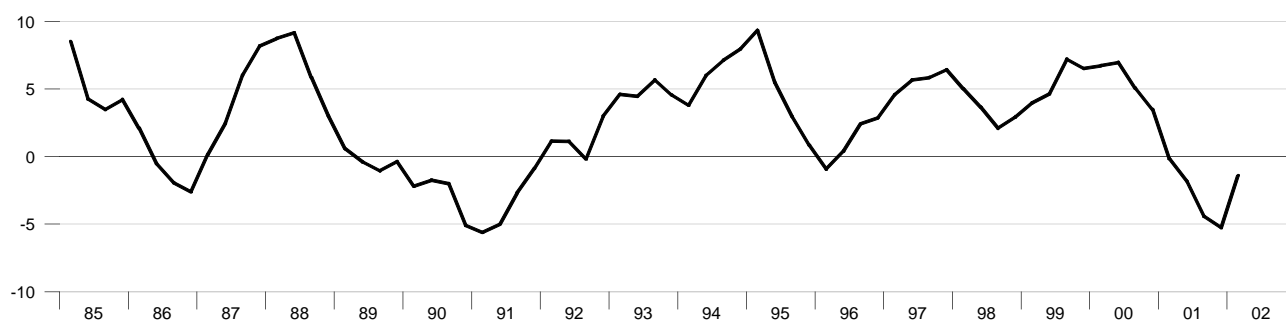
## GDP

Percent change from year ago



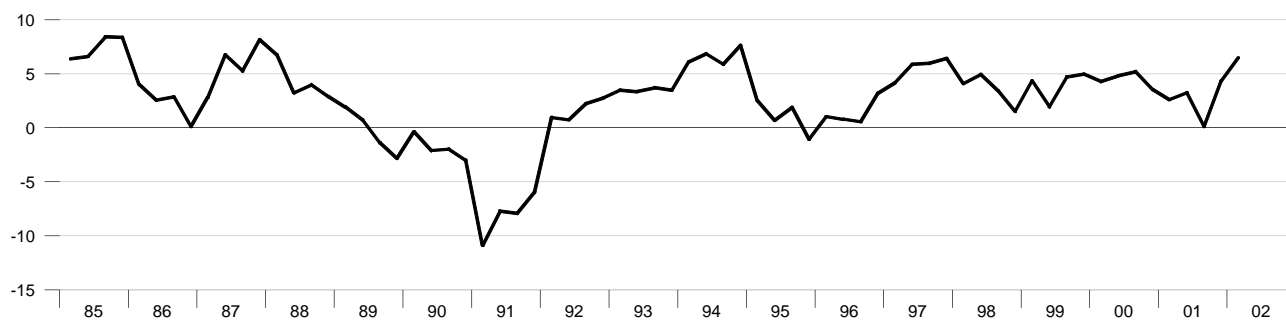
## Industrial Production

Percent change from year ago



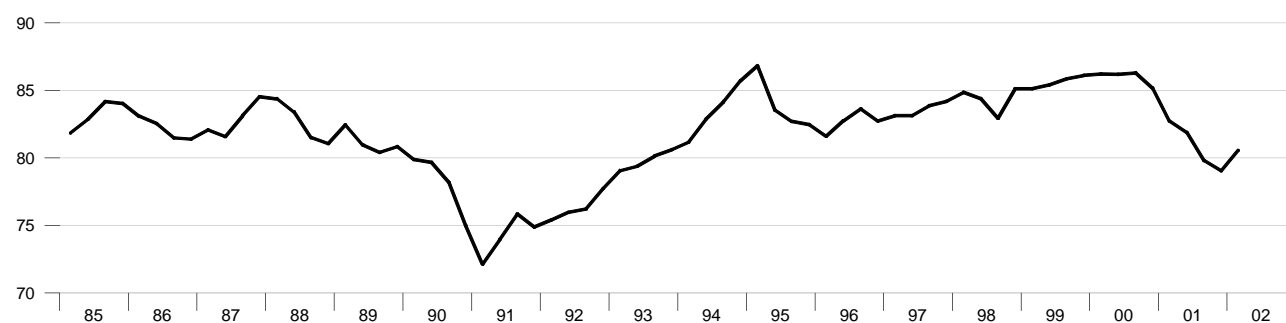
## Retail Sales

Percent change from year ago



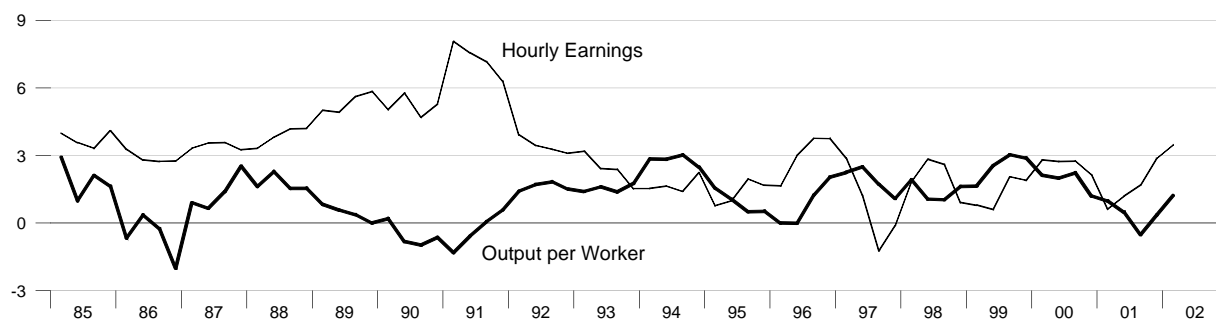
## Capacity Utilization

Percent



## Hourly Earnings and Output per Worker

Percent change from year ago



## Labor Force Indicators

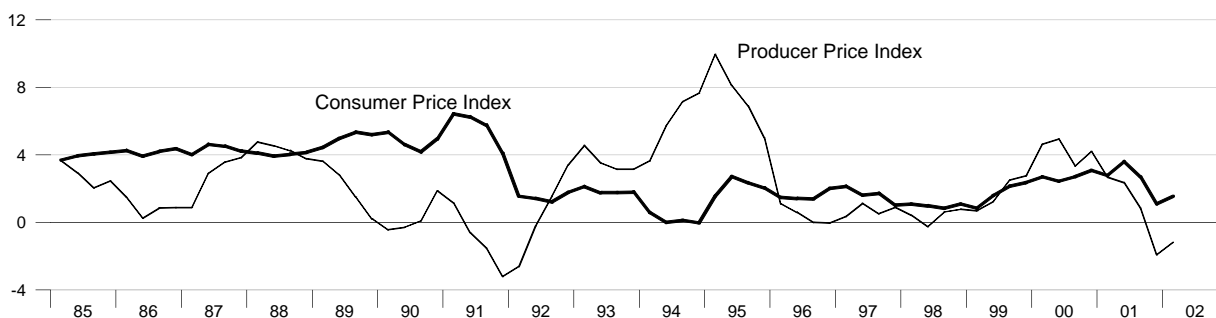
Percent change from year ago

Percent



## Inflation

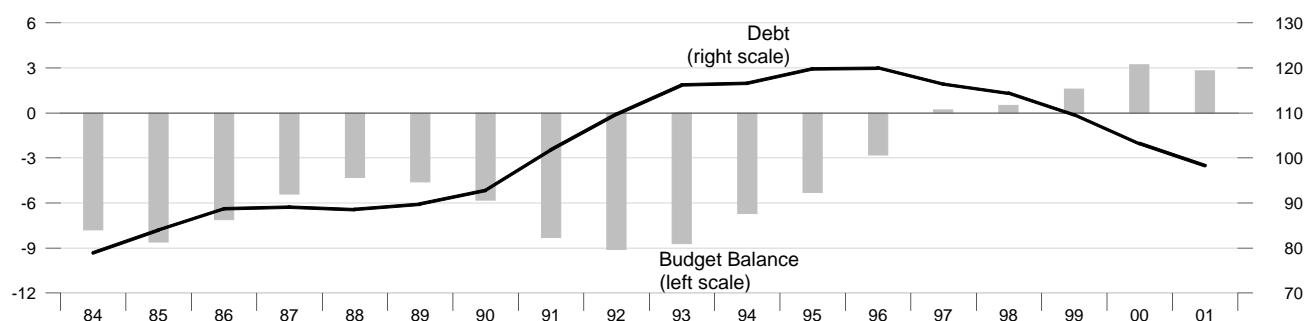
Percent change from year ago



## Government Debt and Budget Balance

Percent of GDP, annual data

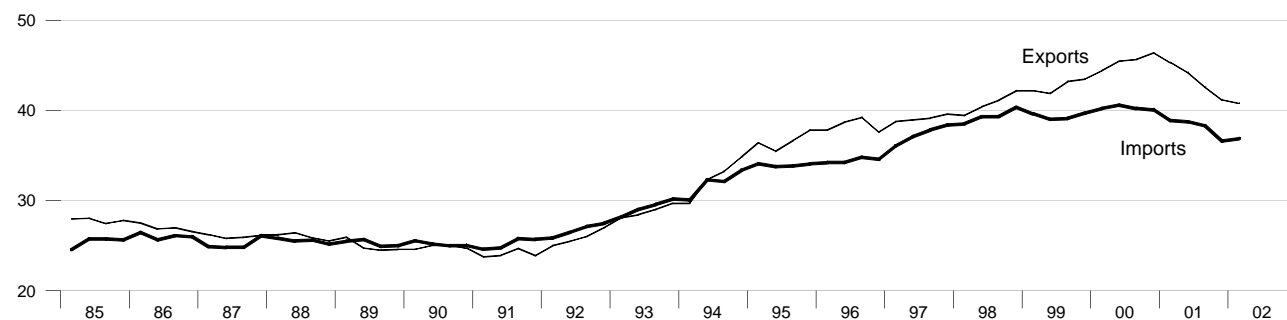
Percent of GDP, annual data





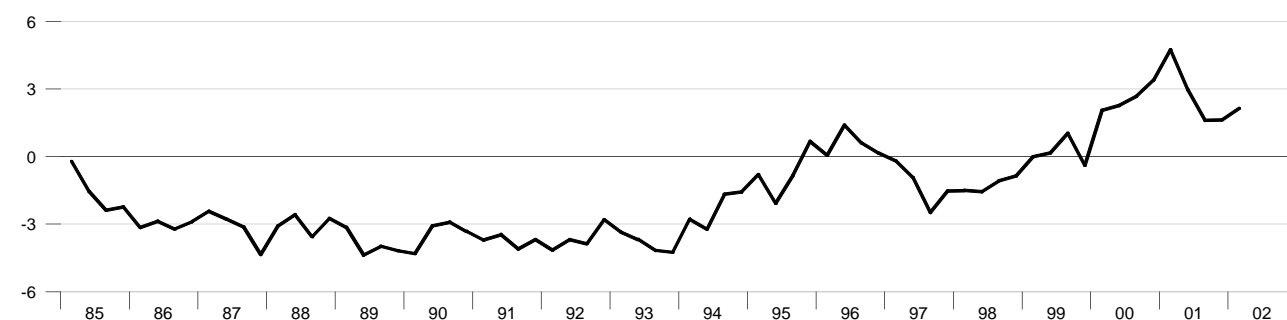
## International Trade - Goods and Services

Percent of GDP



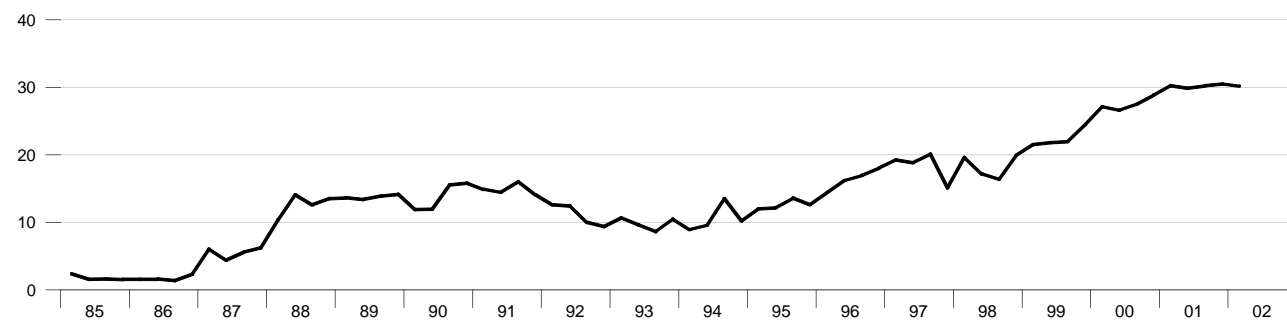
## Current Account Balance

Percent of GDP



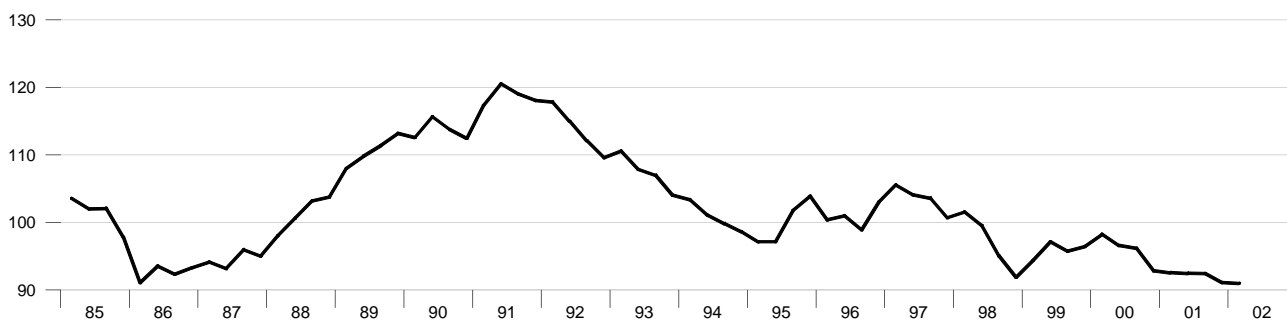
## Foreign Exchange Reserves

Billions of US\$



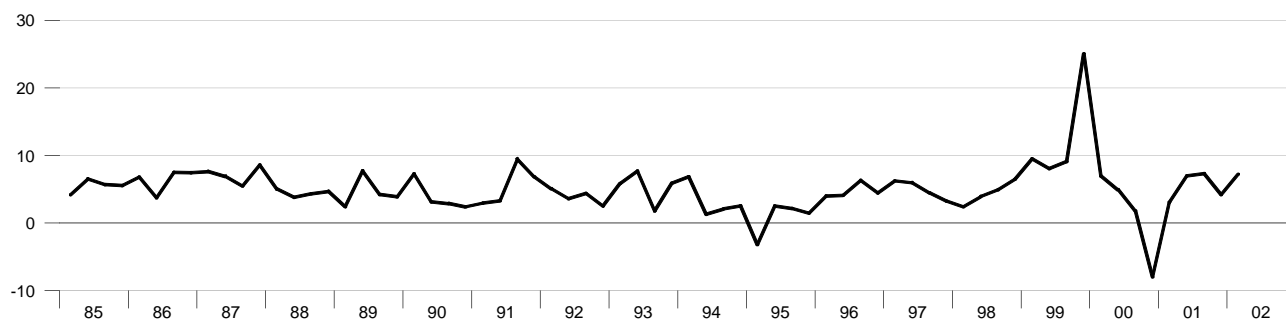
## Real Effective Exchange Rate

Index 1995 = 100



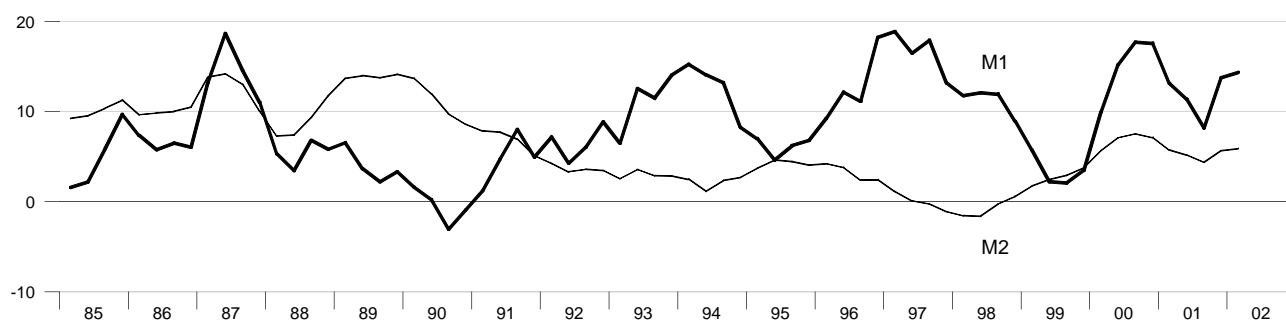
## Reserve Money

Percent change from year ago



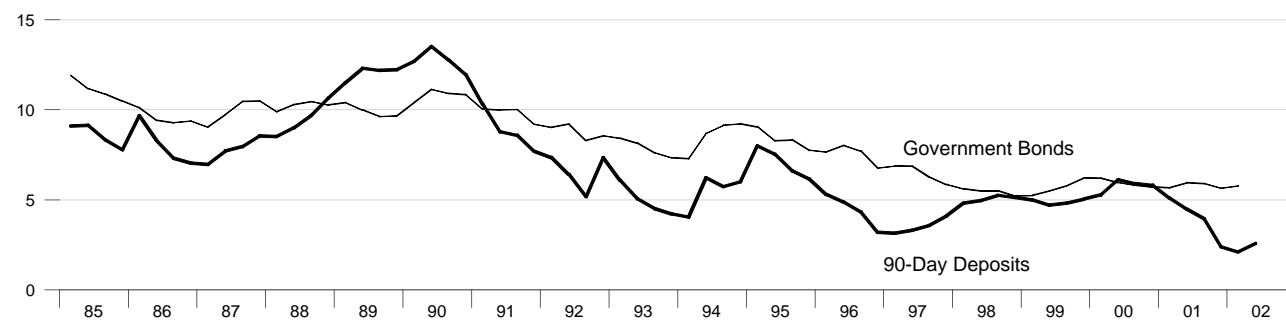
## Monetary Aggregates

Percent change from year ago



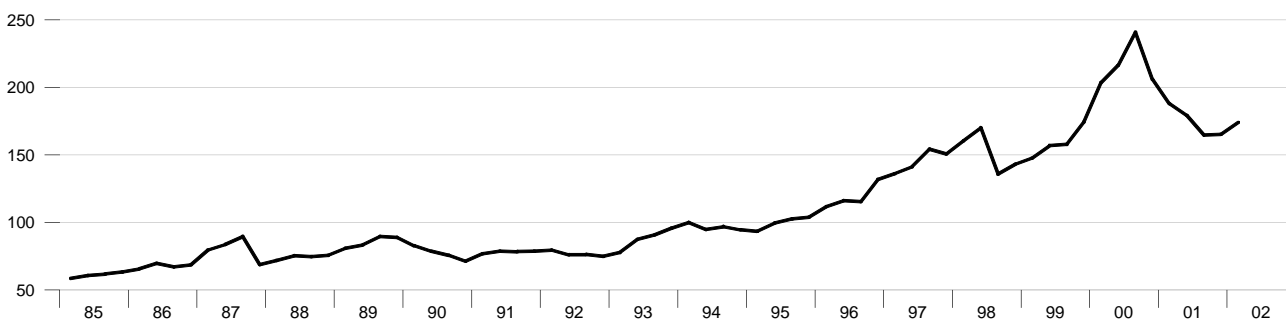
## Interest Rates

Percent



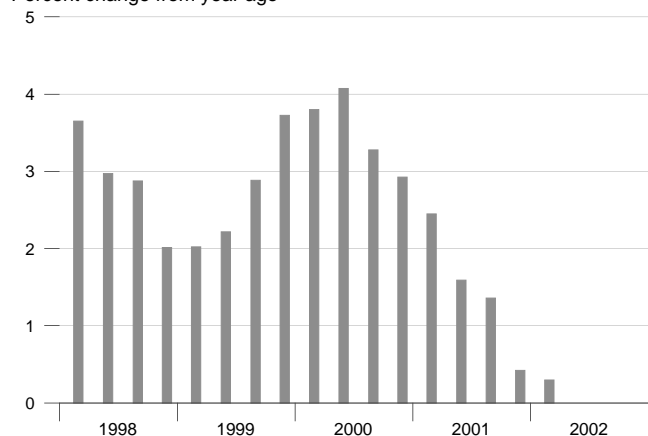
## Stock Exchange Index - Toronto Stock Exchange

