

## **APPENDIX 1**

**Material used by Mr. Fisher in his presentation**

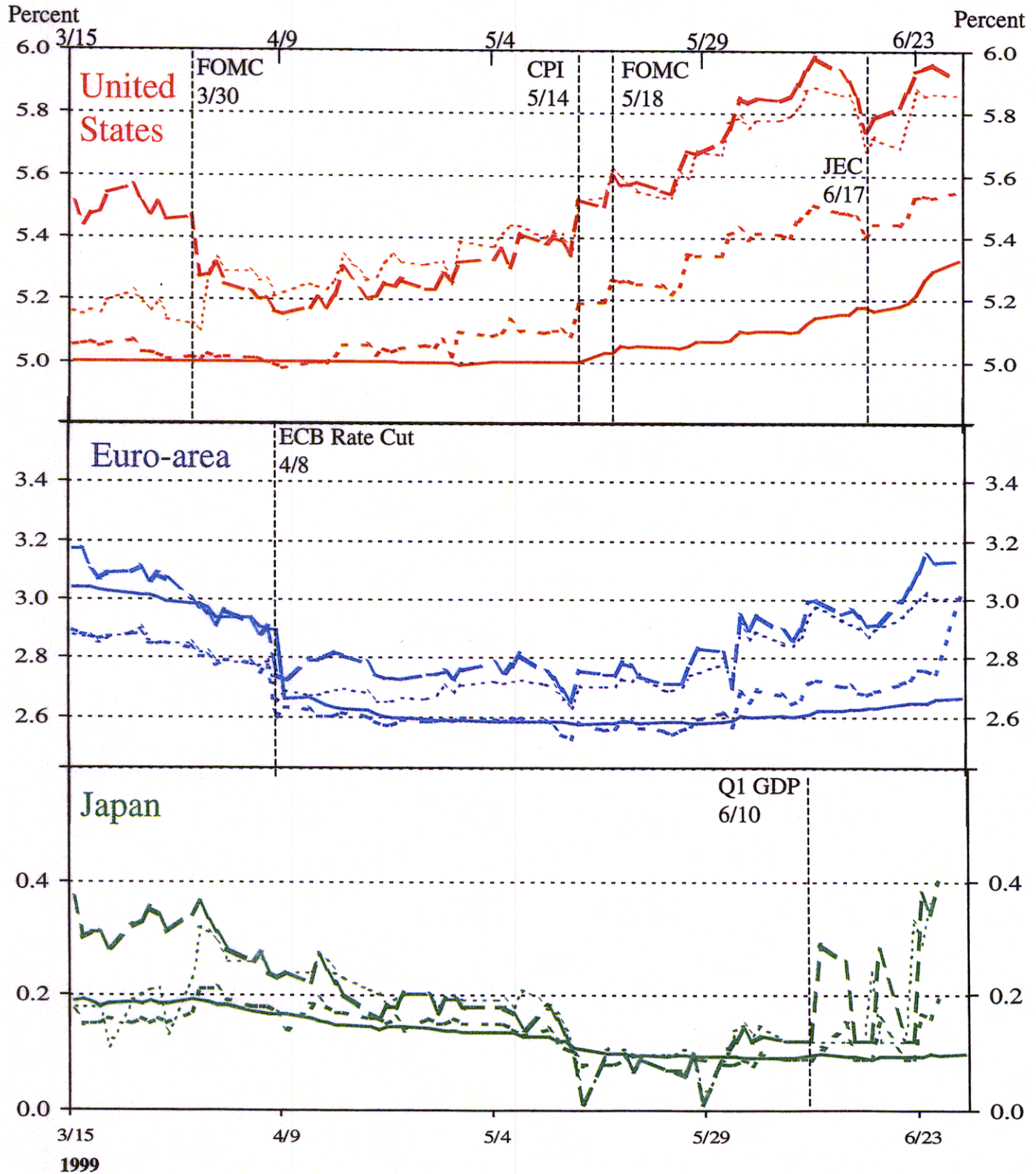
# 3-Month Deposit Rates

March 15, 1999 - June 28, 1999

Page 1