1995 = 100



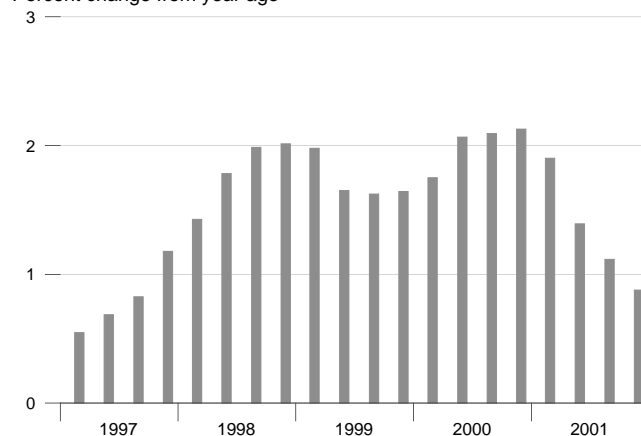
## Real GDP

Percent change from year ago



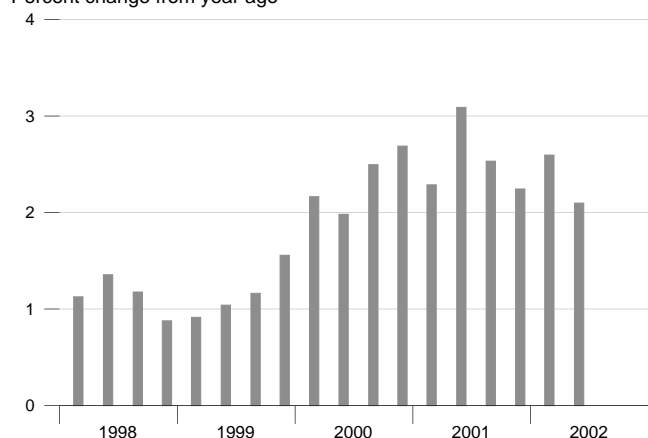
## Employment

Percent change from year ago



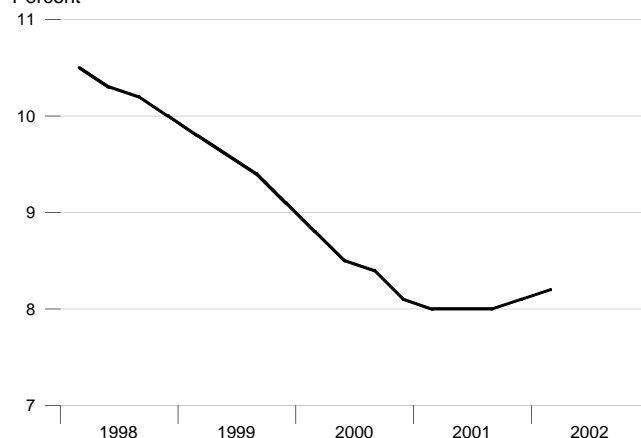
## Consumer Price Index

Percent change from year ago



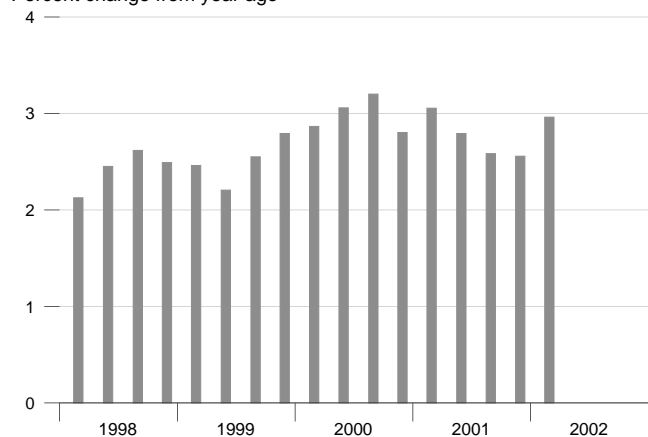
## Unemployment Rate

Percent



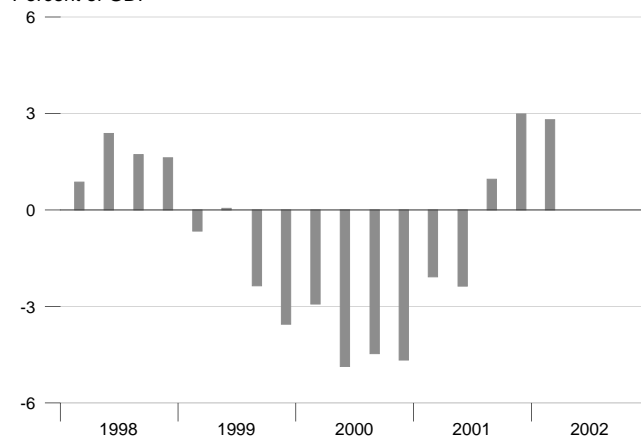
## Hourly Earnings

Percent change from year ago



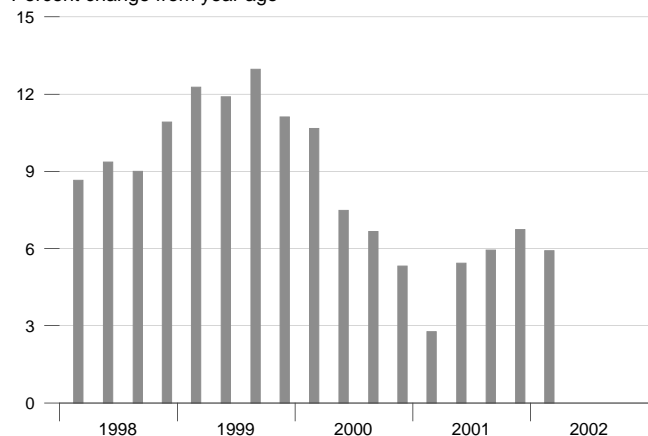
## Current Account Balance

Percent of GDP



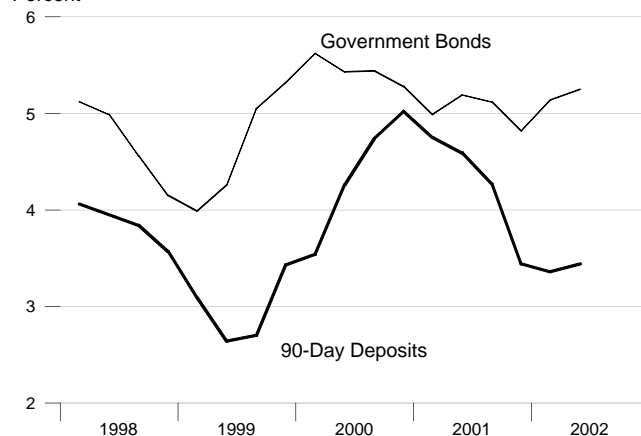
## M1

Percent change from year ago



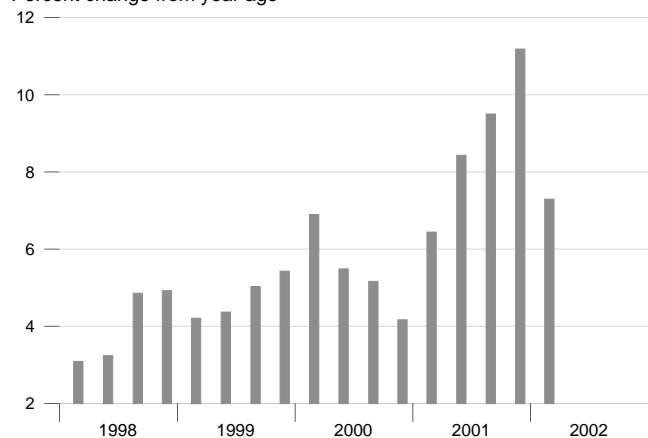
## Interest Rates

Percent



## M3

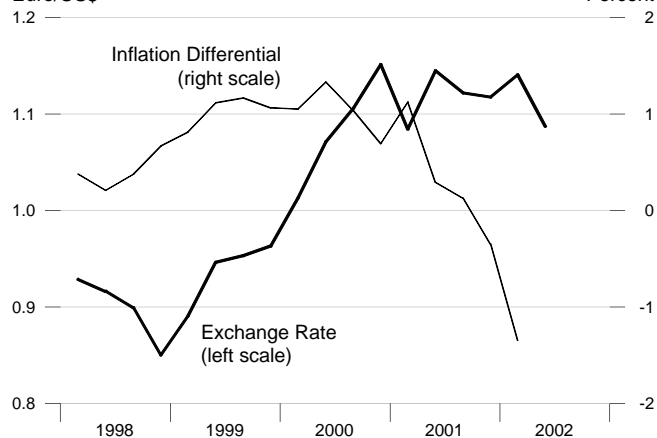
Percent change from year ago



## Exchange Rate and Inflation Differential

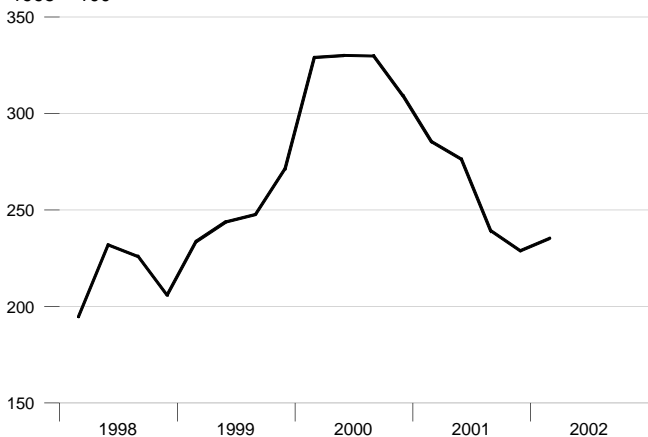
Euro/US\$

Percent



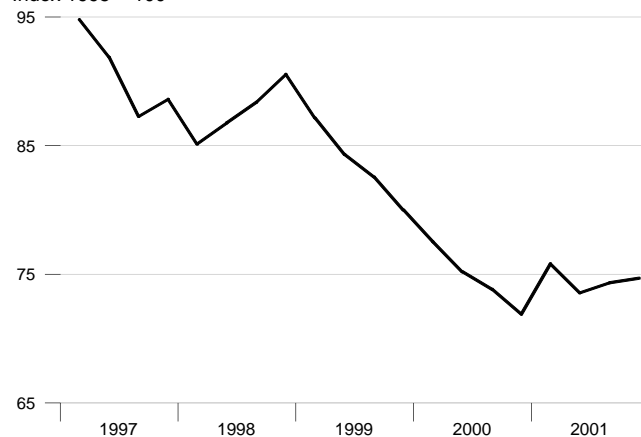
## Stock Exchange Index - Dow Jones EURO STOXX<sup>SM</sup>