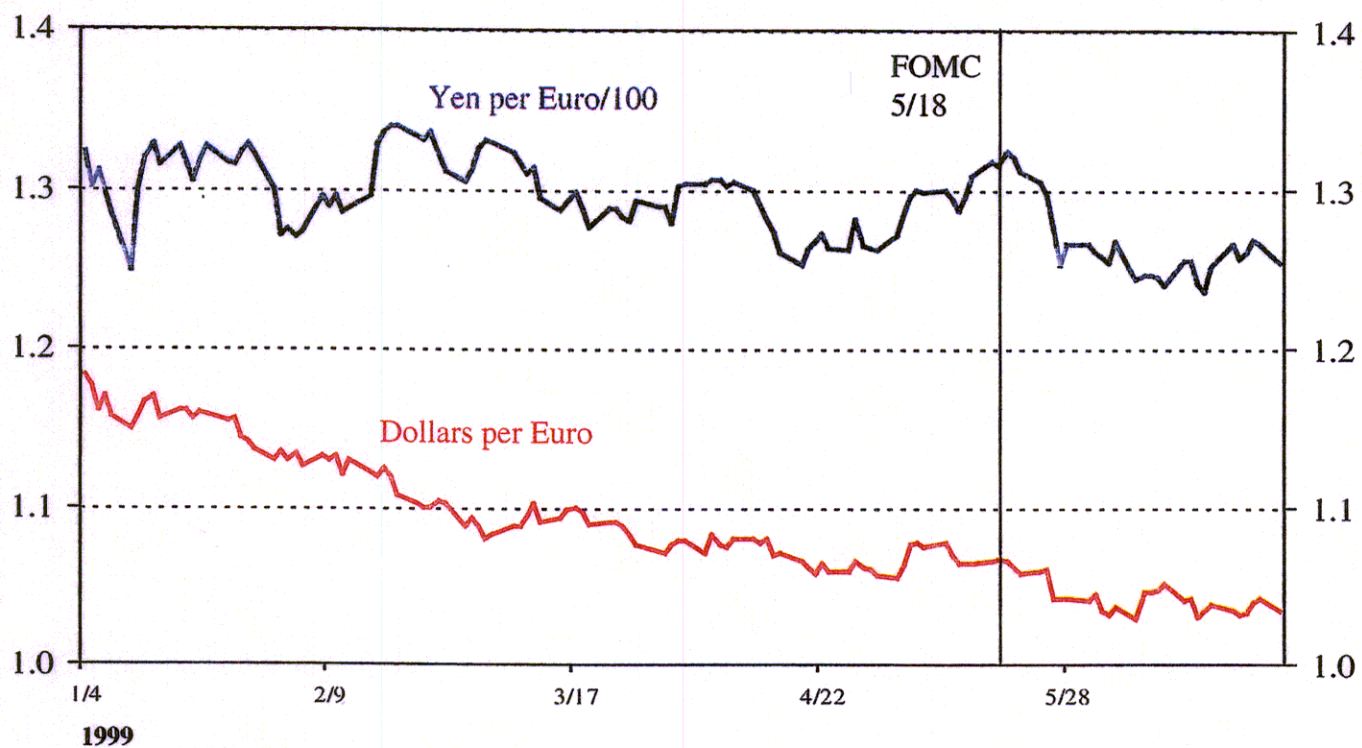
Current Euro-Deposit Rate and Rates Implied by Traded Forward Rate Agreements

	LIBOR Fixing	3-Mo. Forward	6-Mo. Forward	9-Mo. Forward
United States				
Euro-area				
Japan				