1995 = 100



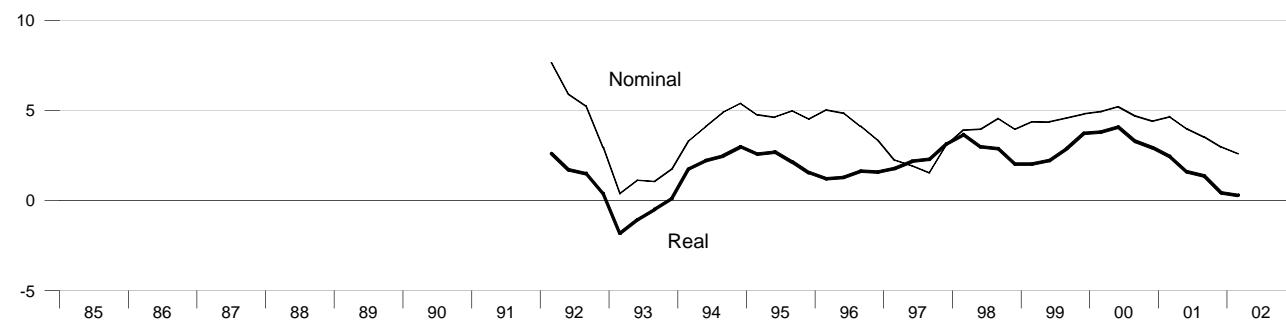
## Real Effective Exchange Rate

Index 1995 = 100



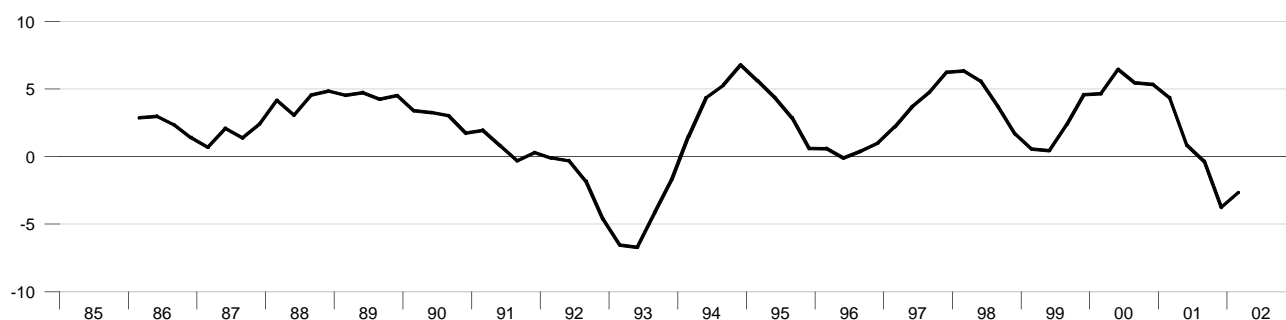
## GDP

Percent change from year ago



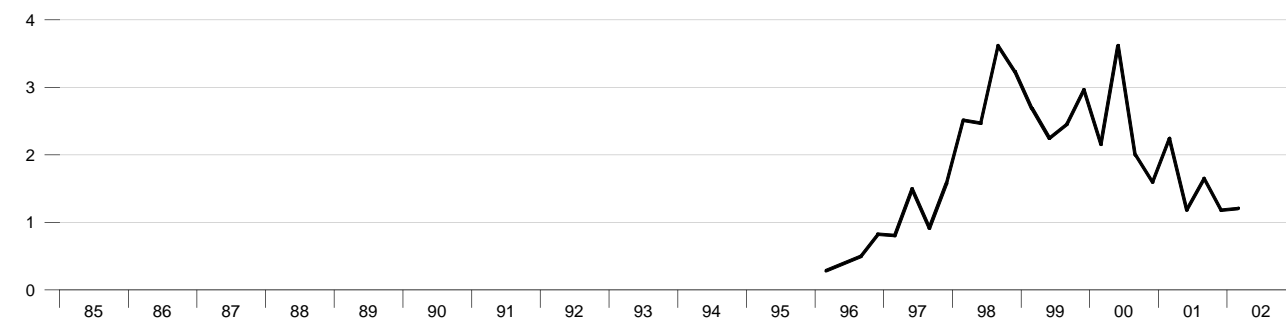
## Industrial Production

Percent change from year ago



## Retail Sales

Percent change from year ago



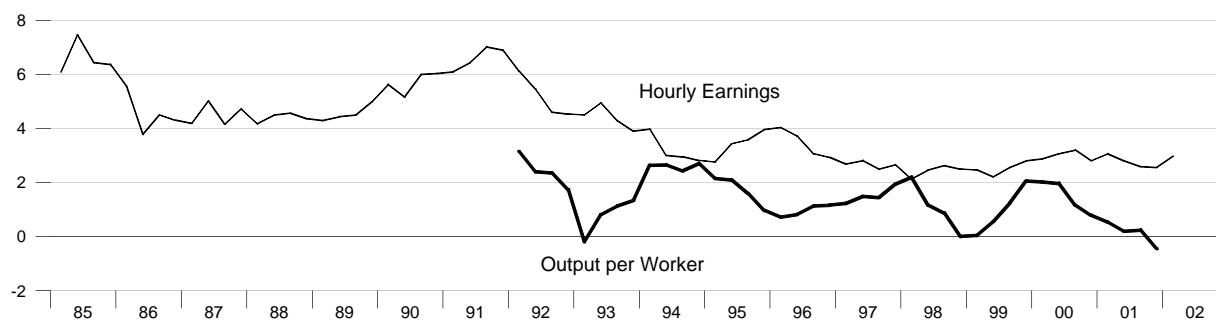
## Capacity Utilization

Percent



## Hourly Earnings and Output per Worker

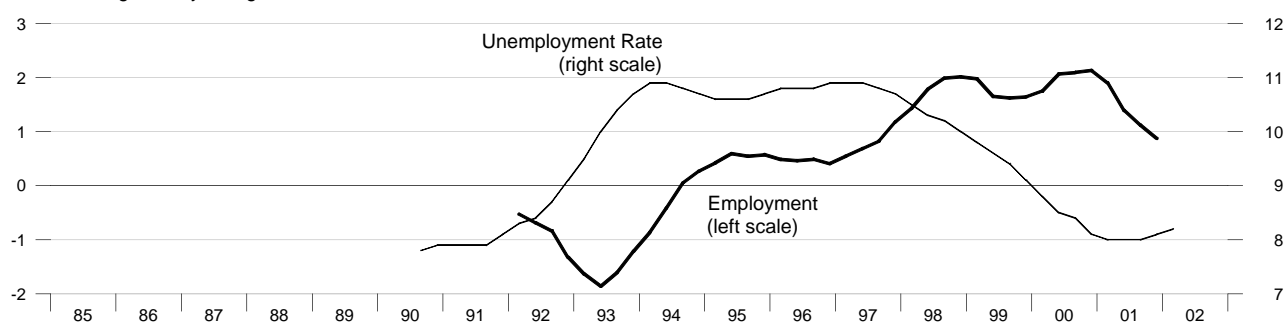
Percent change from year ago



## Labor Force Indicators

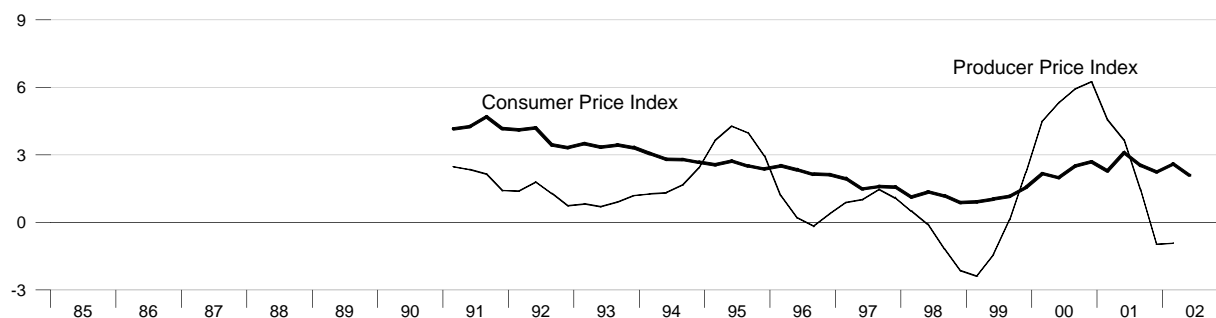
Percent change from year ago

Percent



## Inflation

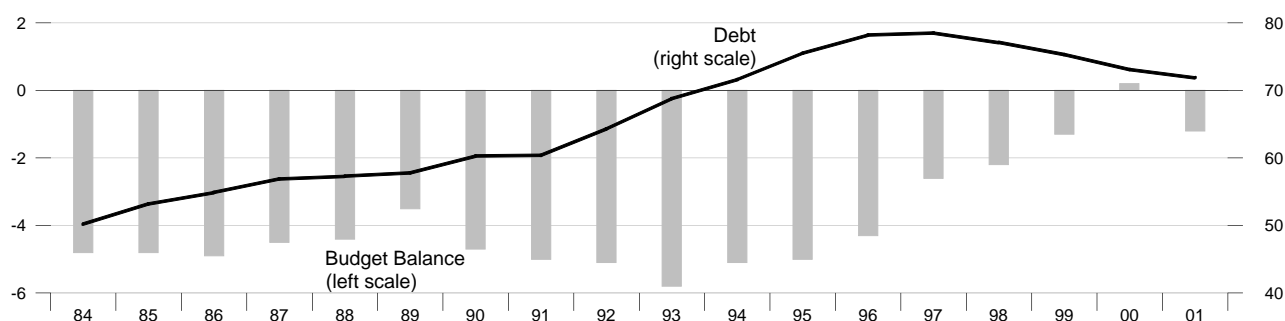
Percent change from year ago



## Government Debt and Budget Balance

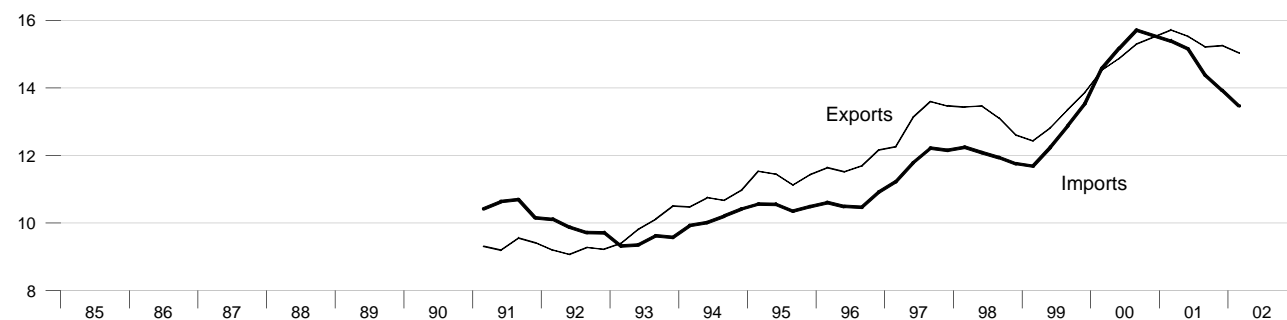
Percent of GDP, annual data

Percent of GDP, annual data



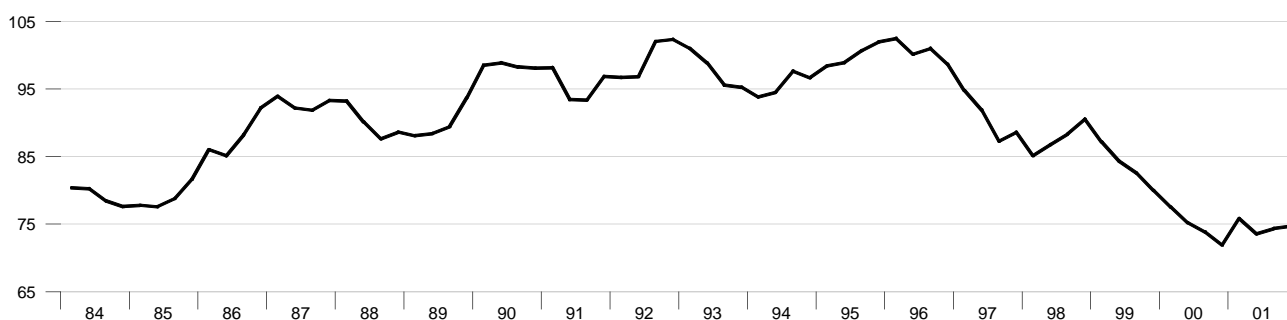
## International Trade - Goods

Percent of GDP



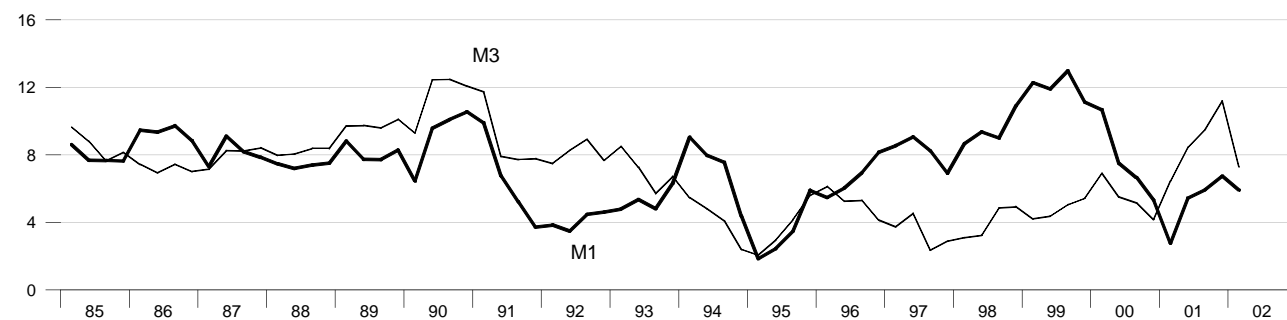
## Real Effective Exchange Rate

Index 1995 = 100



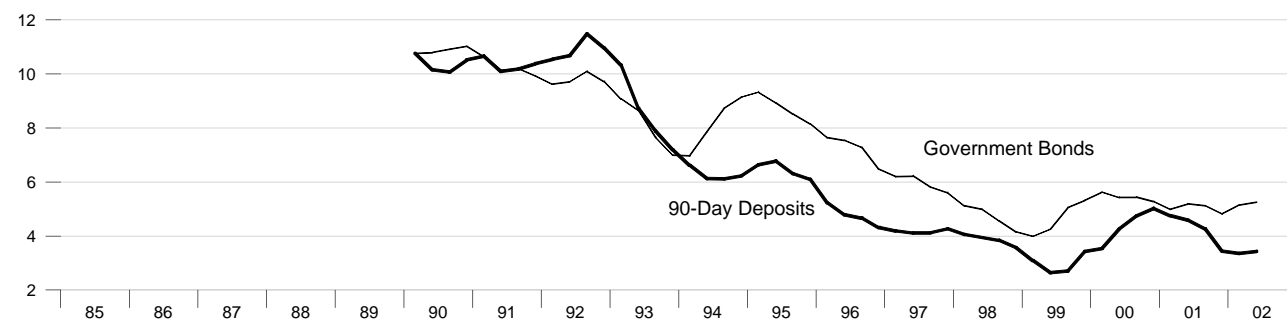
## Monetary Aggregates

Percent change from year ago

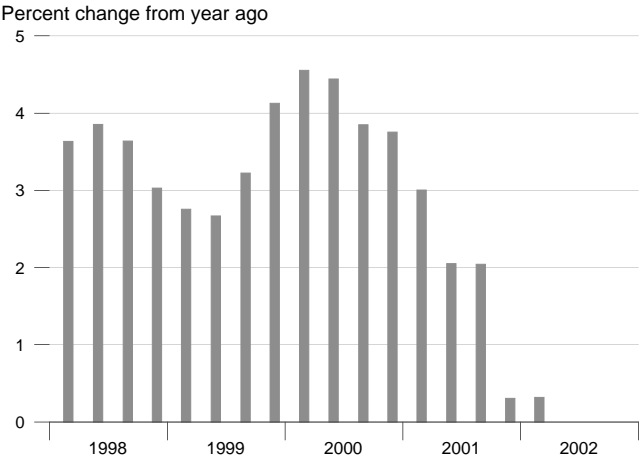


## Interest Rates

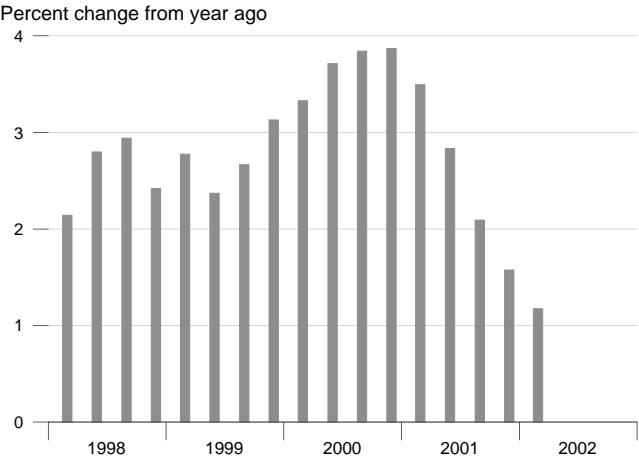
Percent



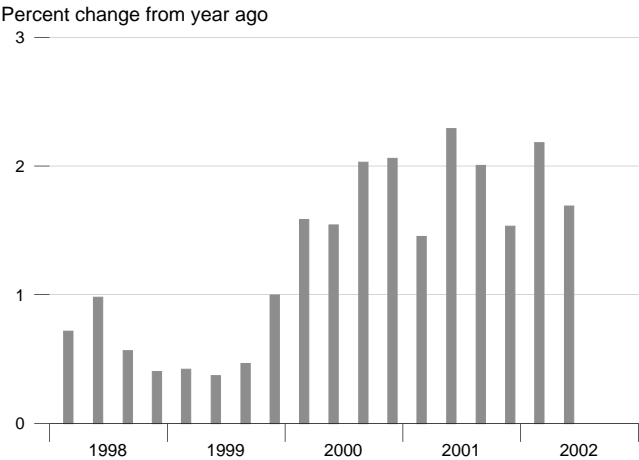
Real GDP



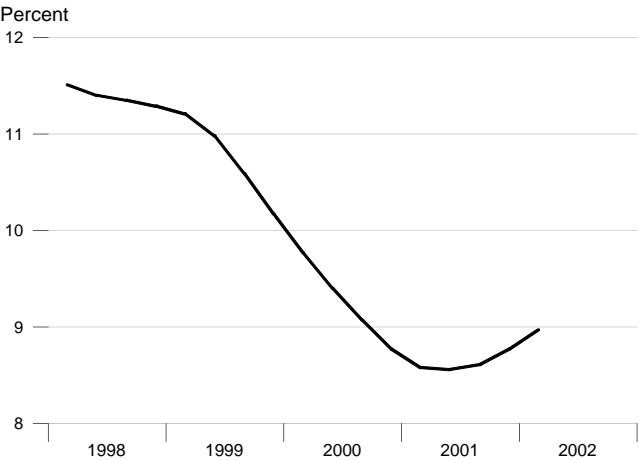
Employment



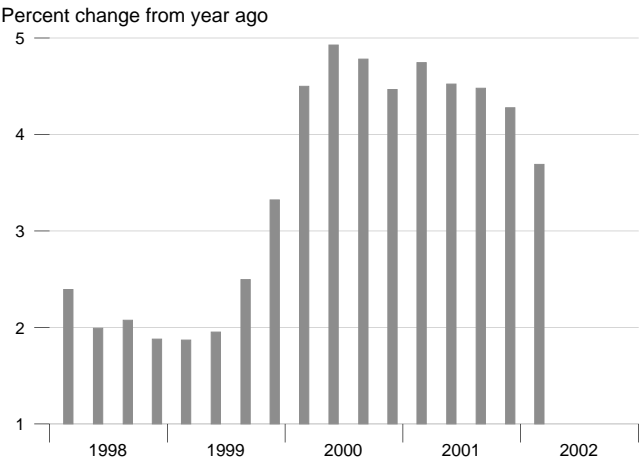
Consumer Price Index



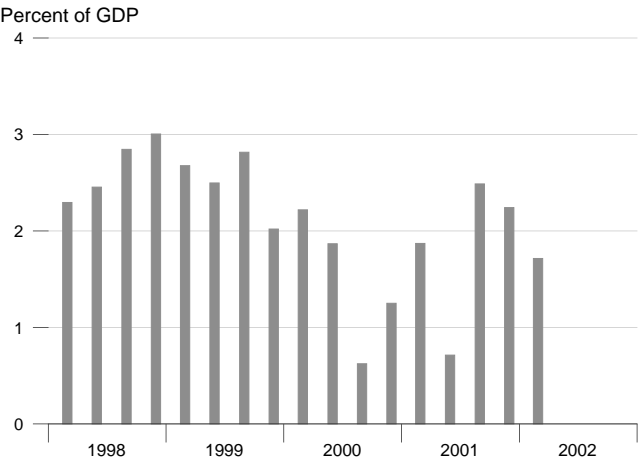
Unemployment Rate



Hourly Earnings



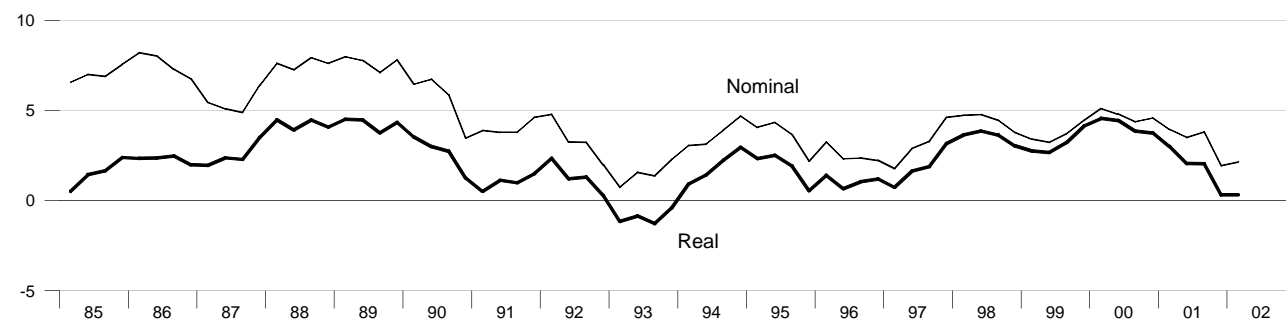
Current Account Balance





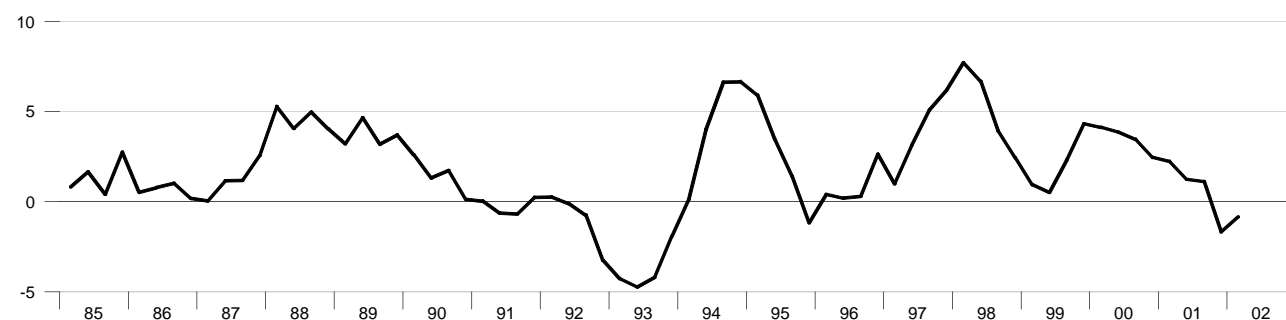
## GDP

Percent change from year ago



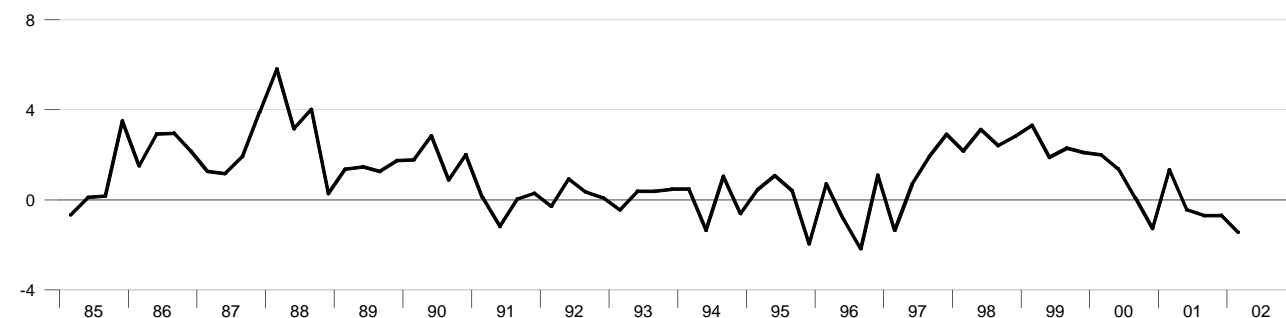
## Industrial Production

Percent change from year ago



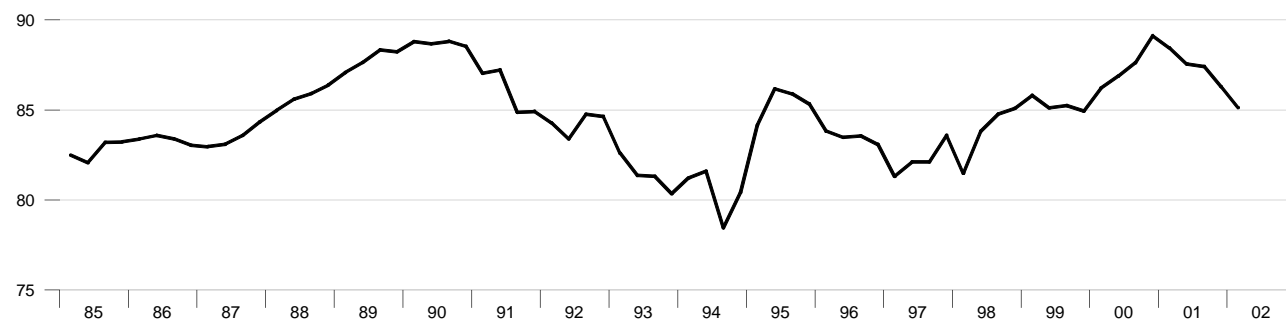
## Retail Sales

Percent change from year ago



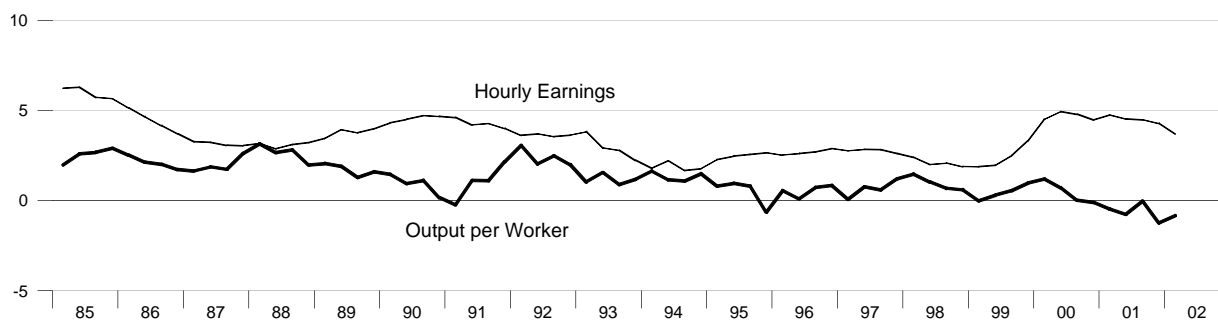
## Capacity Utilization

Percent



## Hourly Earnings and Output per Worker

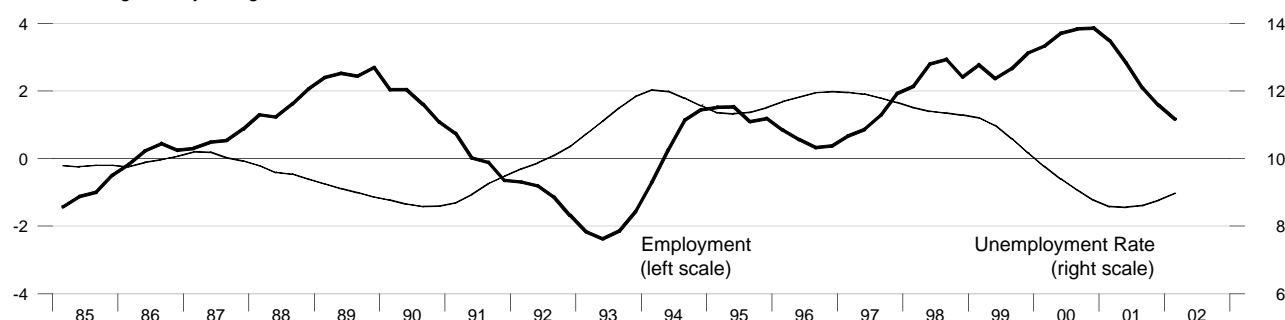
Percent change from year ago



## Labor Force Indicators

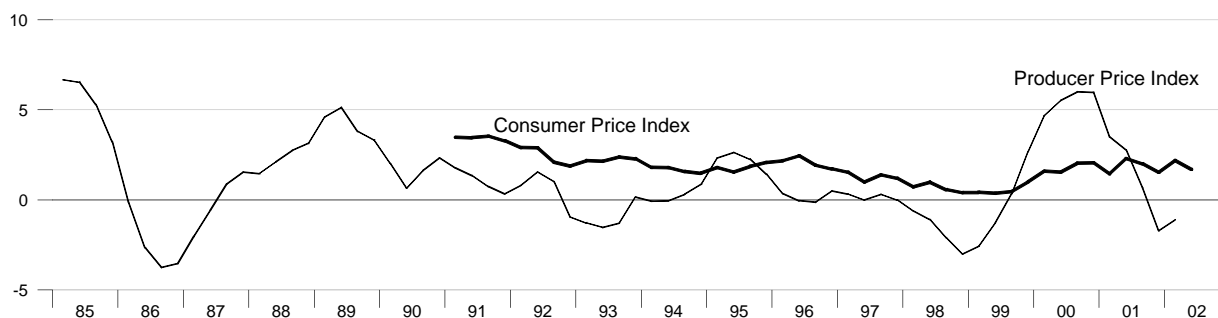
Percent change from year ago

Percent



## Inflation

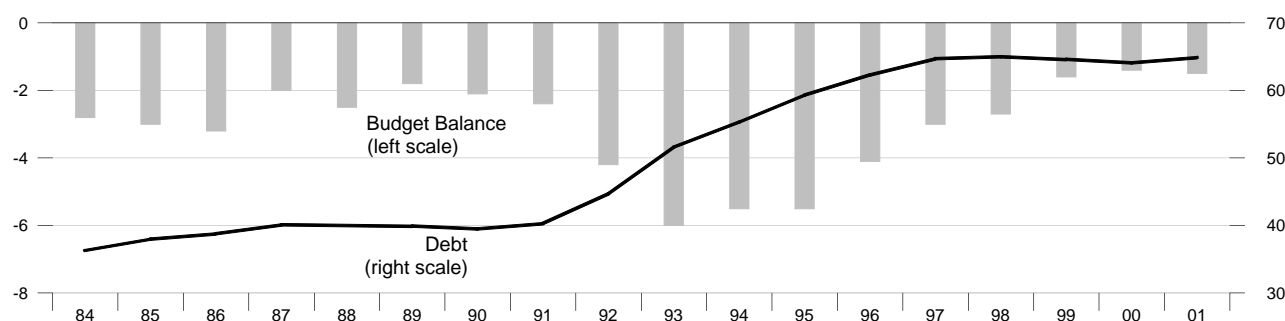
Percent change from year ago



## Government Debt and Budget Balance

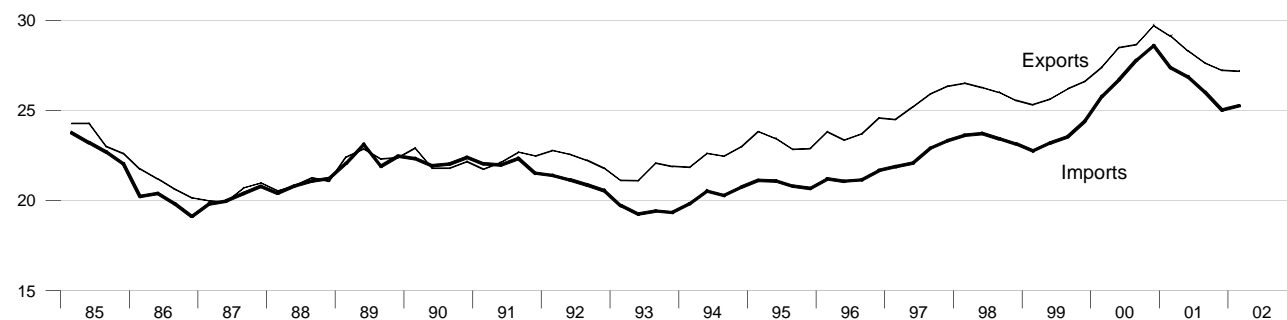
Percent of GDP, annual data

Percent of GDP, annual data



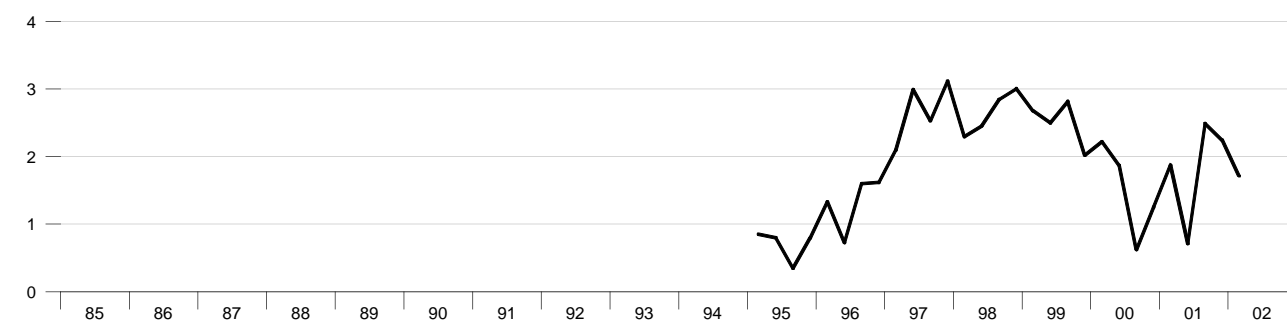
## International Trade - Goods and Services

Percent of GDP



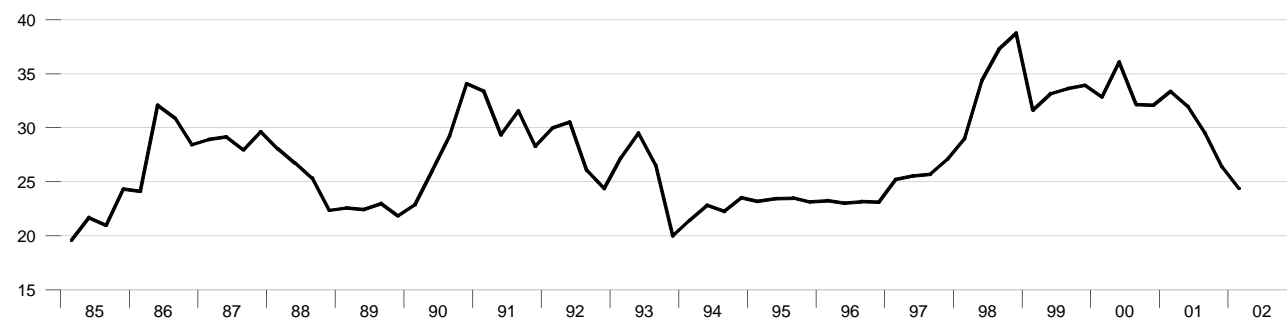
## Current Account Balance

Percent of GDP



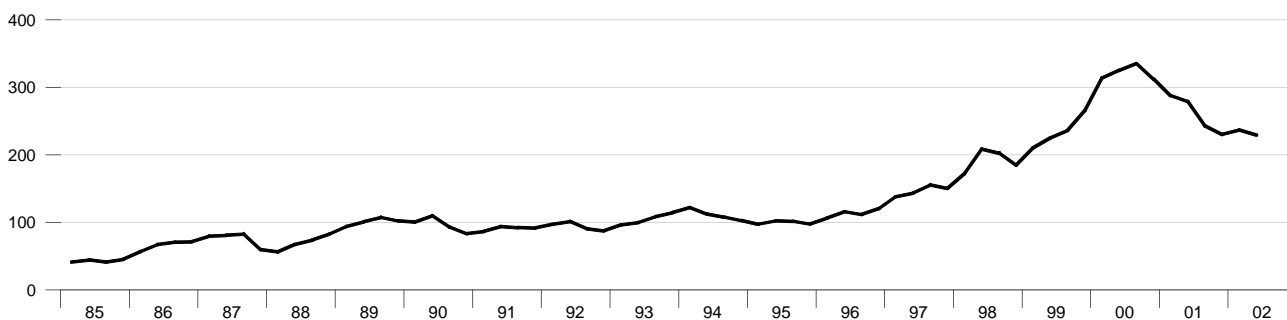
## Foreign Exchange Reserves

Billions of US\$



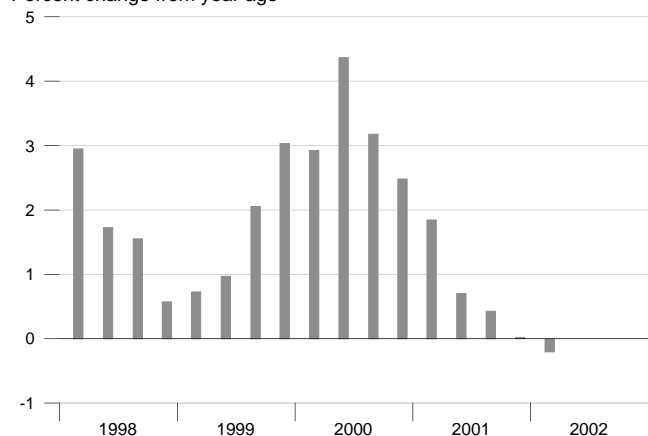
## Stock Exchange Index - SBF 250

1995 = 100



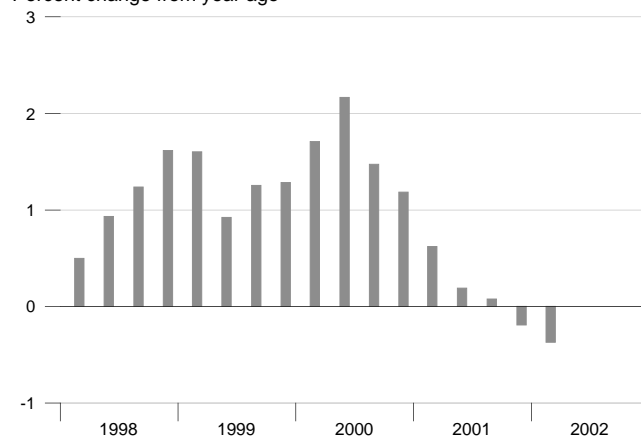
## Real GDP

Percent change from year ago



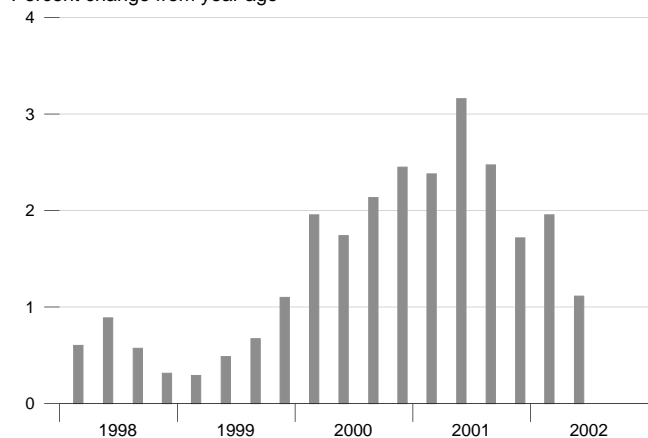
## Employment

Percent change from year ago



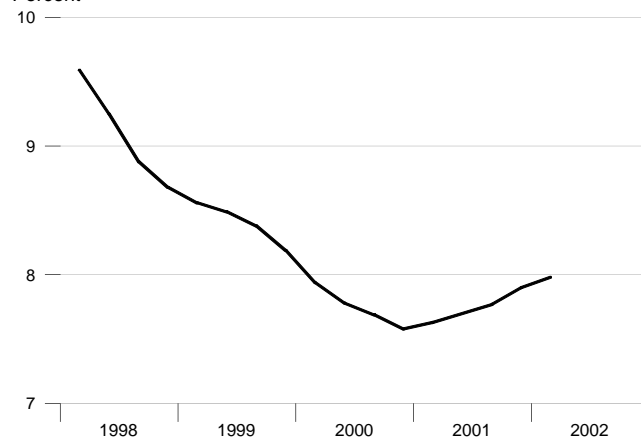
## Consumer Price Index

Percent change from year ago



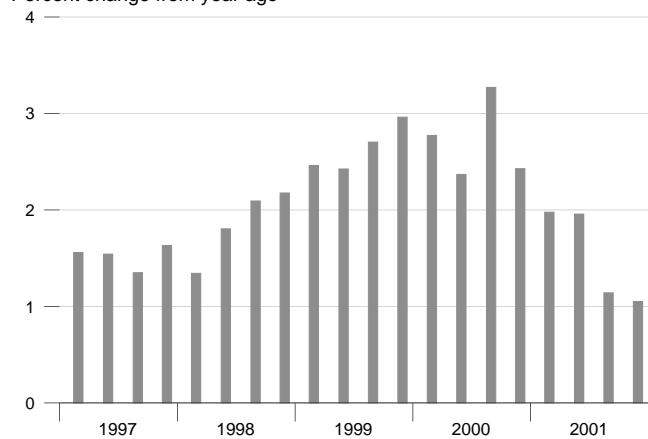
## Unemployment Rate

Percent



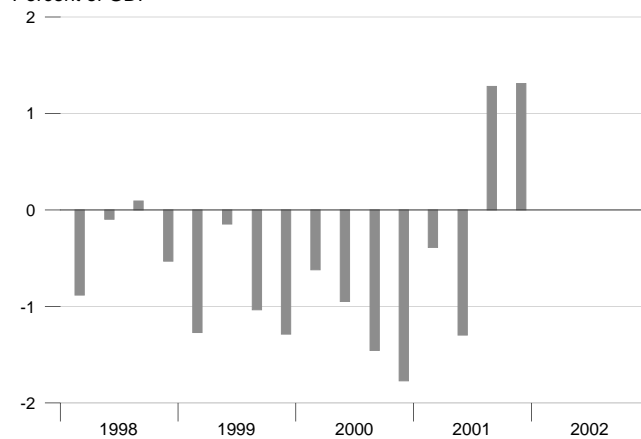
## Hourly Earnings

Percent change from year ago



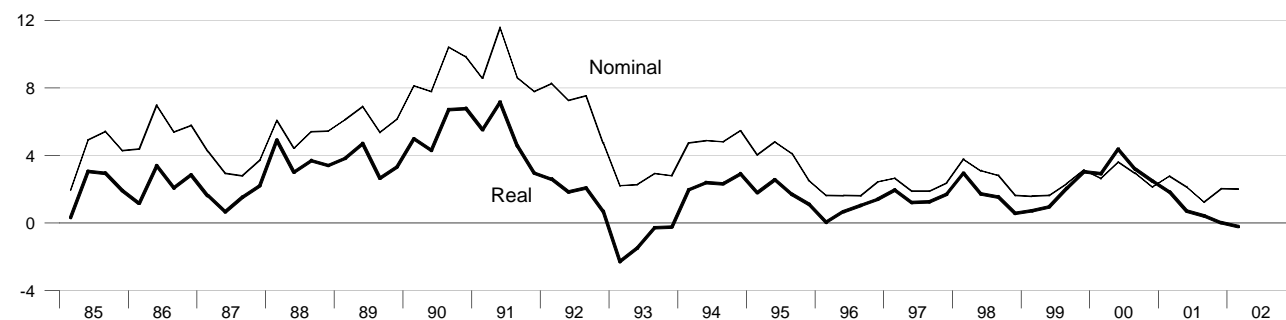
## Current Account Balance

Percent of GDP



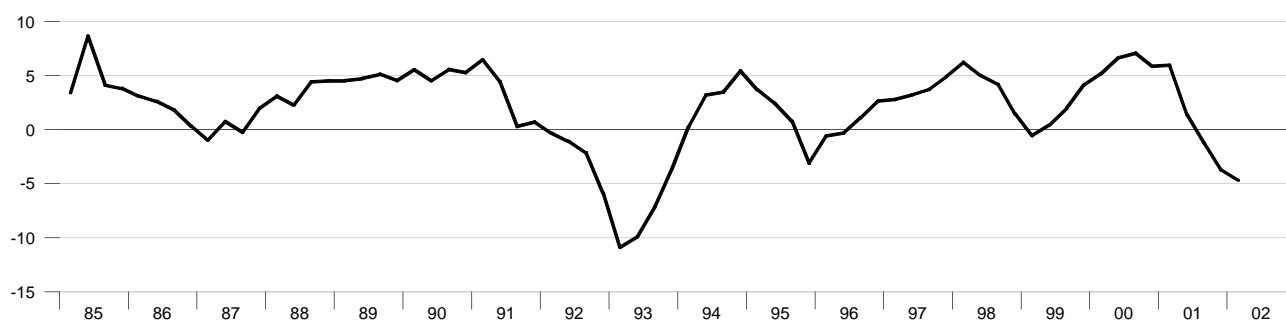
## GDP

Percent change from year ago



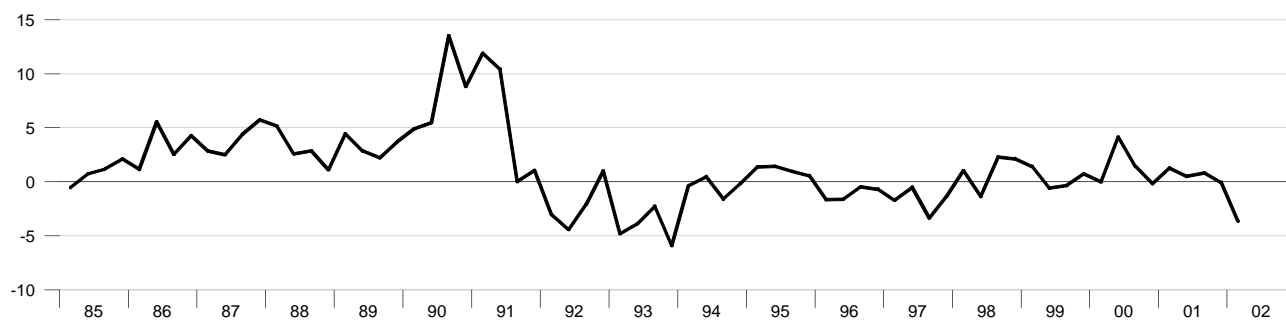
## Industrial Production

Percent change from year ago



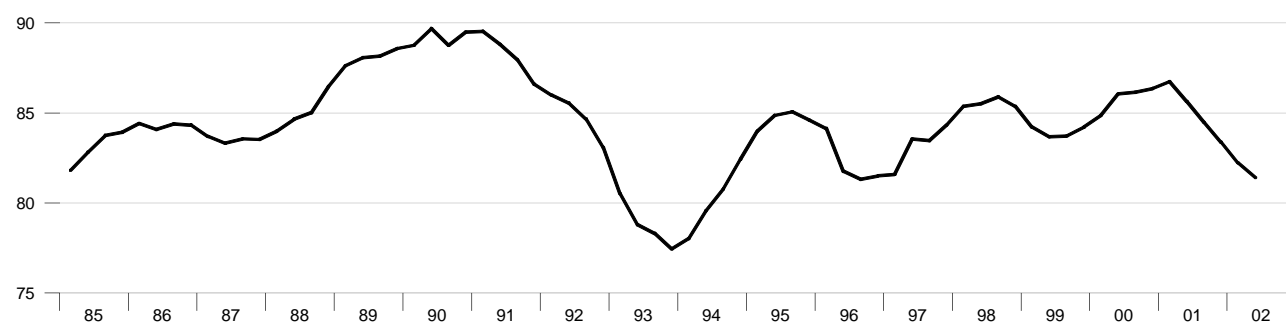
## Retail Sales

Percent change from year ago



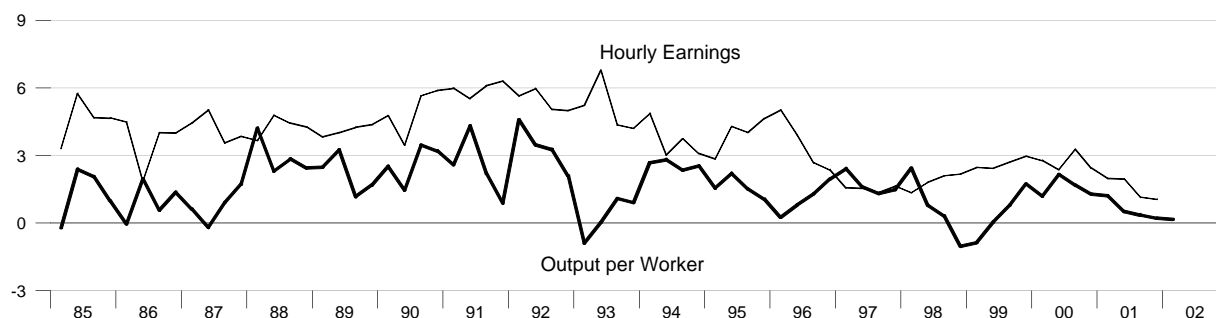
## Capacity Utilization

Percent



## Hourly Earnings and Output per Worker

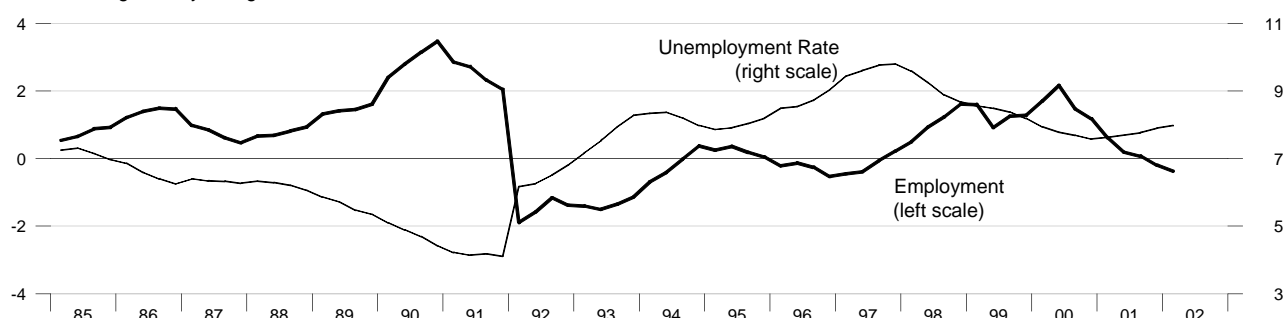
Percent change from year ago



## Labor Force Indicators

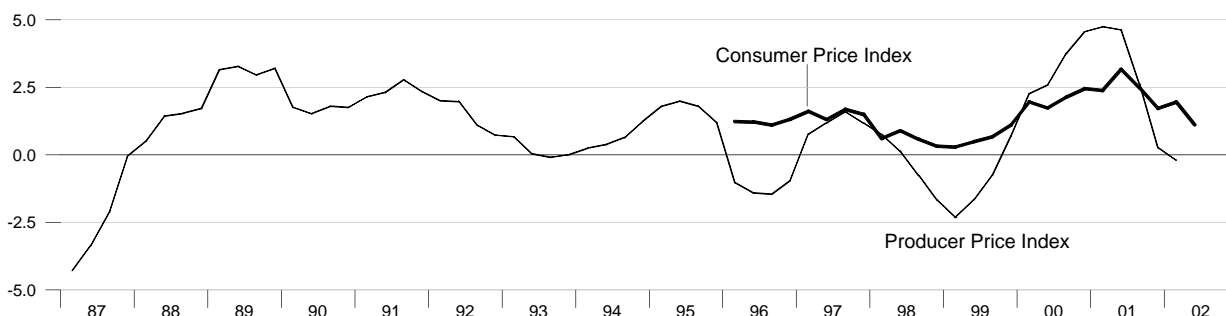
Percent change from year ago

Percent



## Inflation

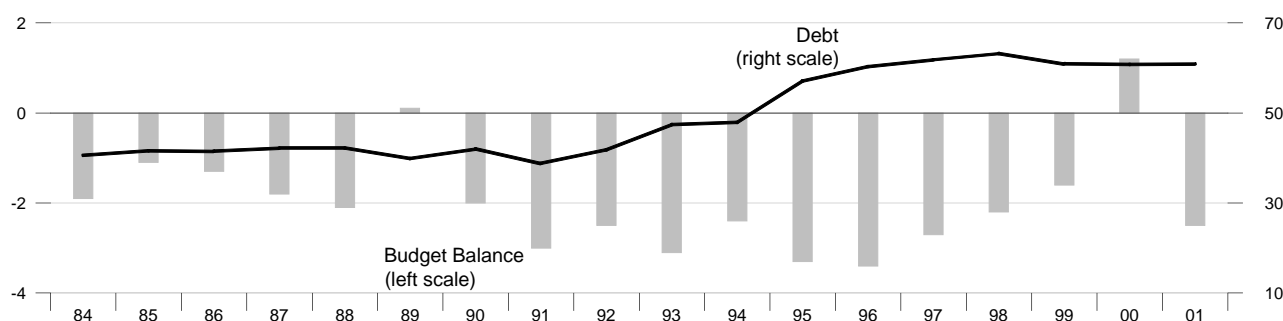
Percent change from year ago



## Government Debt and Budget Balance

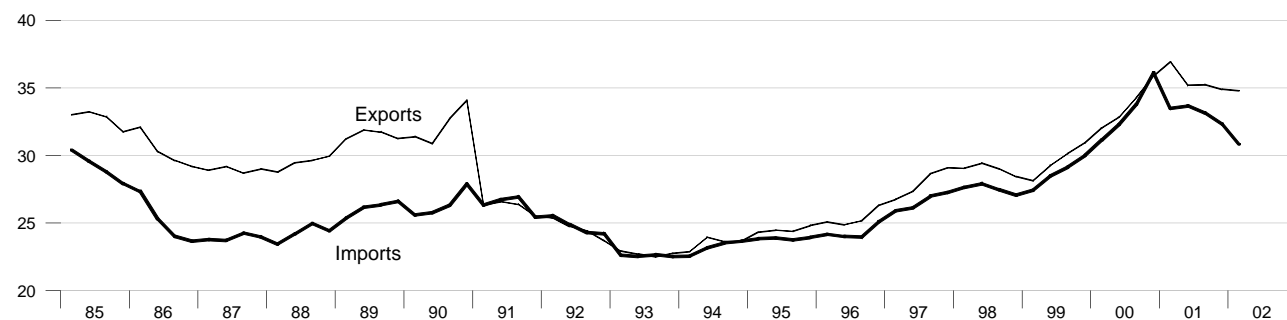
Percent of GDP, annual data

Percent of GDP, annual data



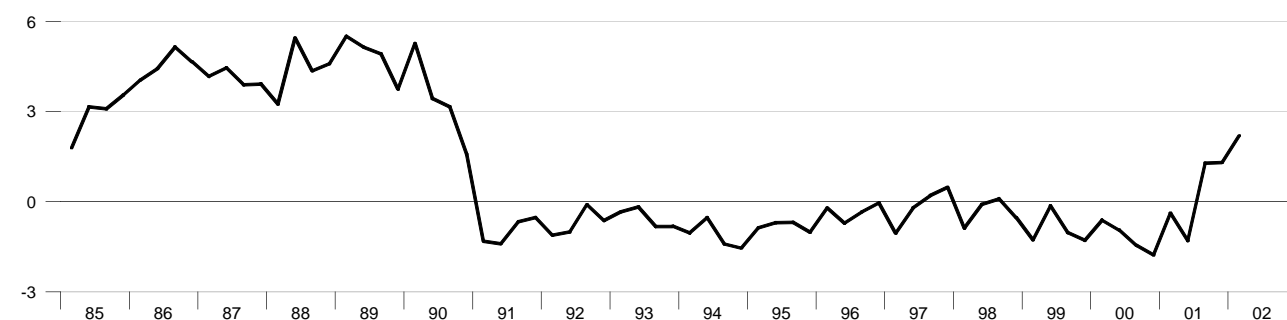
## International Trade - Goods and Services