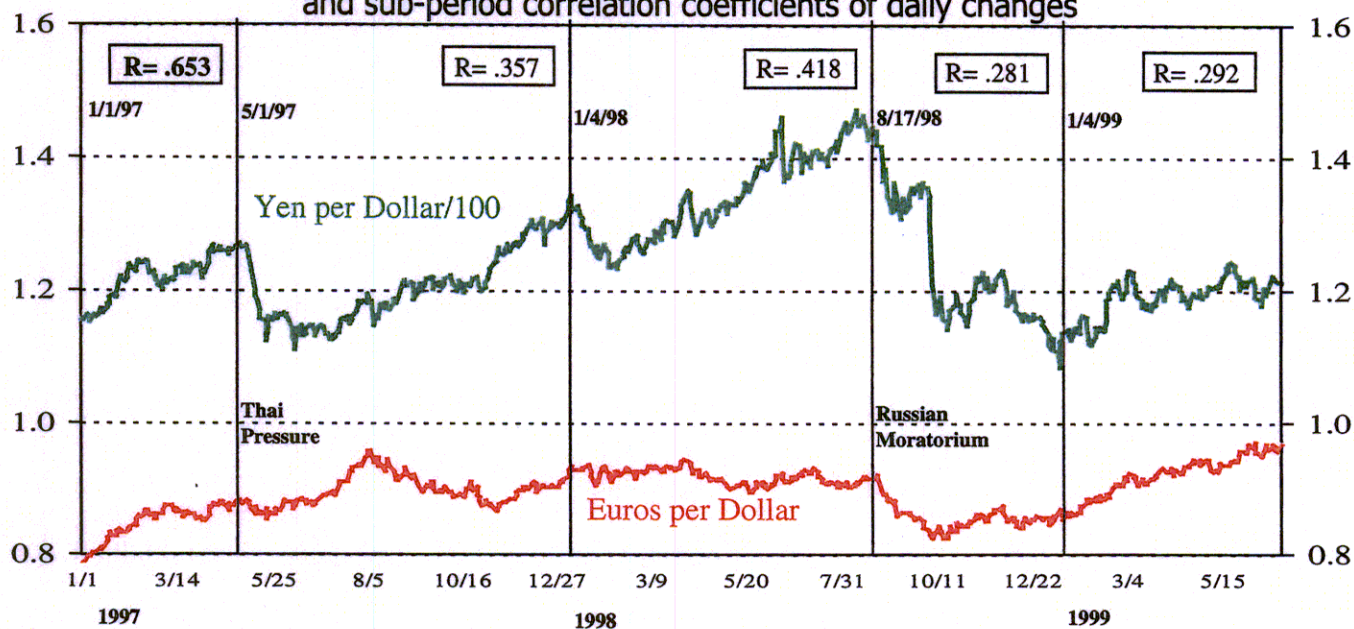
January 4 - June 28, 1999

## The Launch of the Euro

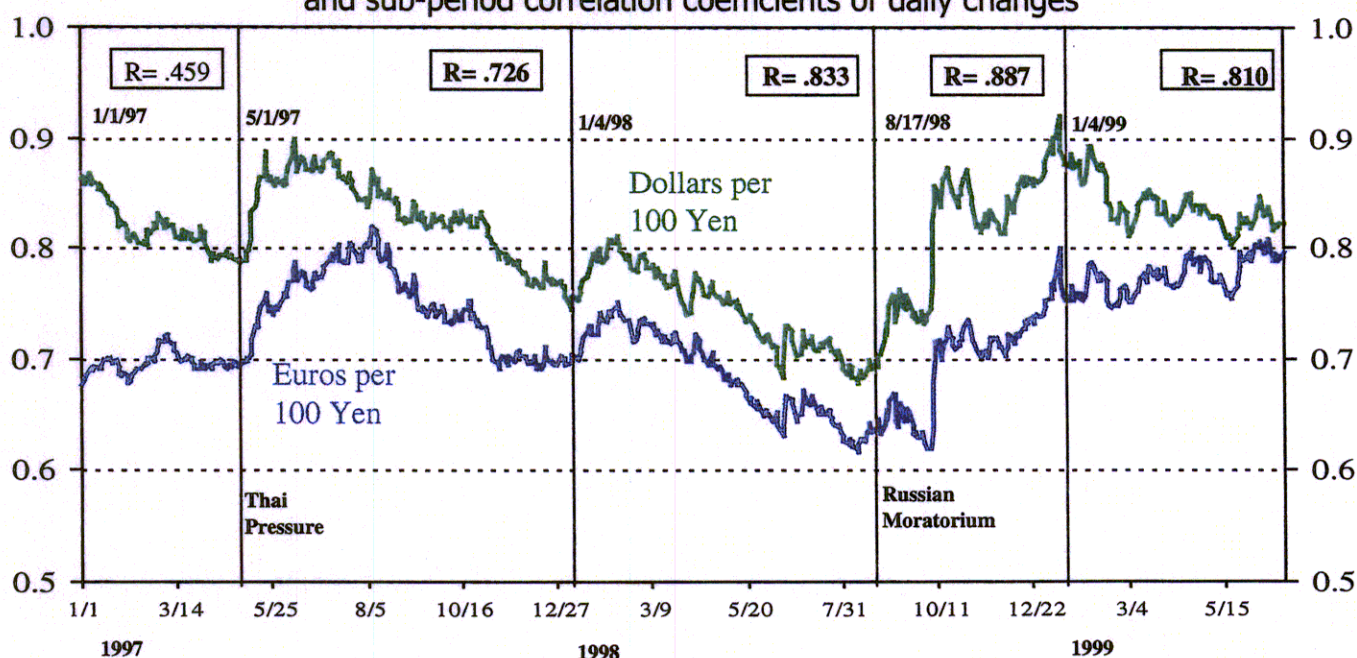


January 1, 1997 - June 28, 1999