Percent of GDP



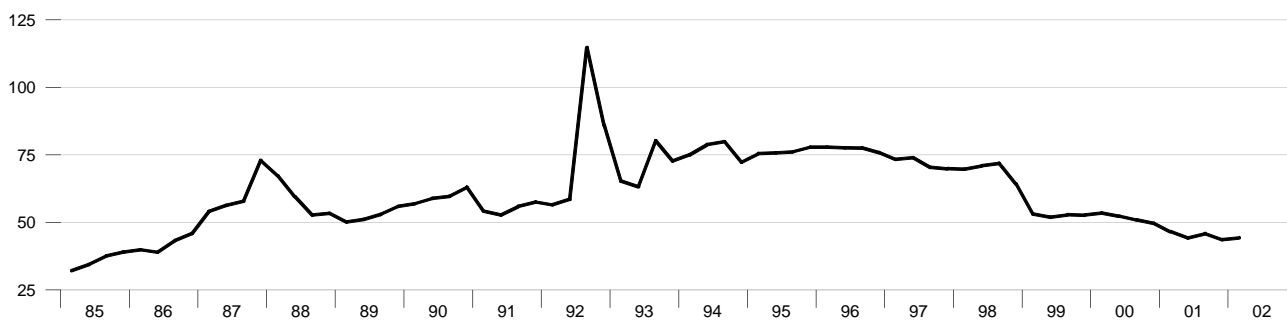
## Current Account Balance

Percent of GDP



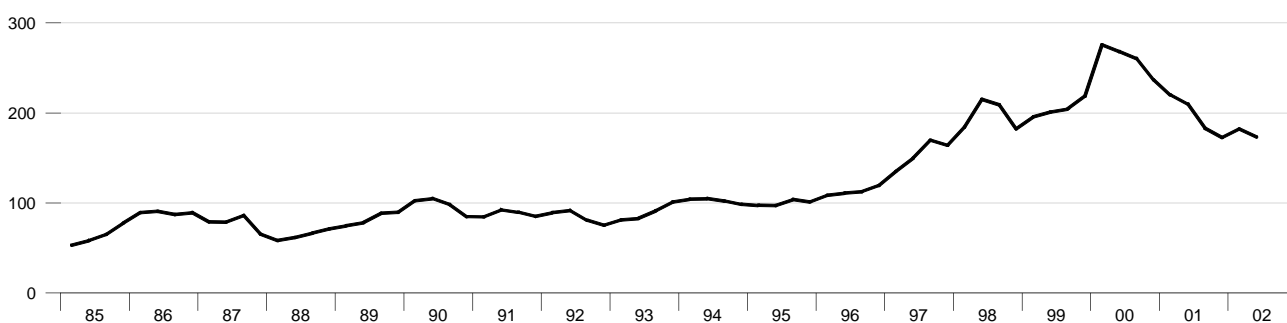
## Foreign Exchange Reserves

Billions of US\$



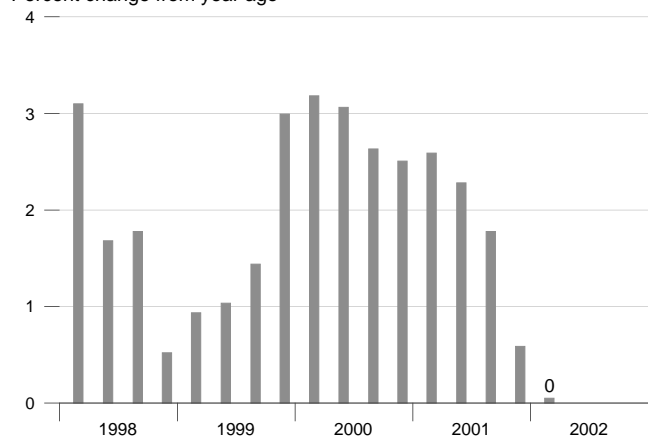
## Stock Exchange Index - CDAX

1995 = 100



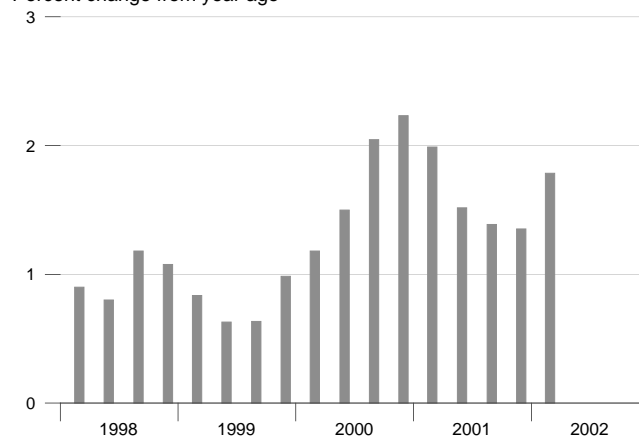
## Real GDP

Percent change from year ago



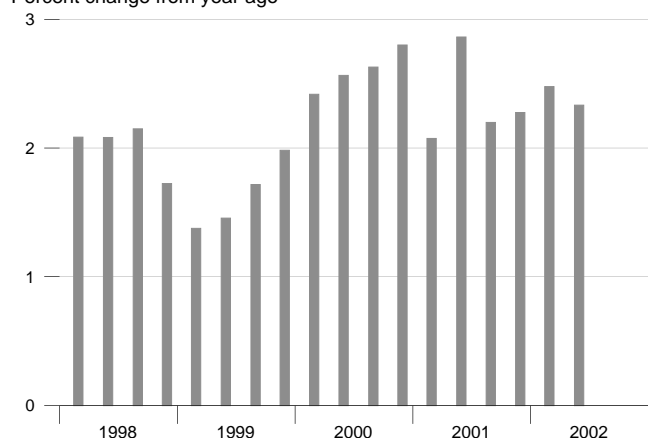
## Employment

Percent change from year ago



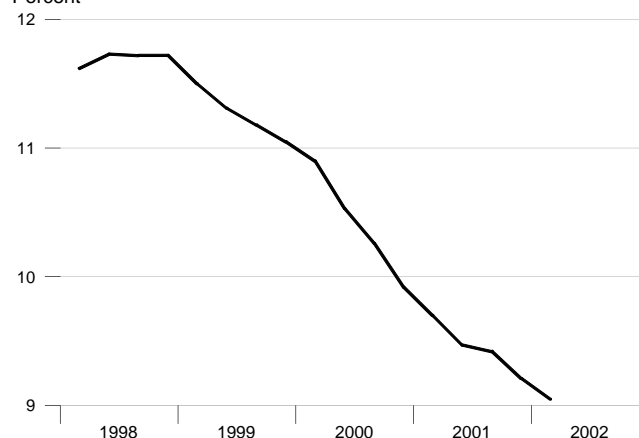
## Consumer Price Index

Percent change from year ago



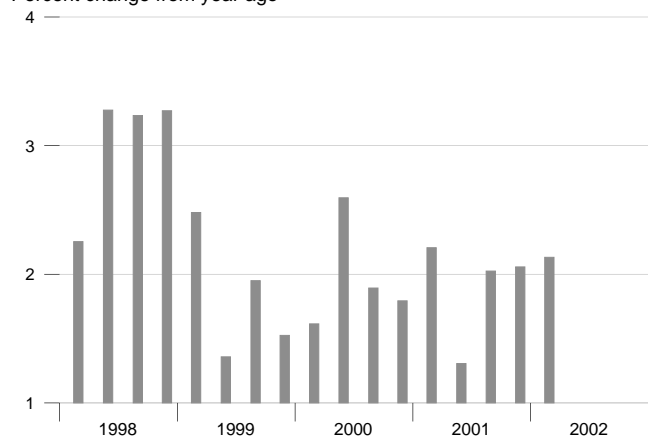
## Unemployment Rate

Percent



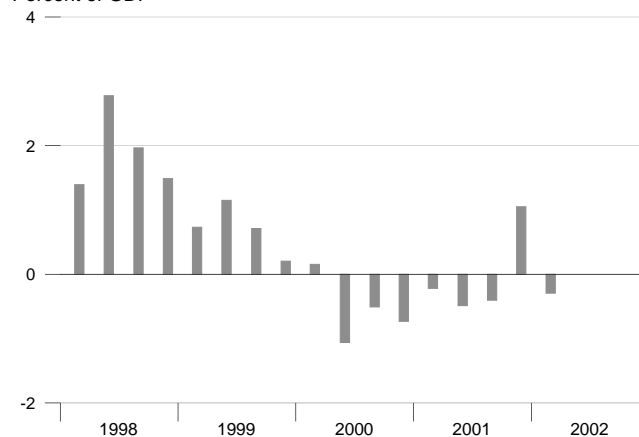
## Hourly Earnings

Percent change from year ago



## Current Account Balance

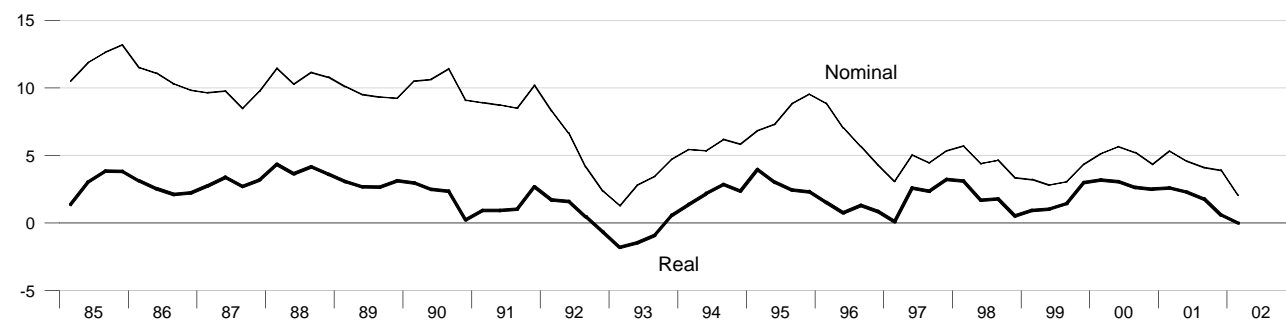
Percent of GDP





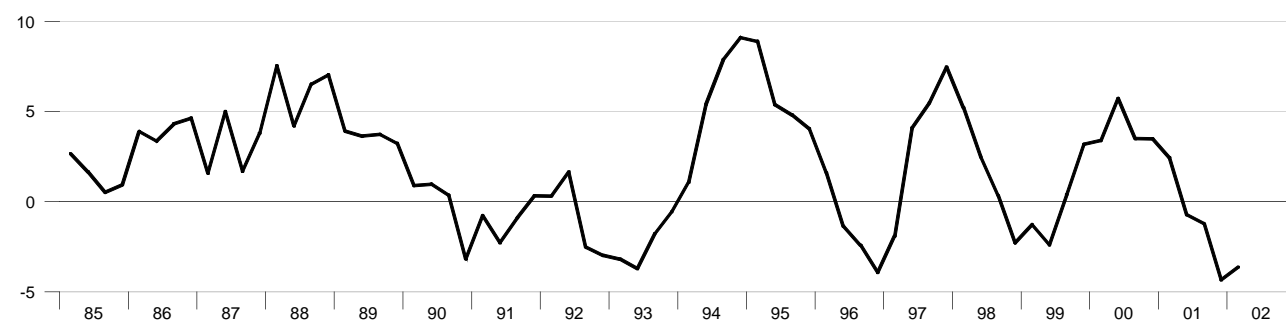
## GDP

Percent change from year ago



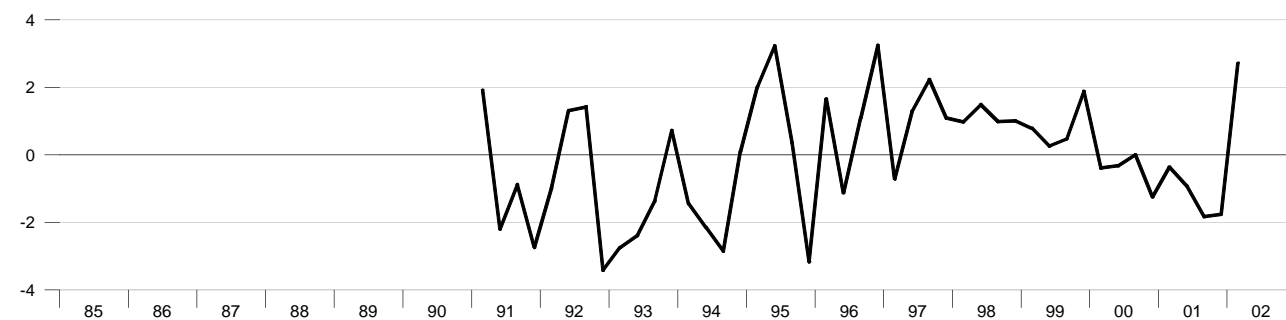
## Industrial Production

Percent change from year ago



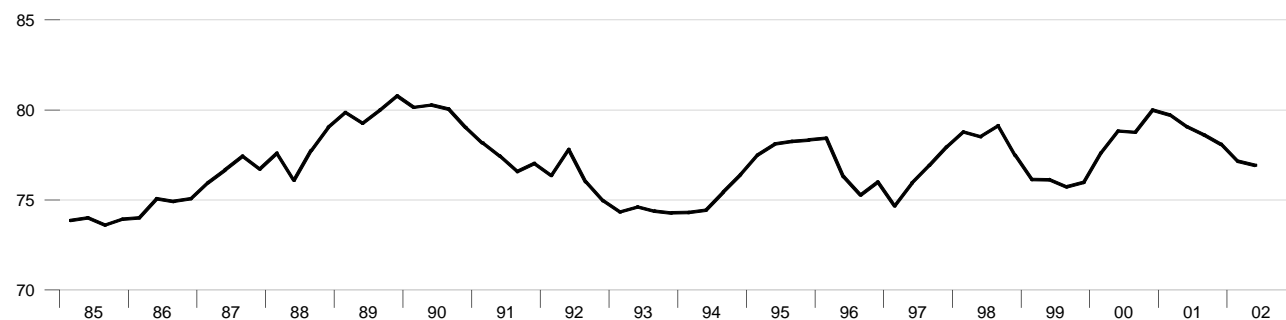
## Retail Sales

Percent change from year ago



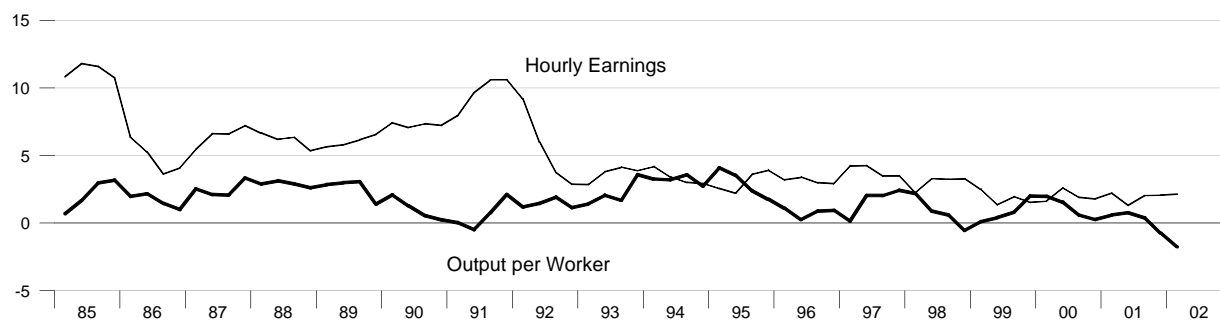
## Capacity Utilization

Percent



## Hourly Earnings and Output per Worker

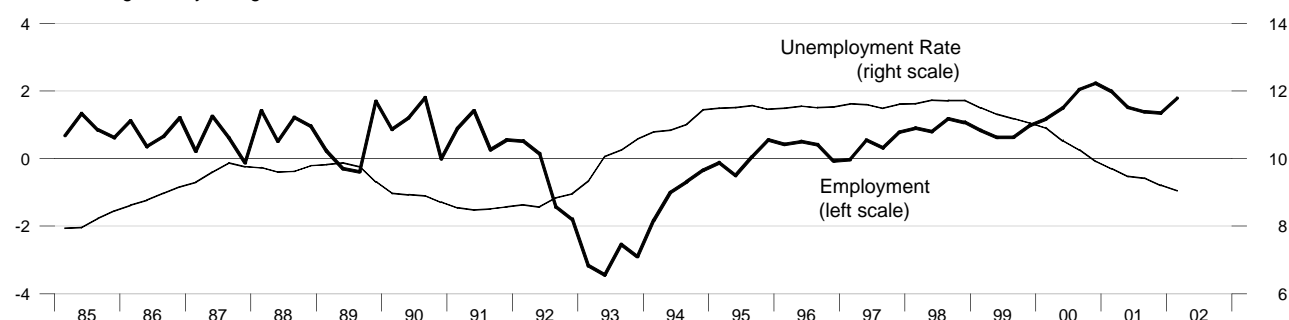
Percent change from year ago



## Labor Force Indicators

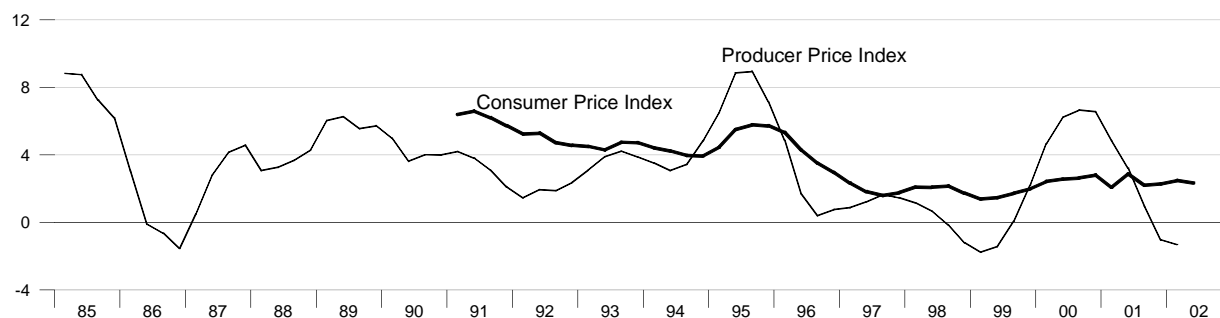
Percent change from year ago

Percent



## Inflation

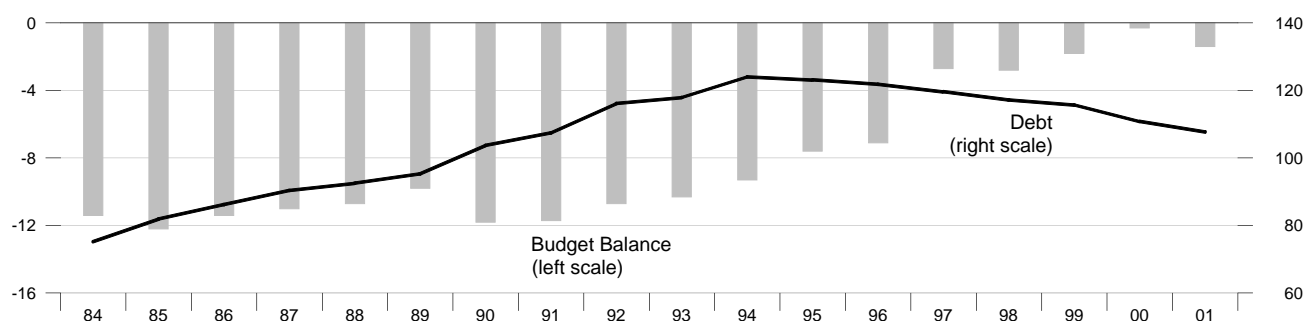
Percent change from year ago



## Government Debt and Budget Balance

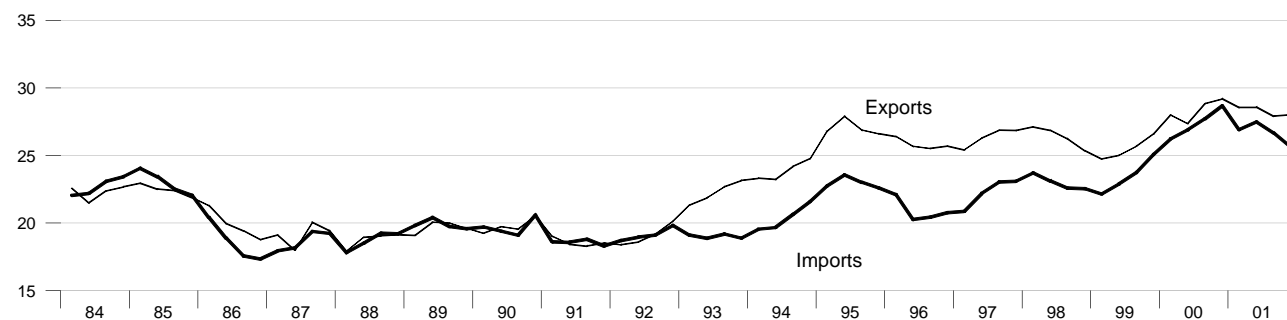
Percent of GDP, annual data

Percent of GDP, annual data



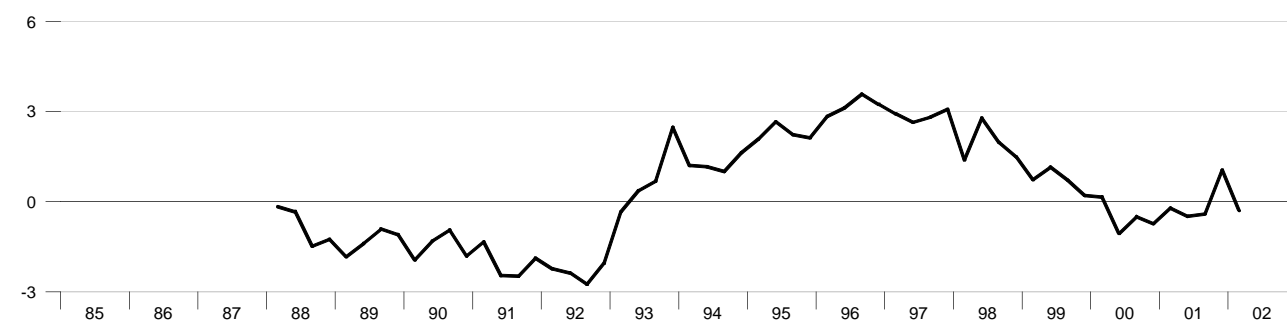
## International Trade - Goods and Services

Percent of GDP



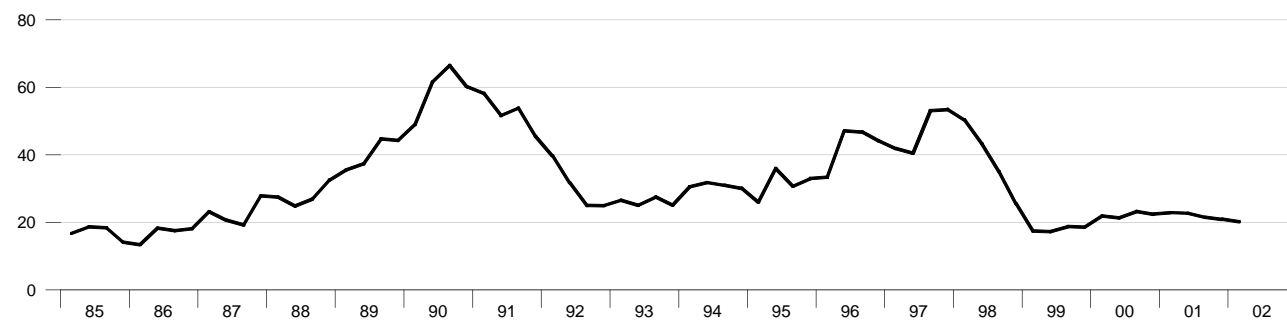
## Current Account Balance

Percent of GDP



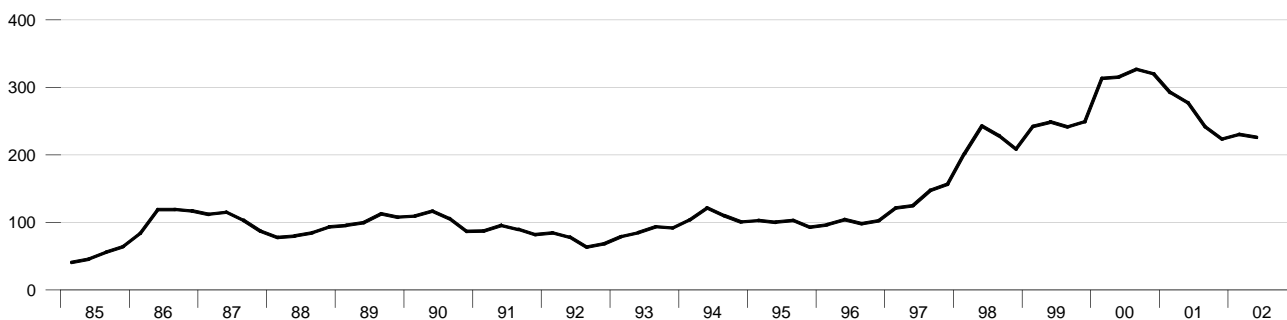
## Foreign Exchange Reserves

Billions of US\$



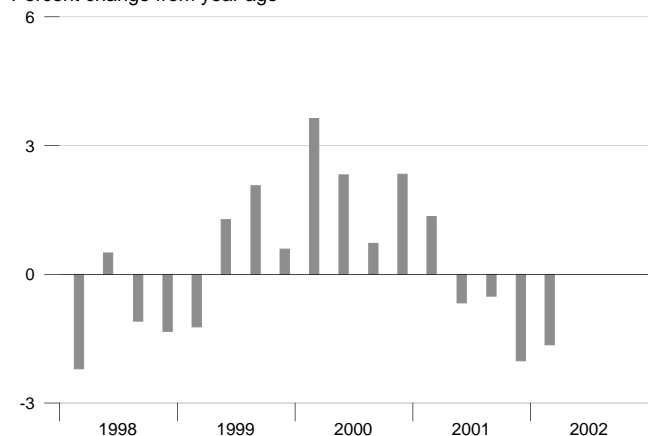
## Stock Exchange Index - Milan Stock Exchange

1995 = 100



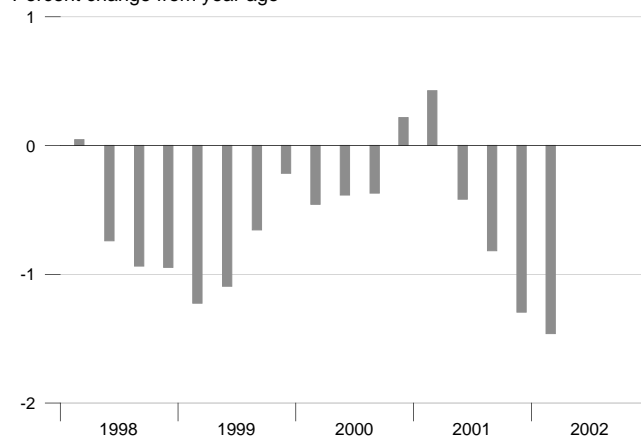
## Real GDP

Percent change from year ago



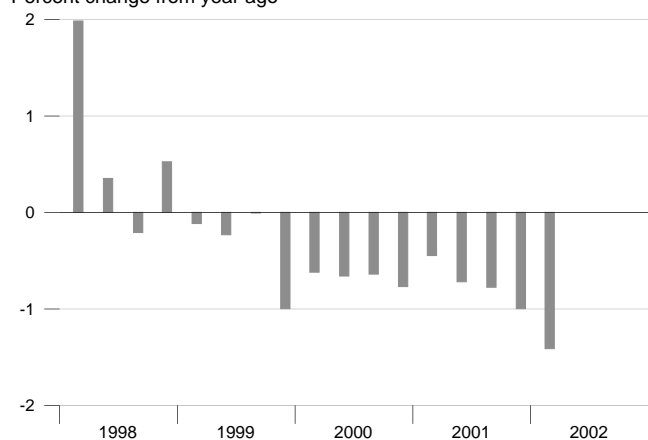
## Employment

Percent change from year ago



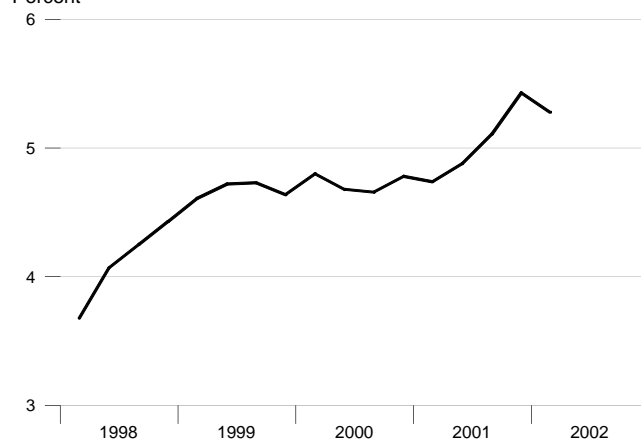
## Consumer Price Index

Percent change from year ago



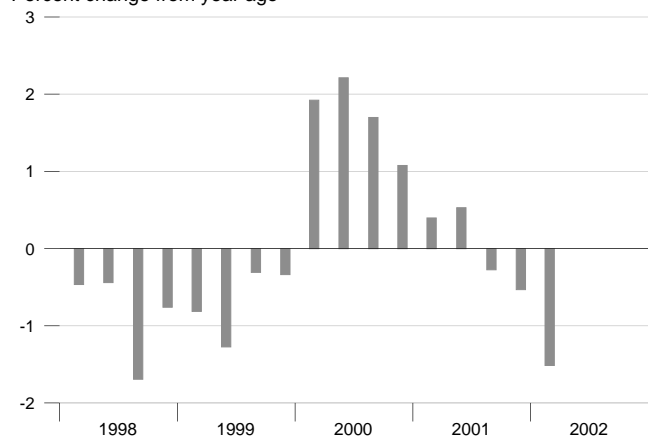
## Unemployment Rate

Percent



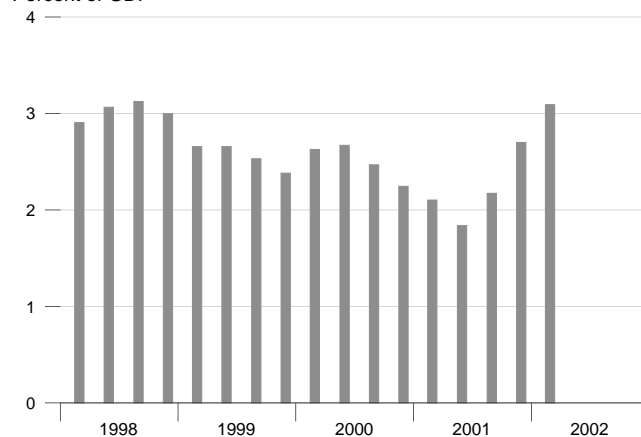
## Monthly Earnings

Percent change from year ago



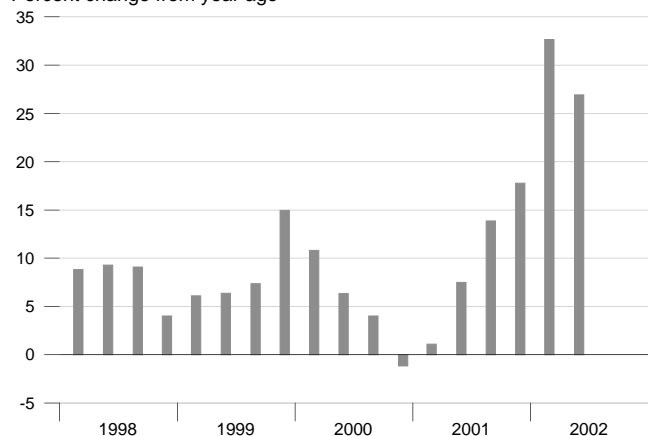
## Current Account Balance

Percent of GDP



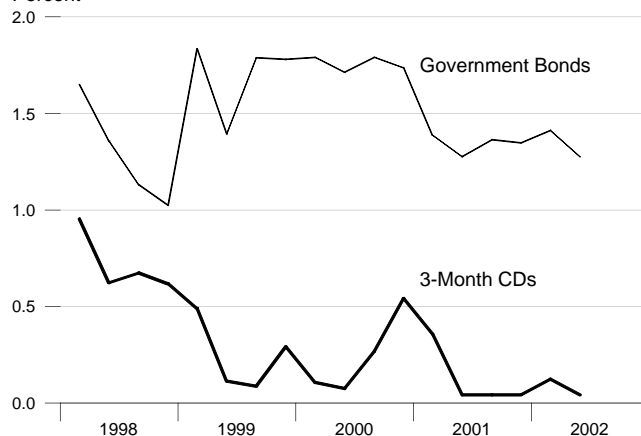
## Adjusted Monetary Base

Percent change from year ago



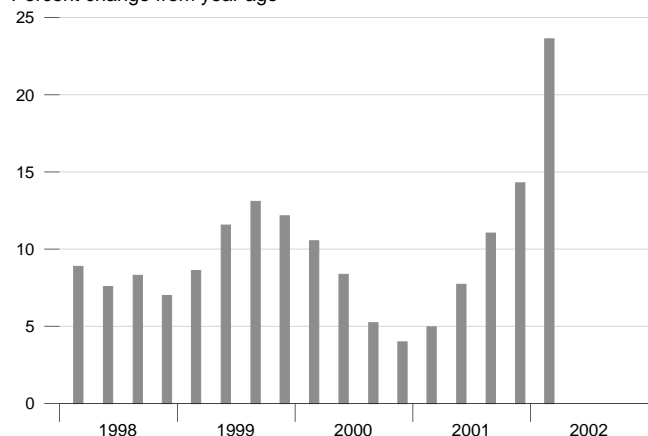
## Interest Rates

Percent



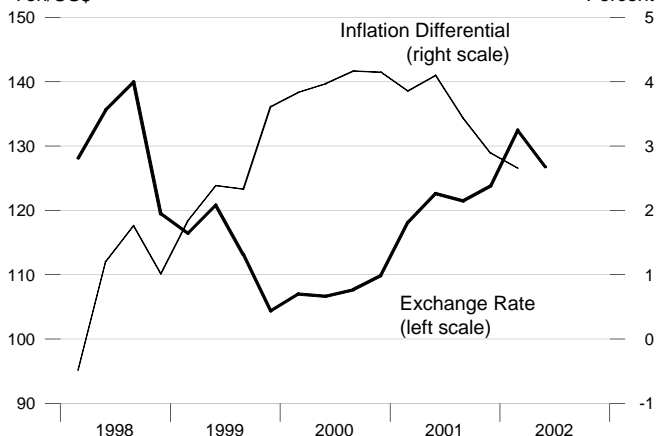
## M1

Percent change from year ago



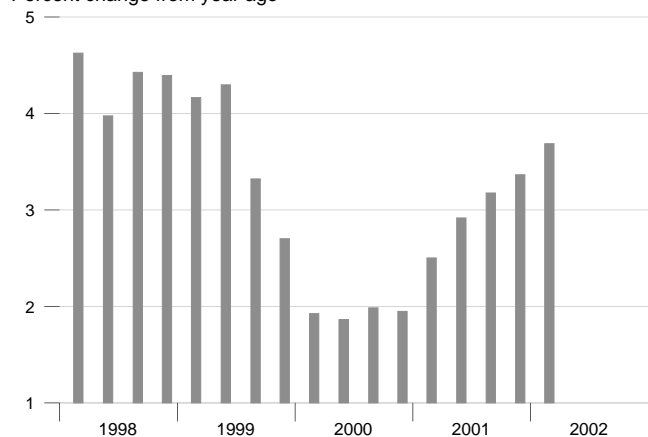
## Exchange Rate and Inflation Differential

Yen/US\$



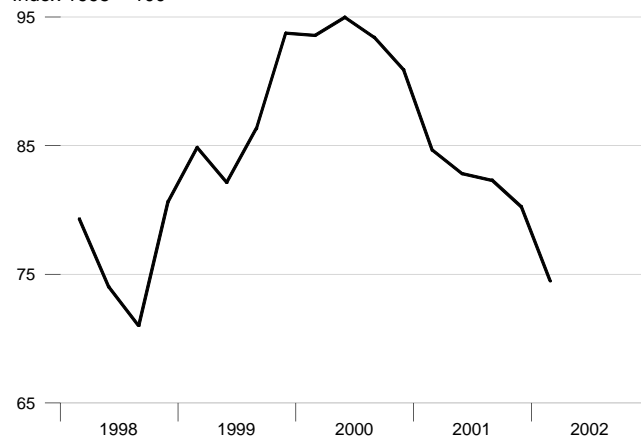
## M2

Percent change from year ago



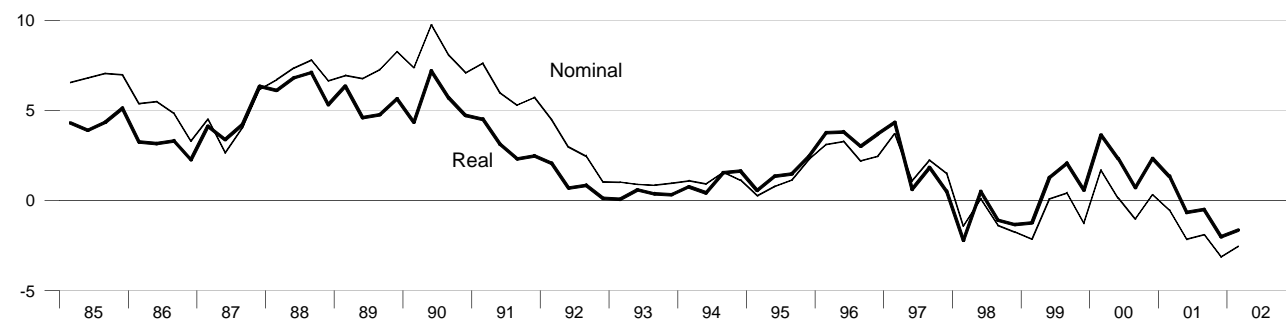
## Real Effective Exchange Rate

Index 1995 = 100



## GDP

Percent change from year ago



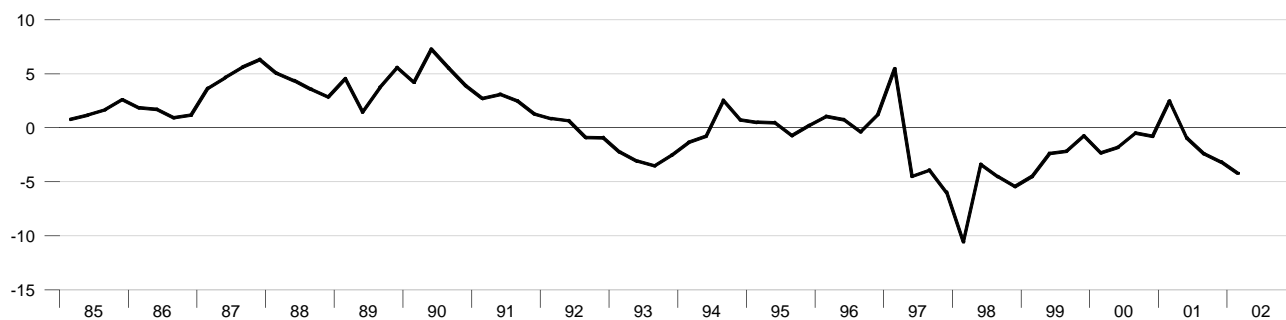
## Industrial Production

Percent change from year ago



## Retail Sales

Percent change from year ago



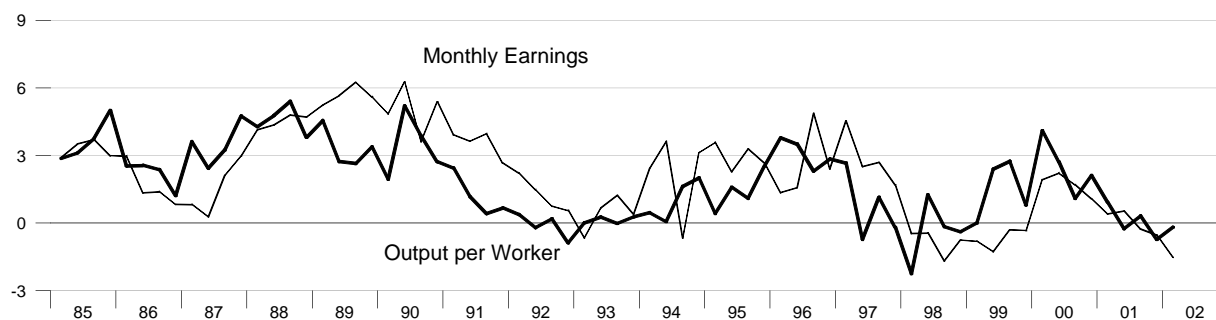
## Capacity Utilization

1995 = 100



## Monthly Earnings and Output per Worker

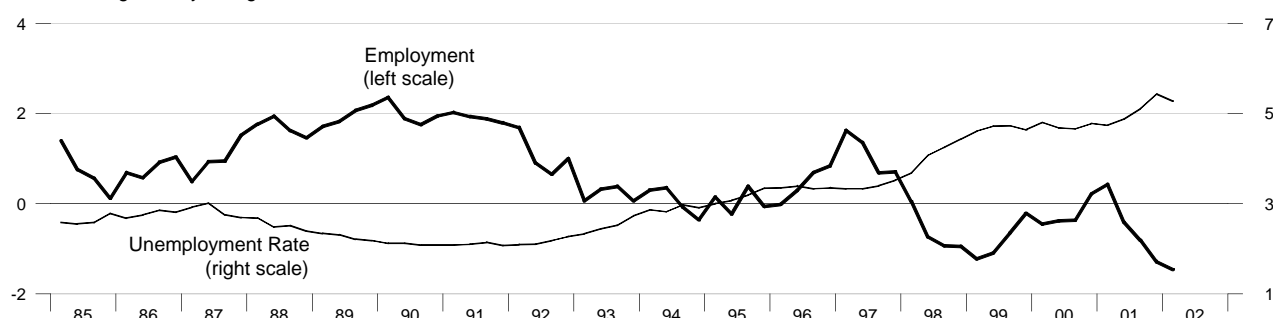
Percent change from year ago



## Labor Force Indicators

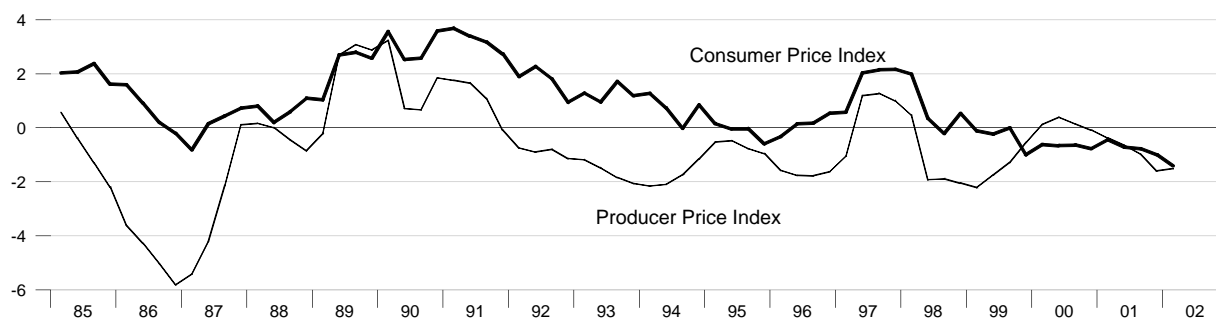
Percent change from year ago

Percent



## Inflation

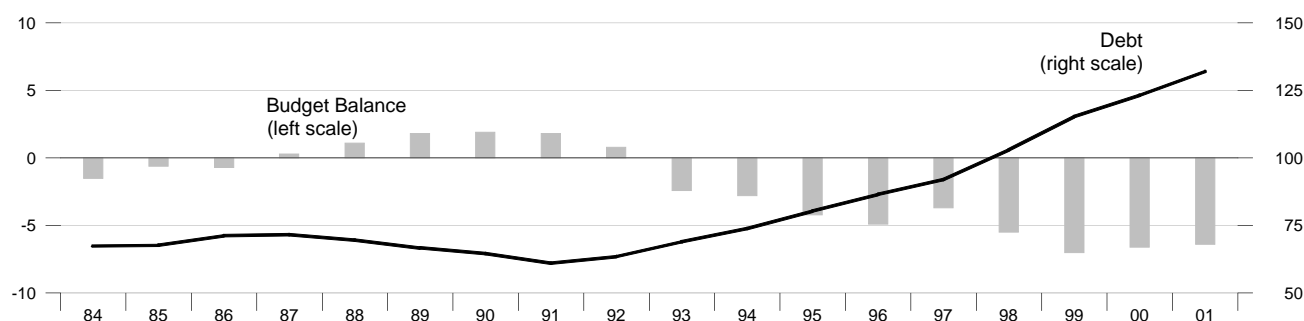
Percent change from year ago



## Government Debt and Budget Balance

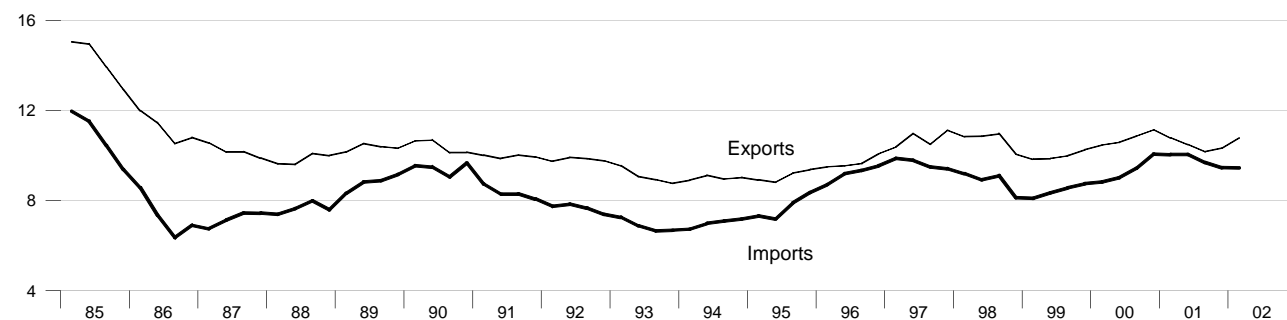
Percent of GDP, annual data

Percent of GDP, annual data



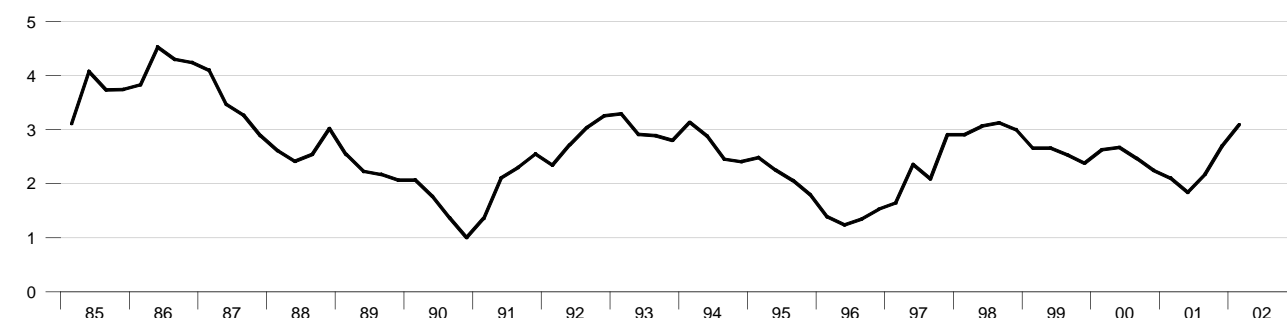
## International Trade - Goods and Services

Percent of GDP



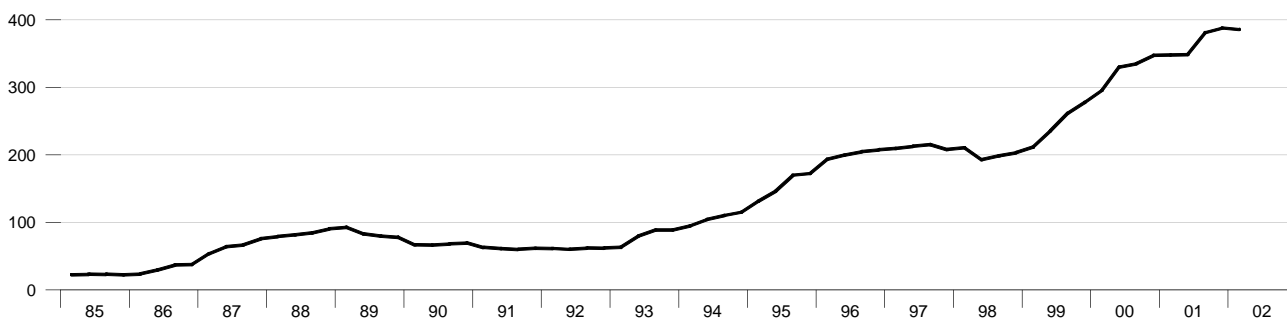
## Current Account Balance

Percent of GDP



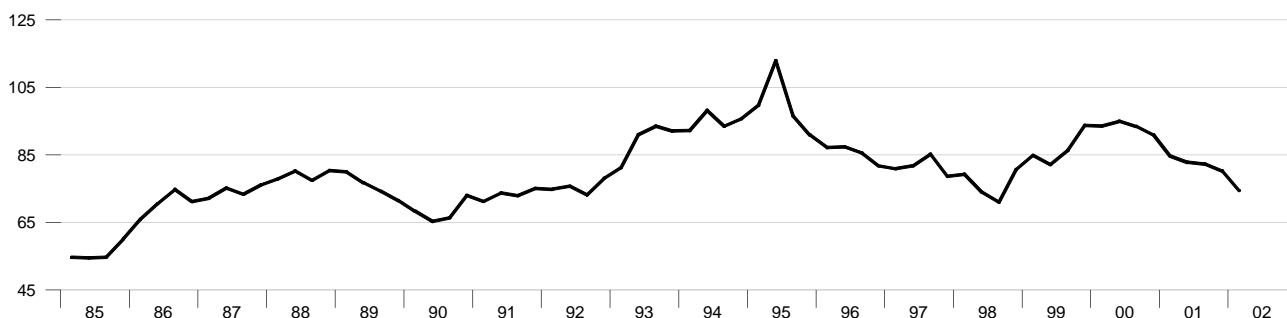
## Foreign Exchange Reserves

Billions of US\$



## Real Effective Exchange Rate

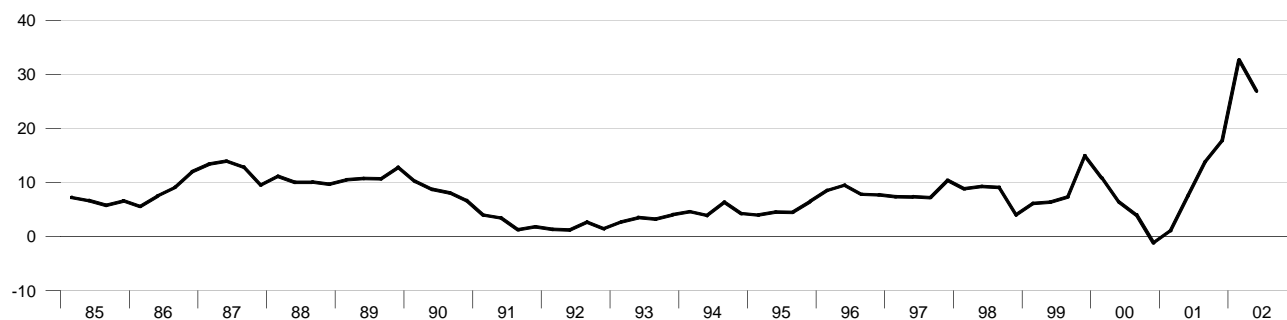
Index 1995 = 100





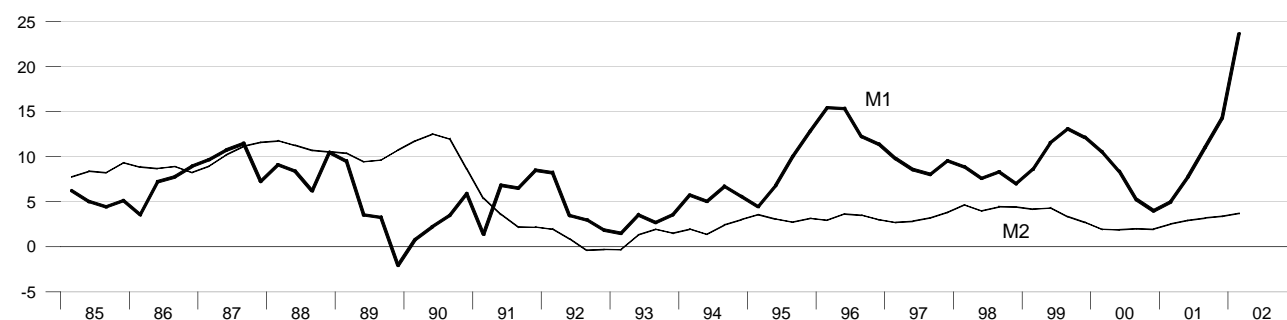
## Adjusted Monetary Base

Percent change from year ago



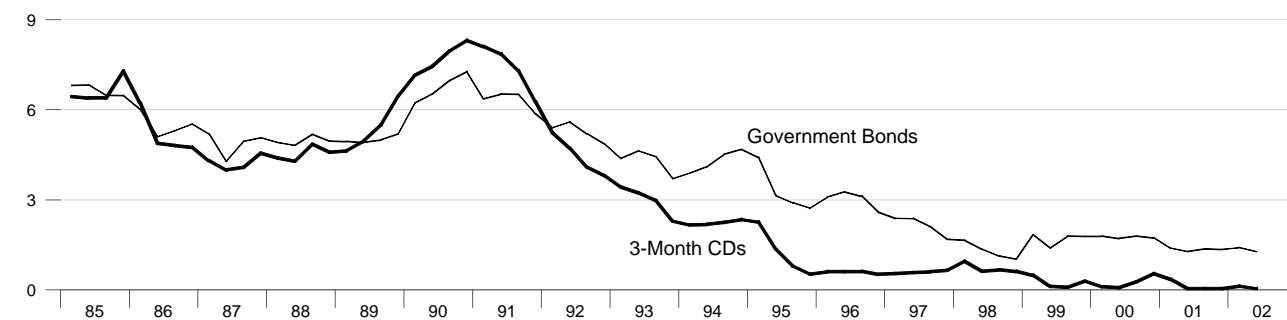
## Monetary Aggregates

Percent change from year ago



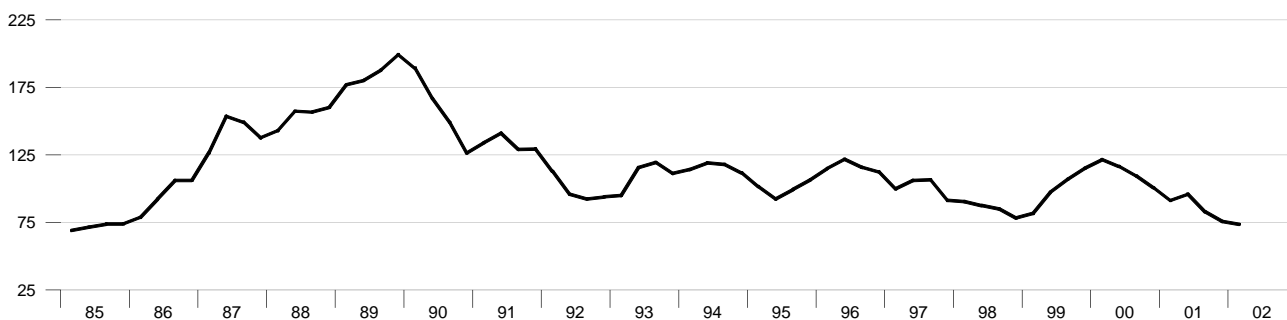
## Interest Rates

Percent



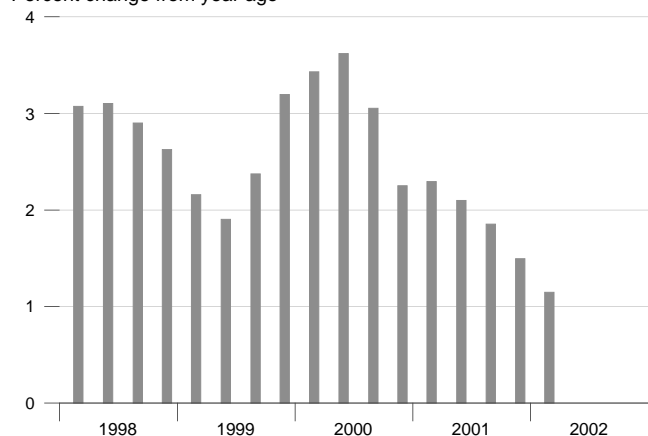
## Stock Exchange Index - Tokyo Stock Exchange

1995 = 100



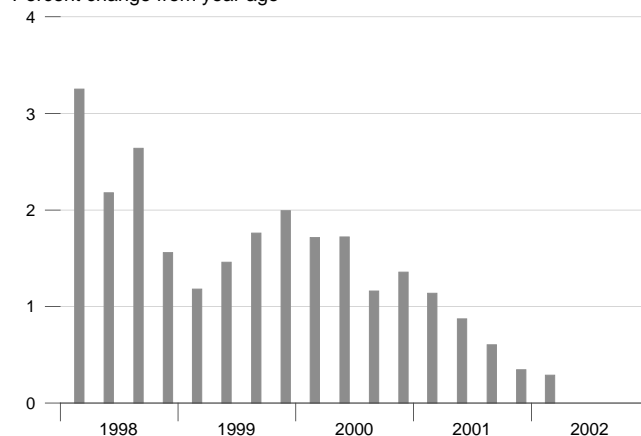
## Real GDP

Percent change from year ago



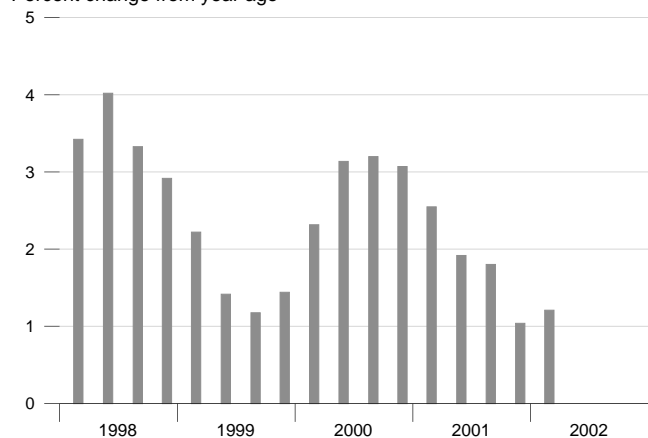
## Employment

Percent change from year ago



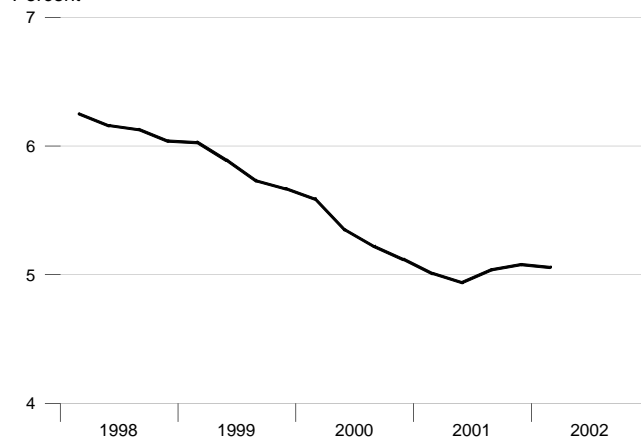
## Consumer Price Index

Percent change from year ago



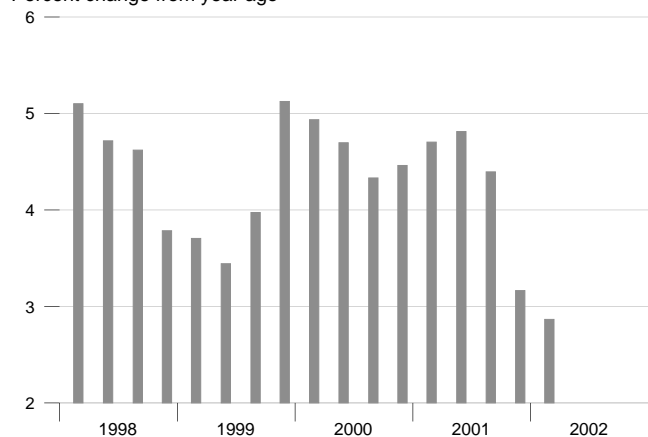
## Unemployment Rate

Percent



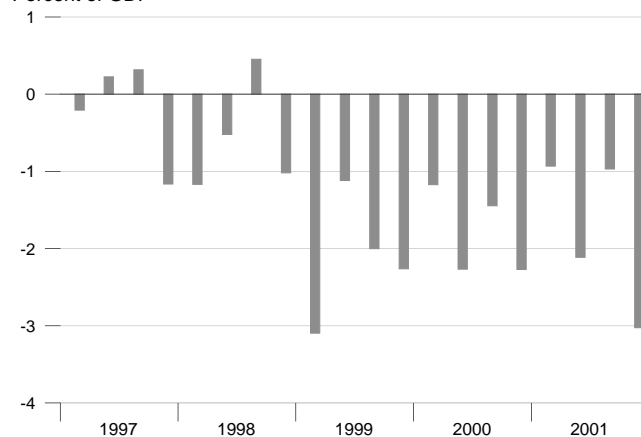
## Weekly Earnings

Percent change from year ago



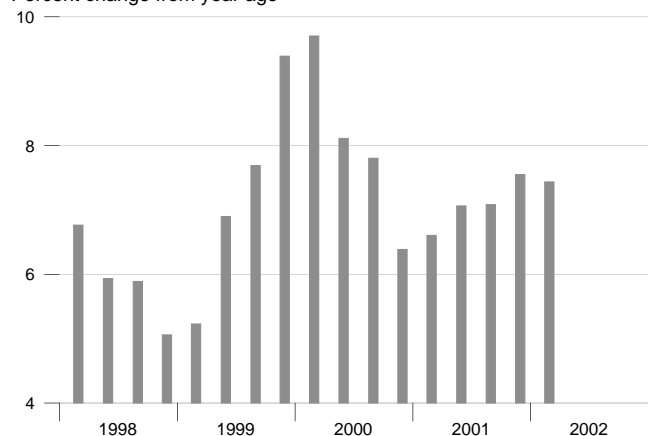
## Current Account Balance

Percent of GDP



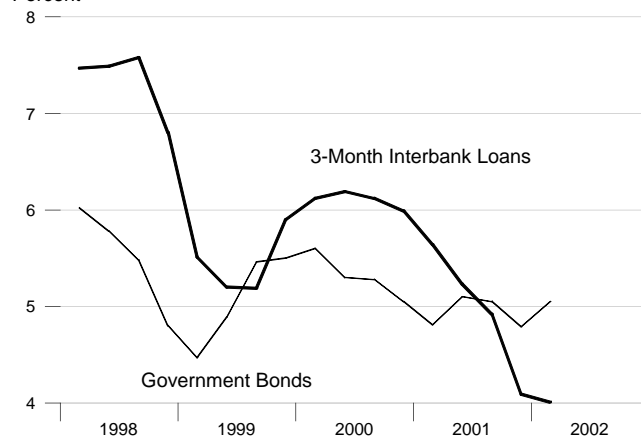
## M0

Percent change from year ago



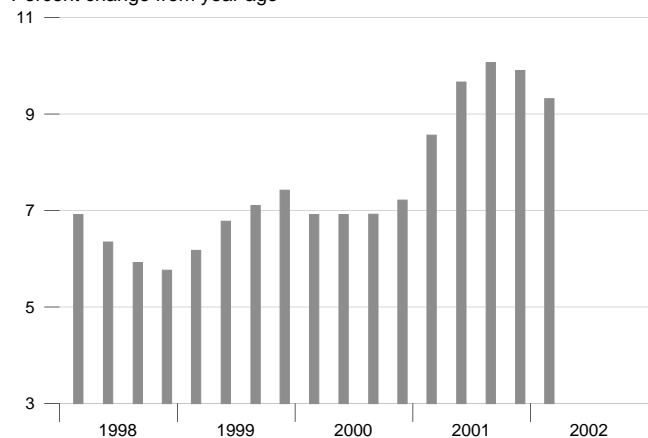
## Interest Rates

Percent



## M2

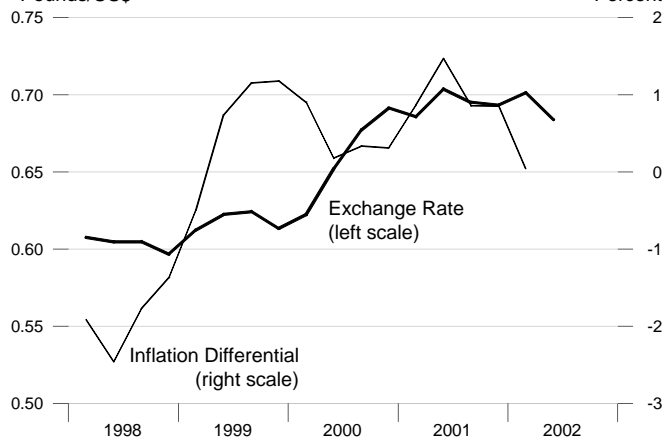
Percent change from year ago



## Exchange Rate and Inflation Differential

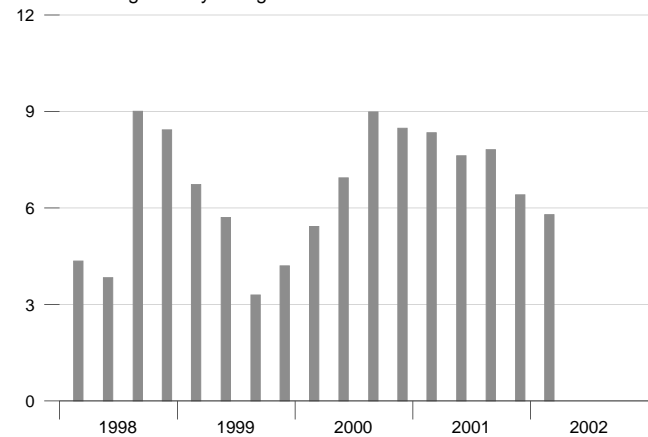
Pounds/US\$

Percent



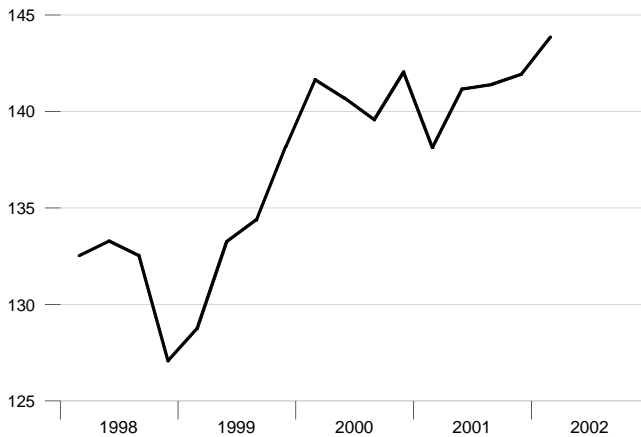
## M4

Percent change from year ago



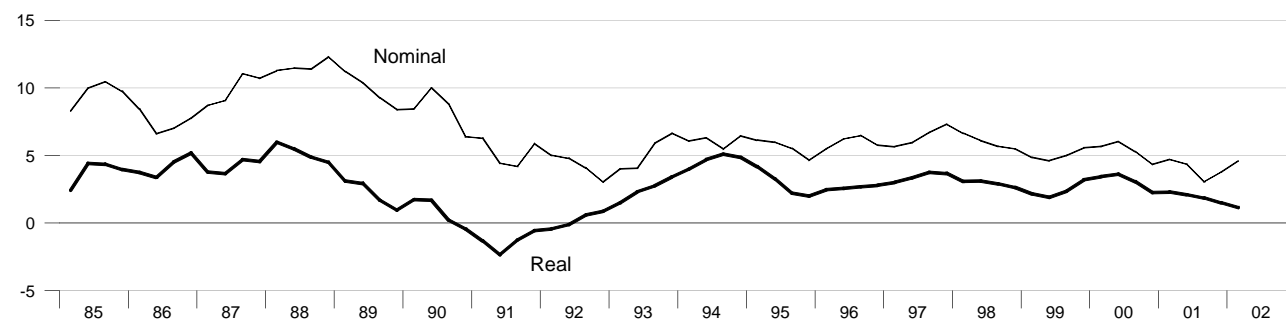
## Real Effective Exchange Rate

Index 1995 = 100



## GDP

Percent change from year ago



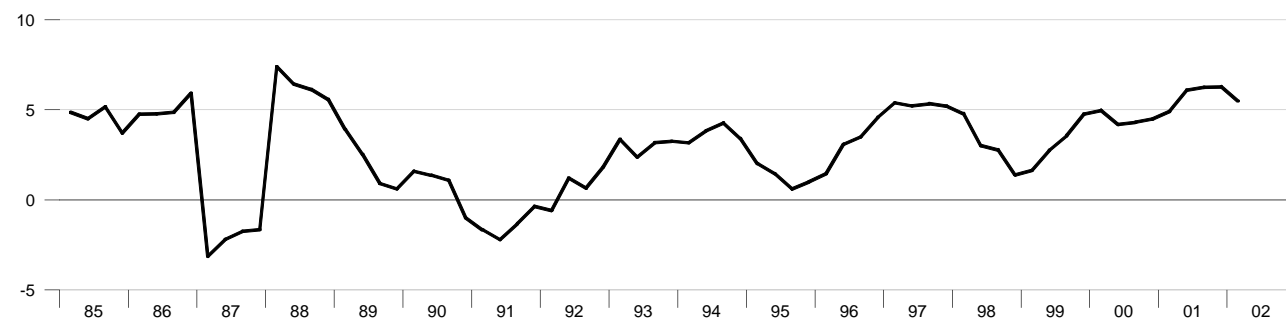
## Industrial Production

Percent change from year ago



## Retail Sales

Percent change from year ago



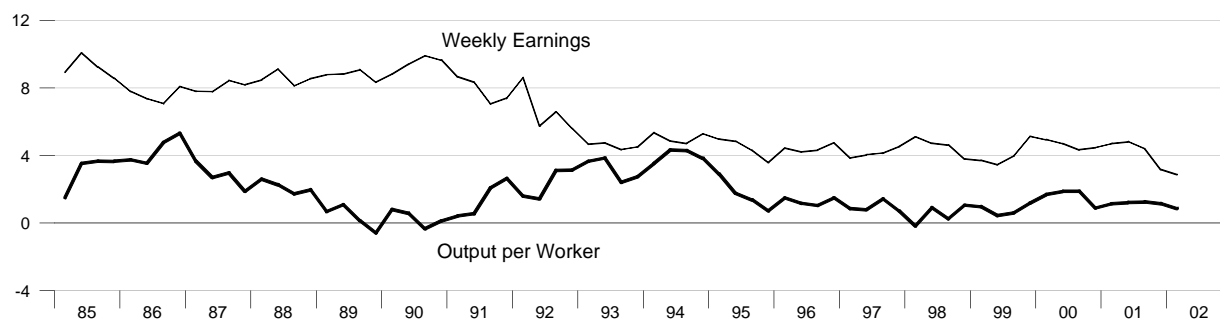
## Firms Operating at Capacity

Percent



## Weekly Earnings and Output per Worker

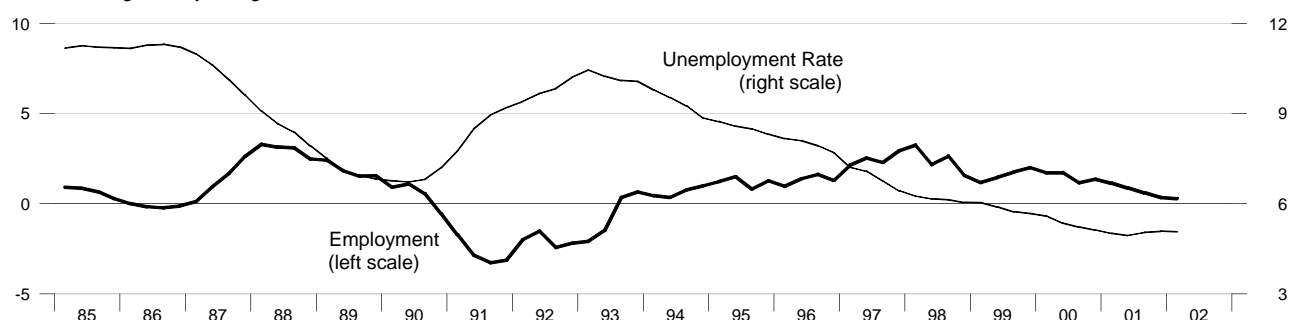
Percent change from year ago



## Labor Force Indicators

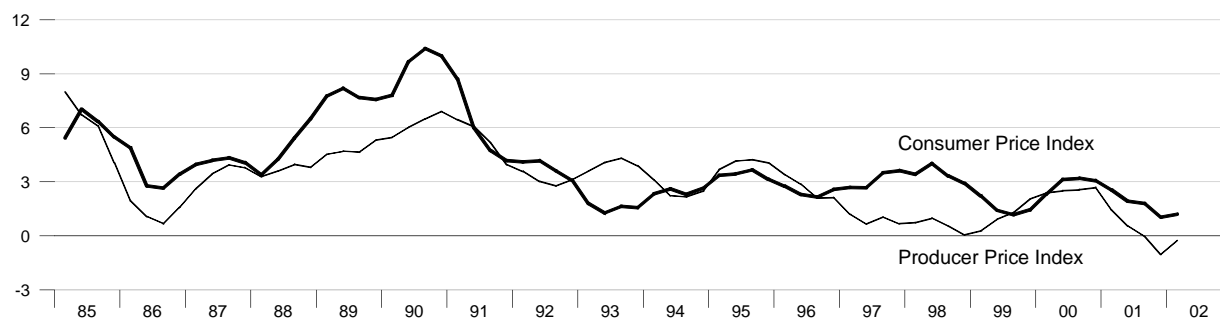
Percent change from year ago

Percent



## Inflation

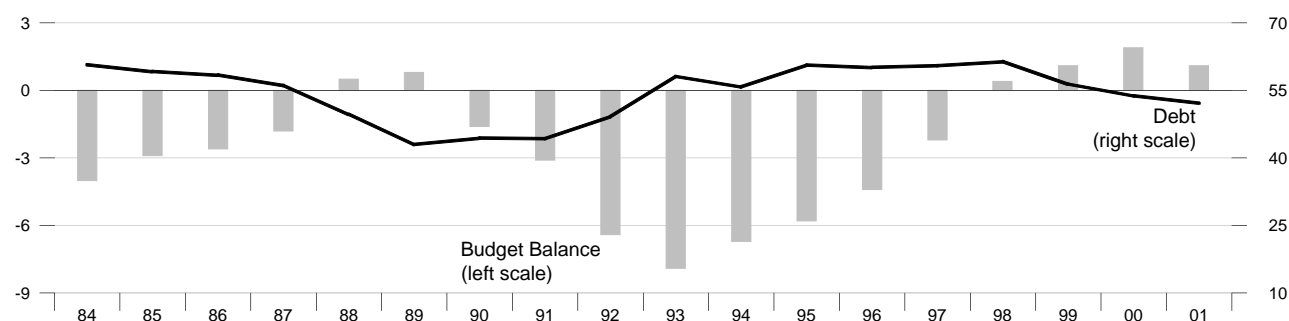
Percent change from year ago



## Government Debt and Budget Balance

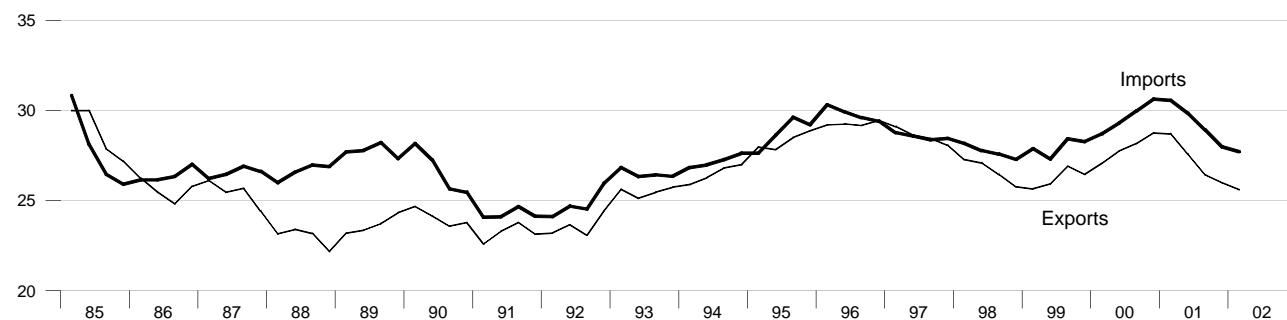
Percent of GDP, annual data

Percent of GDP, annual data



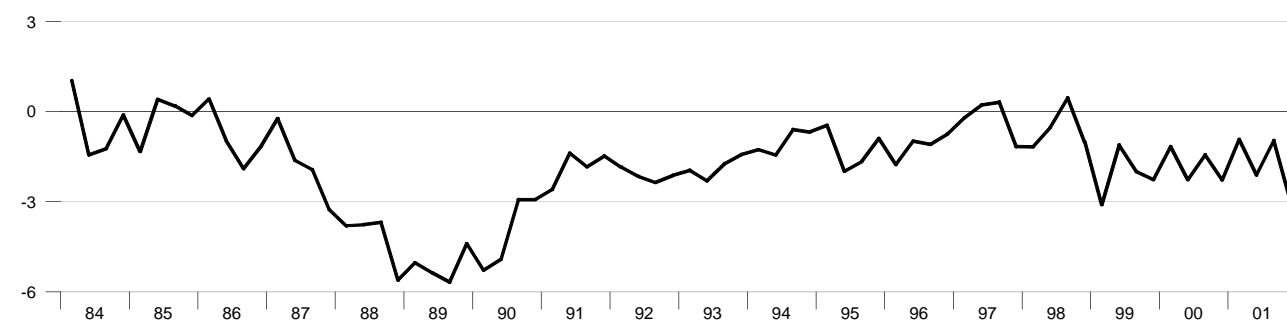
## International Trade - Goods and Services

Percent of GDP



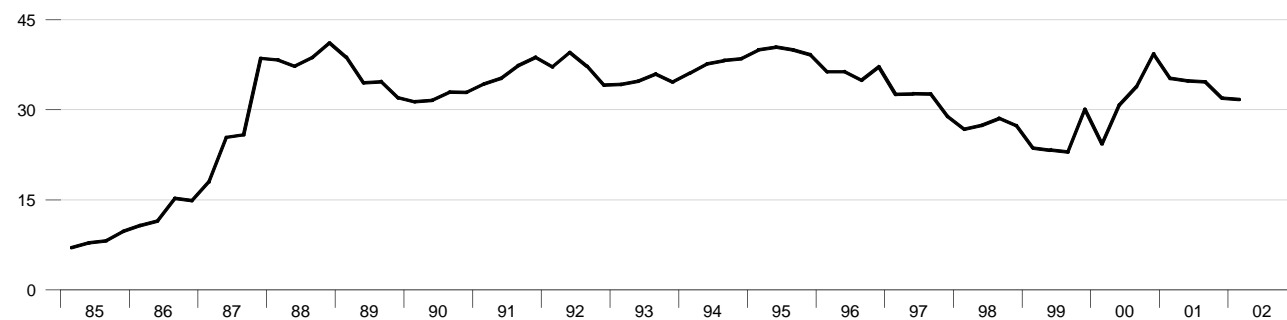
## Current Account Balance

Percent of GDP



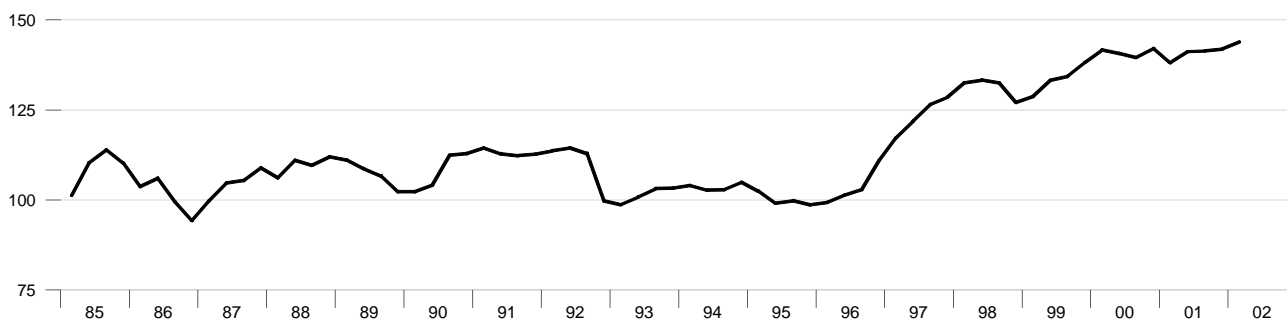
## Foreign Exchange Reserves

Billions of US\$



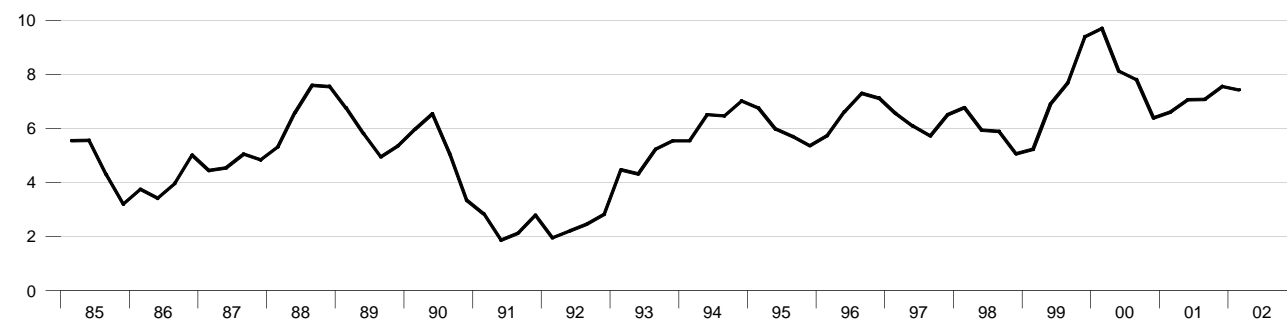
## Real Effective Exchange Rate

Index 1995 = 100



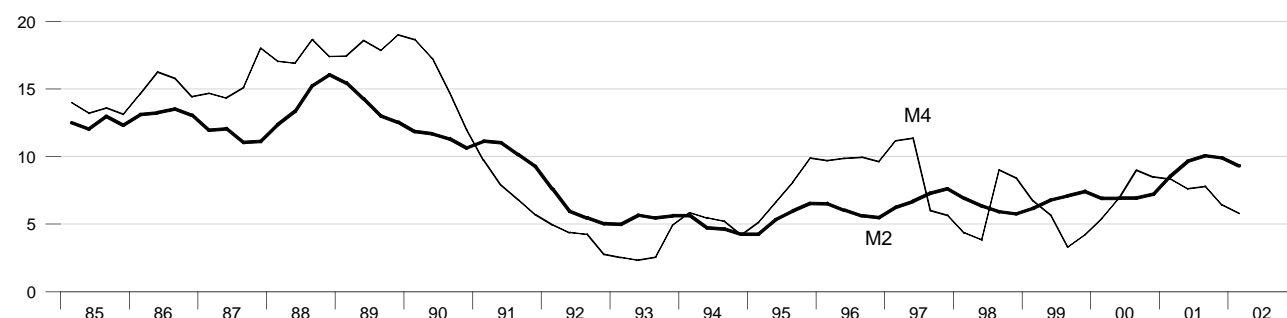
## M0

Percent change from year ago



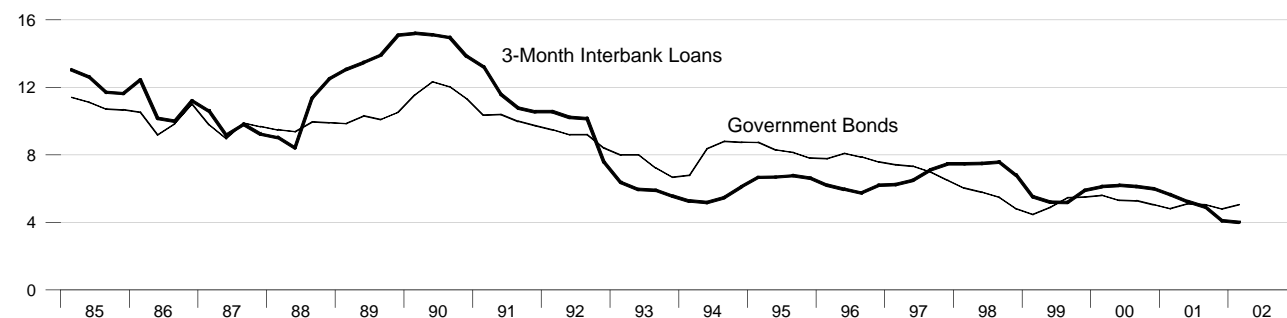
## Monetary Aggregates

Percent change from year ago



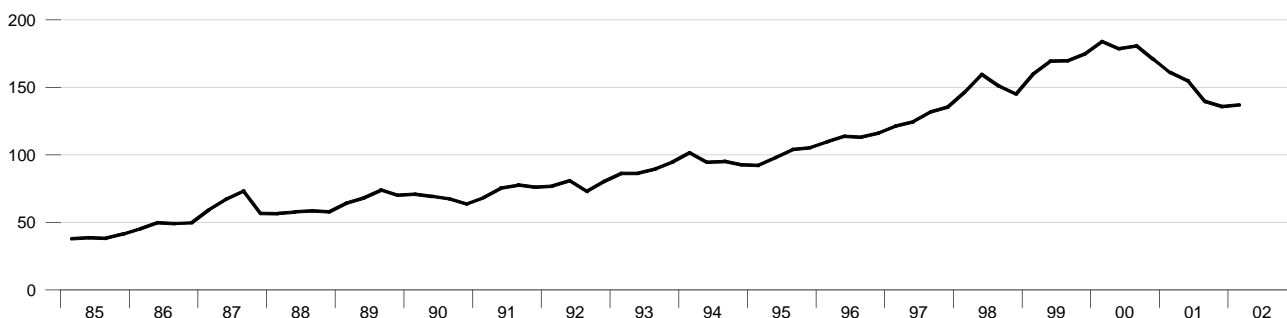
## Interest Rates

Percent

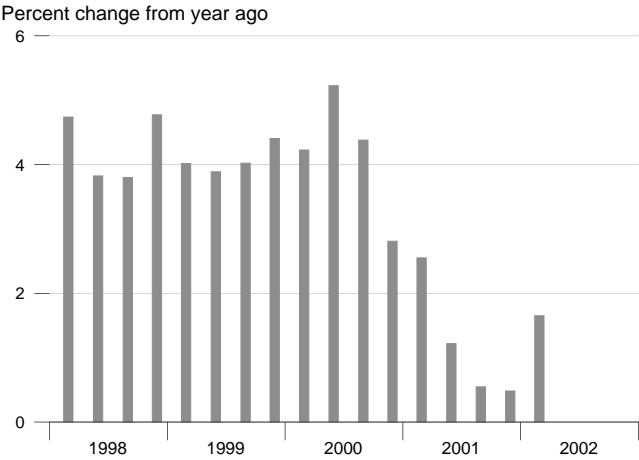


## Stock Exchange Index - Financial Times Stock Exchange

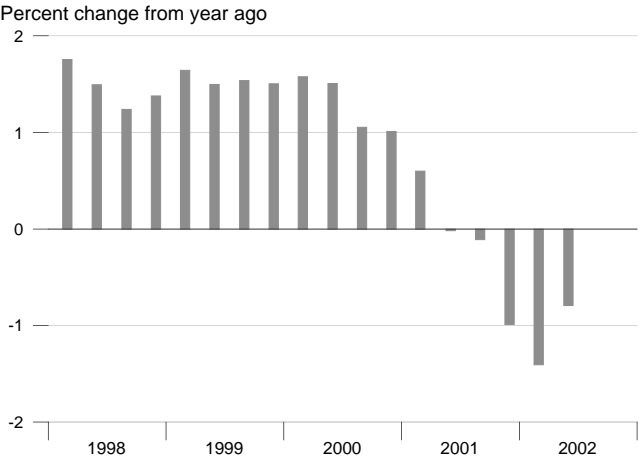
1995 = 100



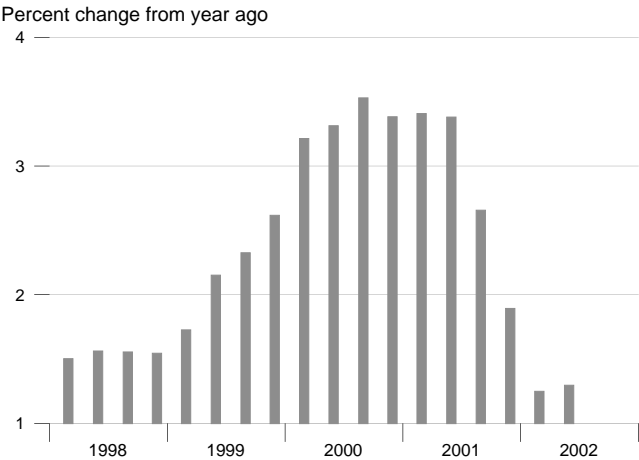
Real GDP



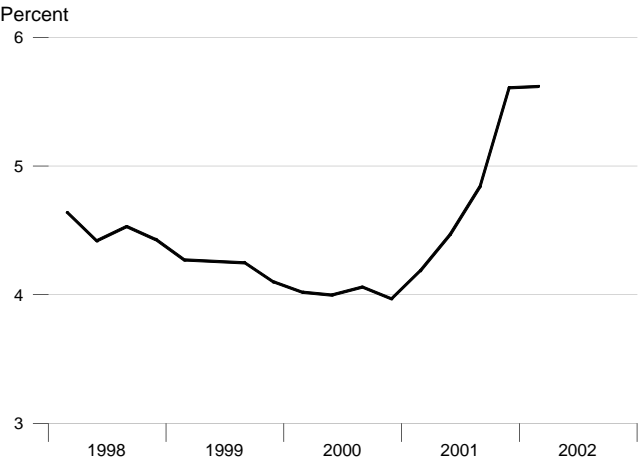
Employment



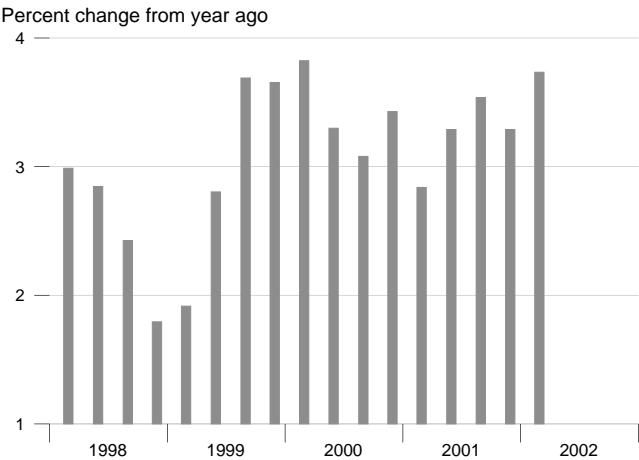
Consumer Price Index



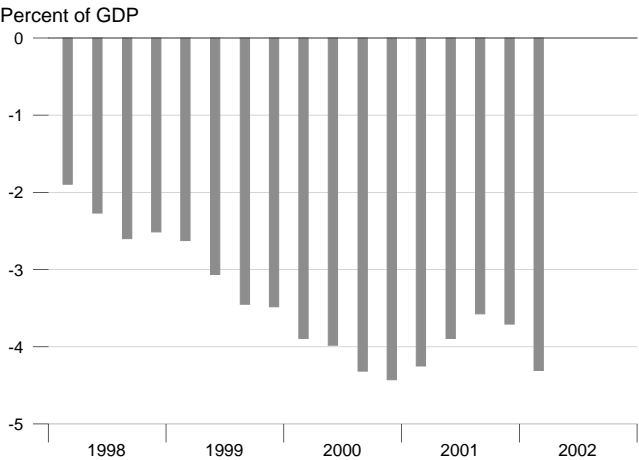
Unemployment Rate



Hourly Earnings



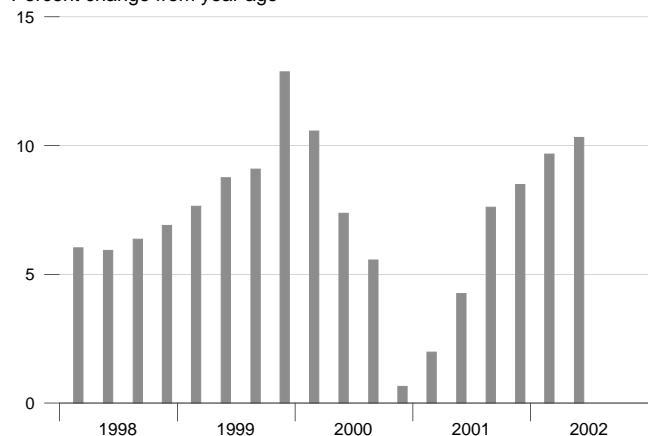
Current Account Balance





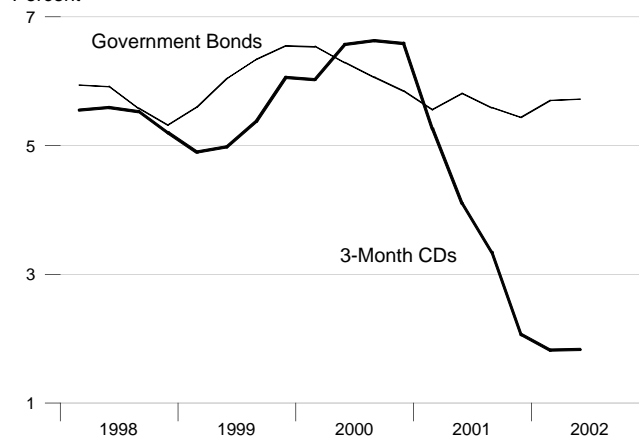
## Adjusted Monetary Base

Percent change from year ago



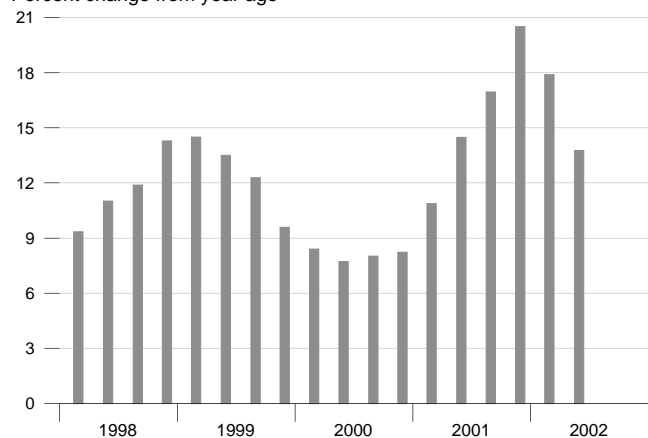
## Interest Rates

Percent



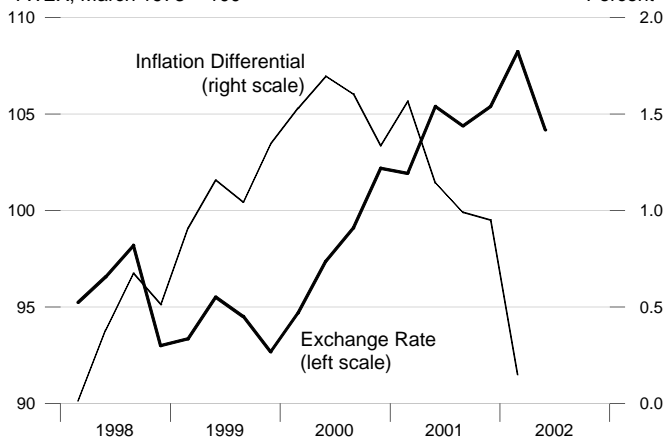
## MZM

Percent change from year ago



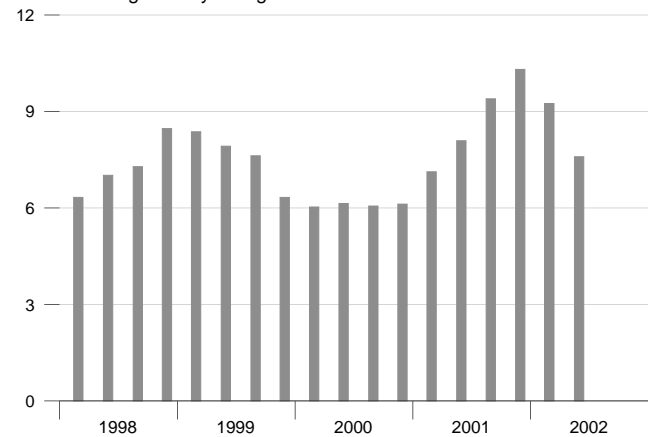
## Exchange Rate and Inflation Differential

TWEX, March 1973 = 100



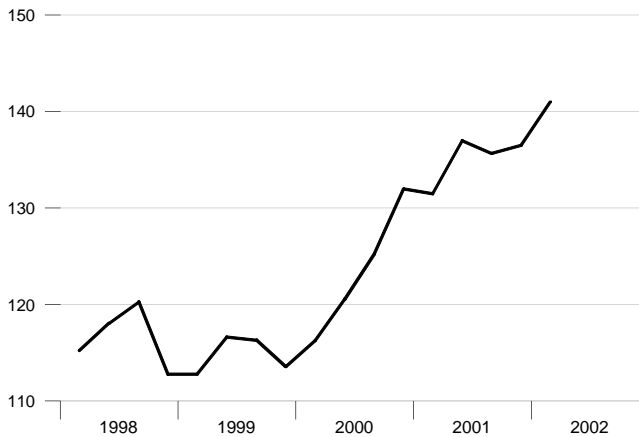
## M2

Percent change from year ago



## Real Effective Exchange Rate

Index 1995 = 100



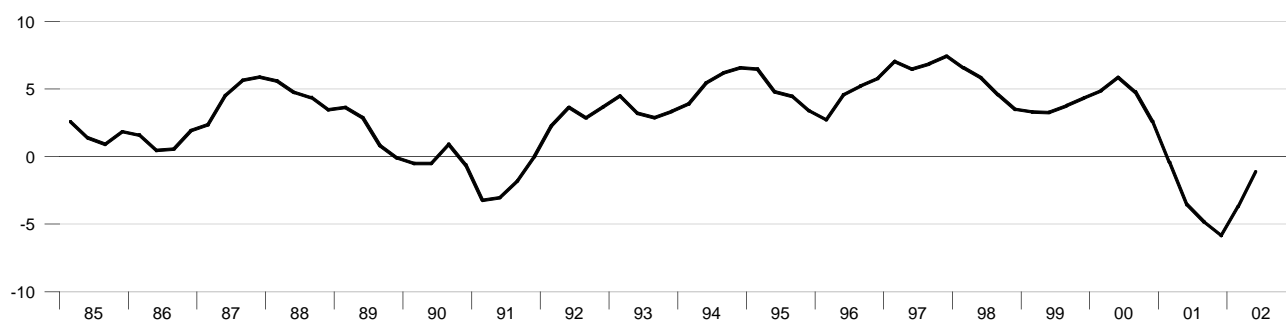
## GDP

Percent change from year ago



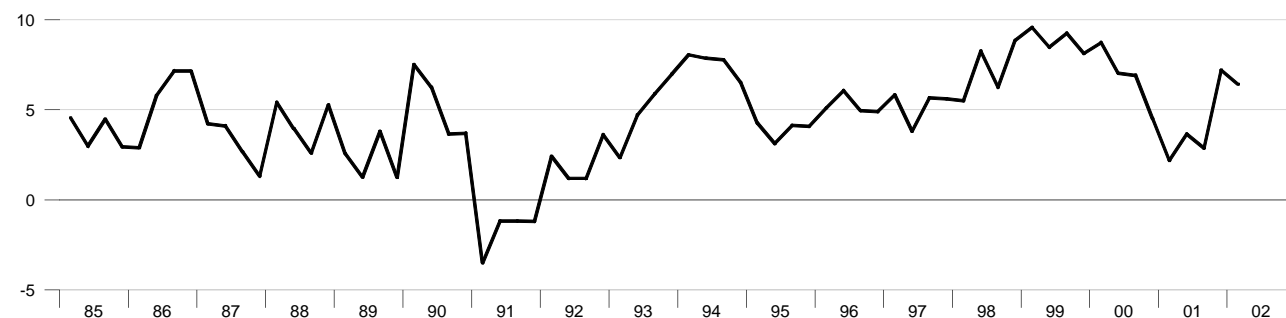
## Industrial Production

Percent change from year ago



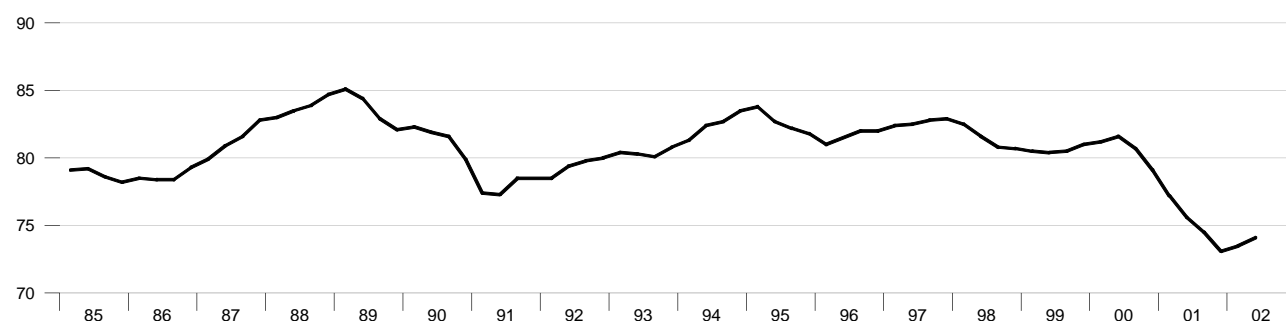
## Retail Sales

Percent change from year ago



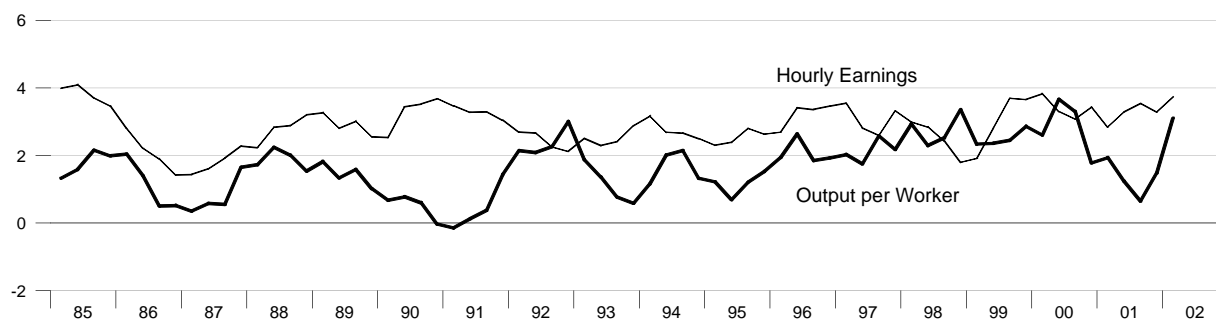
## Capacity Utilization

Percent



## Hourly Earnings and Output per Worker

Percent change from year ago



## Labor Force Indicators

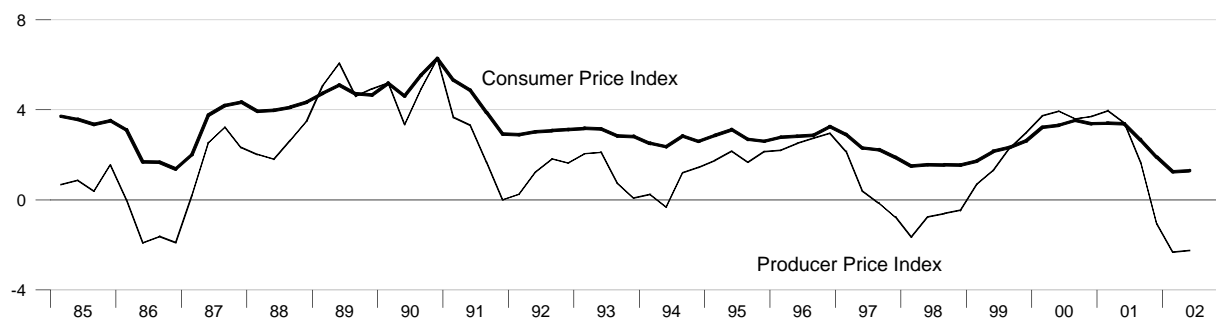
Percent change from year ago

Percent



## Inflation

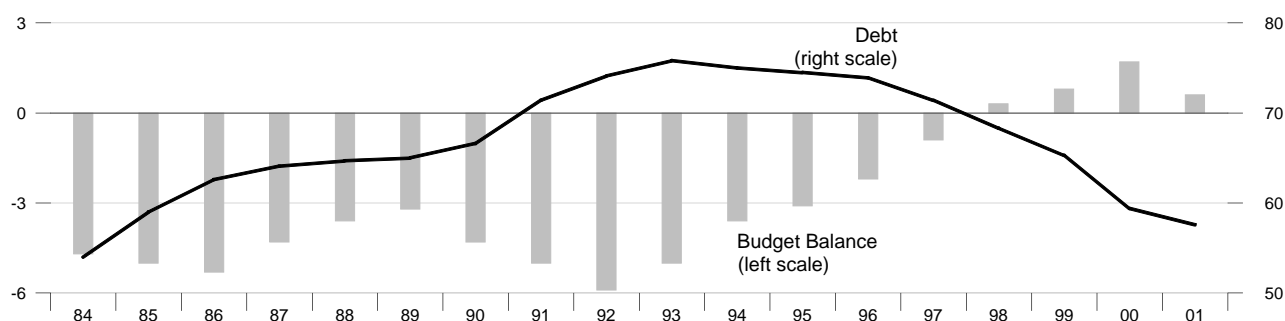
Percent change from year ago



## Government Debt and Budget Balance

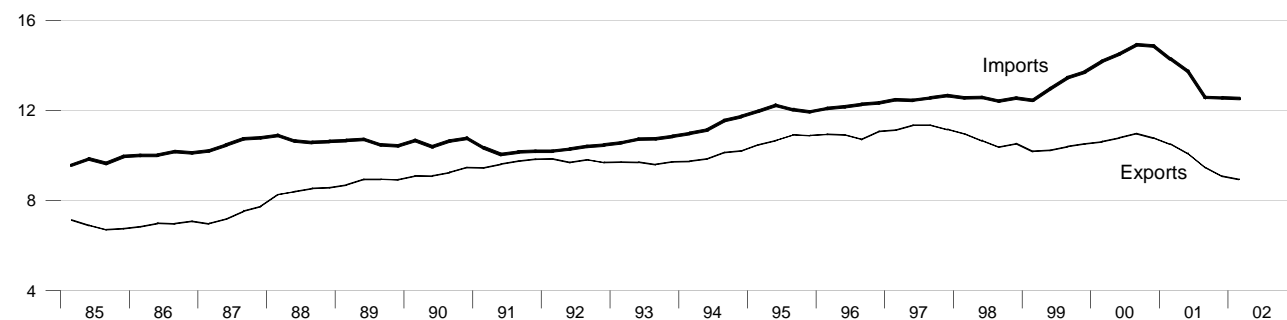
Percent of GDP, annual data

Percent of GDP, annual data



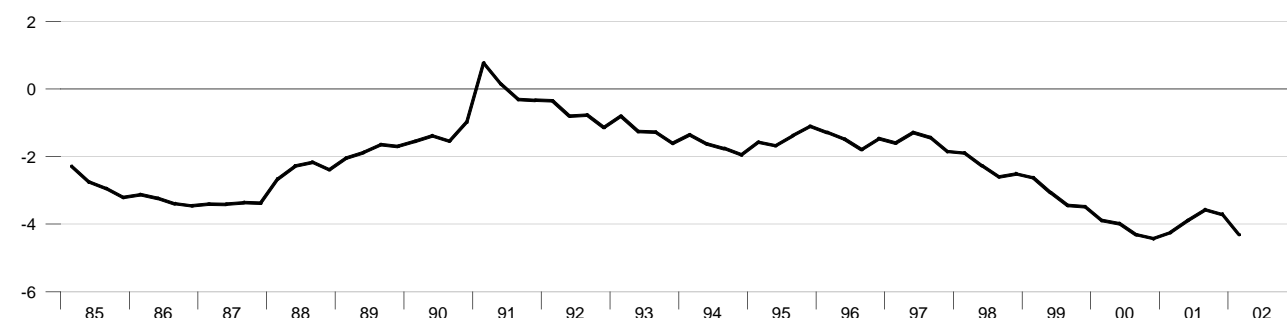
## International Trade - Goods and Services

Percent of GDP



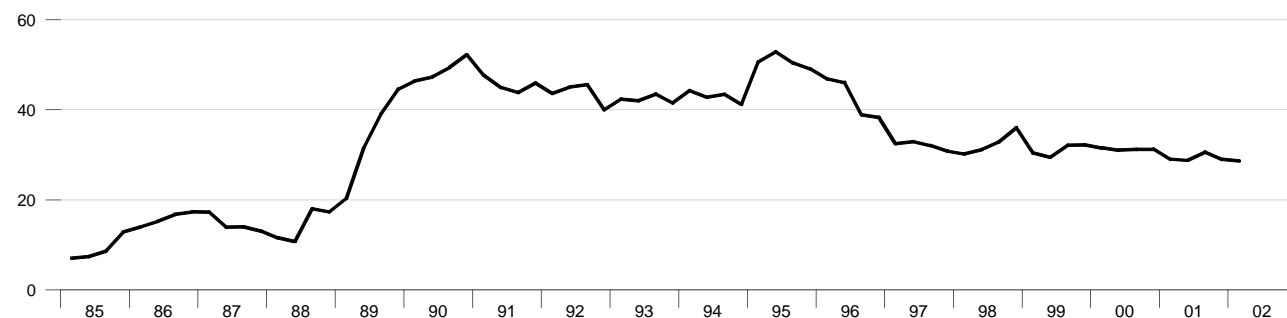
## Current Account Balance

Percent of GDP



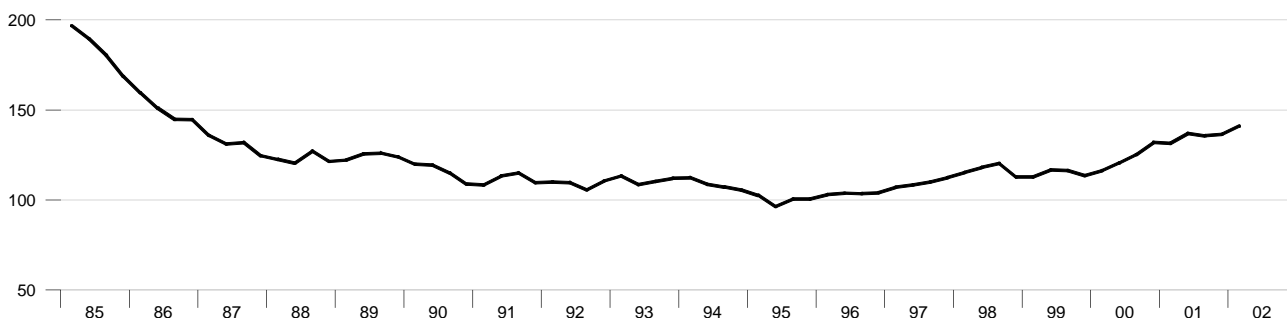
## Foreign Exchange Reserves

Billions of US\$



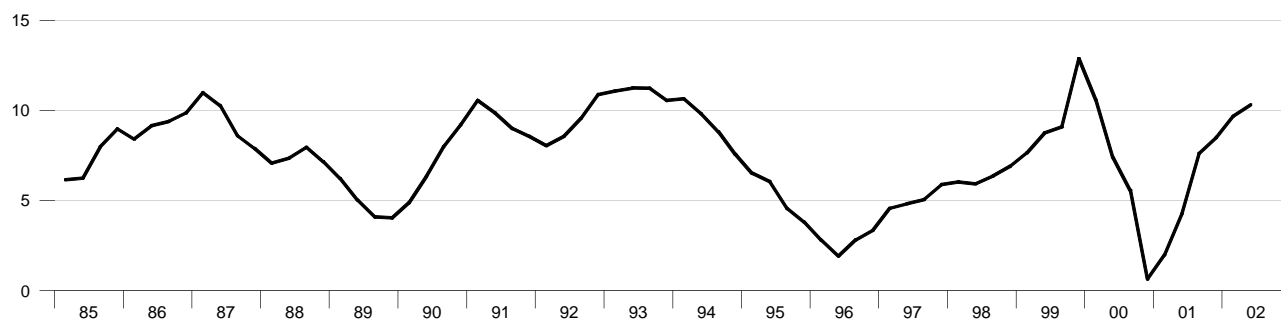
## Real Effective Exchange Rate

Index 1995 = 100



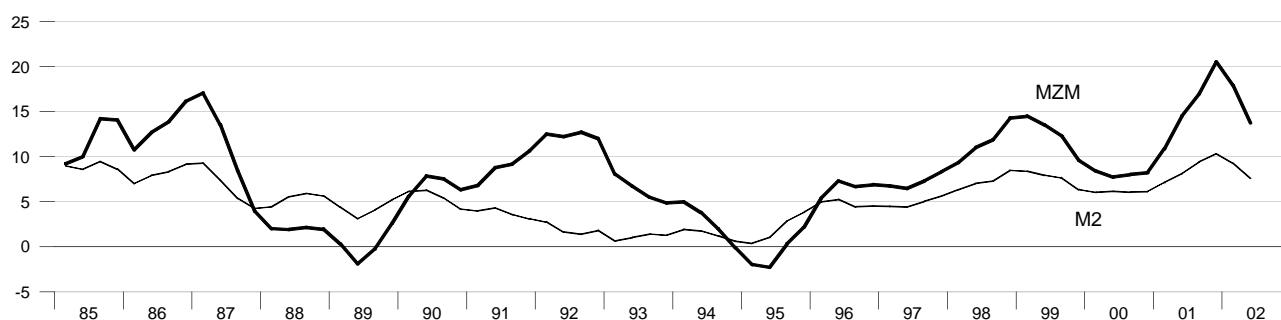
## Adjusted Monetary Base

Percent change from year ago



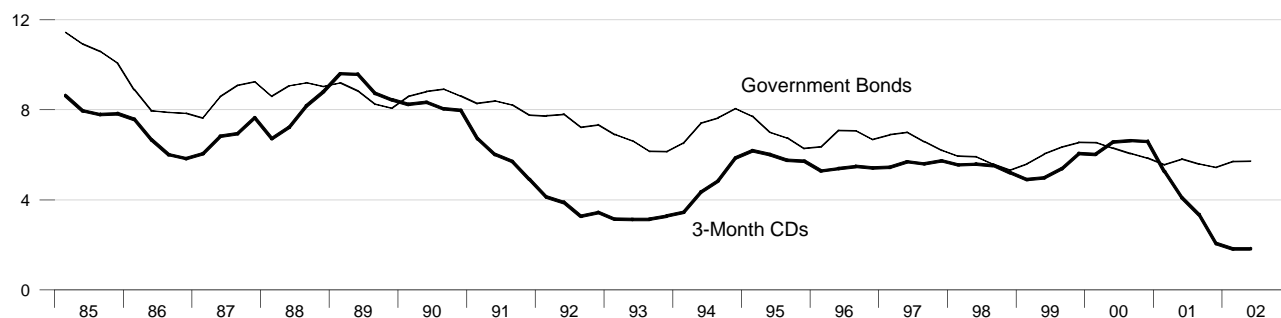
## Monetary Aggregates

Percent change from year ago



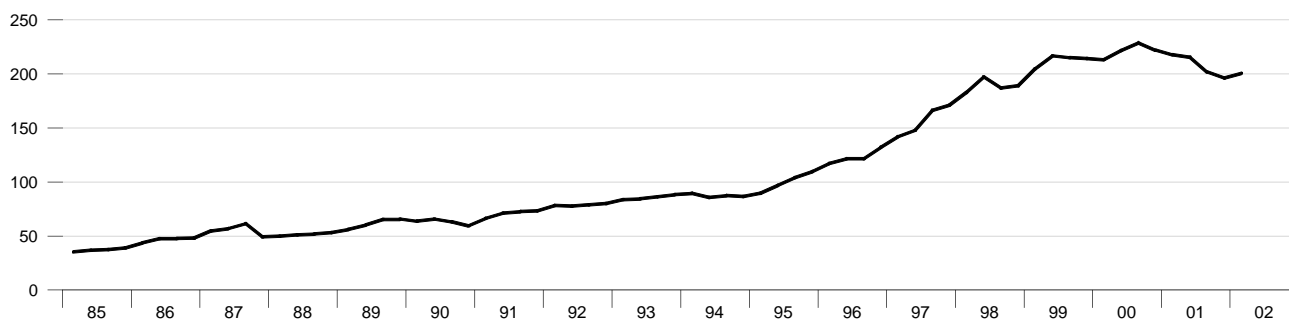
## Interest Rates

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.

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. **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 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.

### 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.

**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

Eurostat: capacity utilization, consumer price index, current account balance, employment, GDP, interest rates, 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: 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: 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: 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.  
Istituto Nazionale di Statistica: employment.  
OECD1: 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: 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.