### The Value of One Dollar in Euros and Yen and sub-period correlation coefficients of daily changes



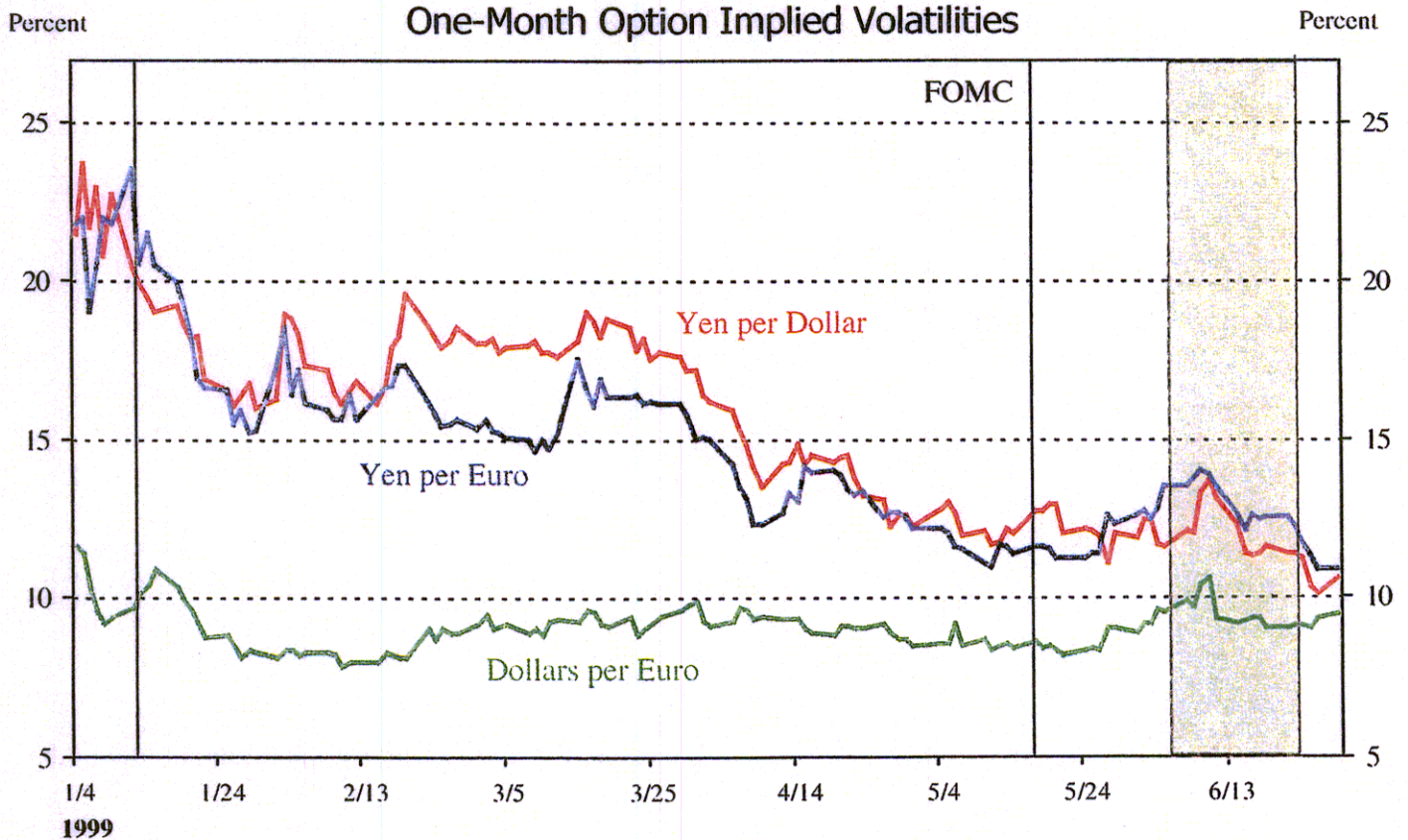
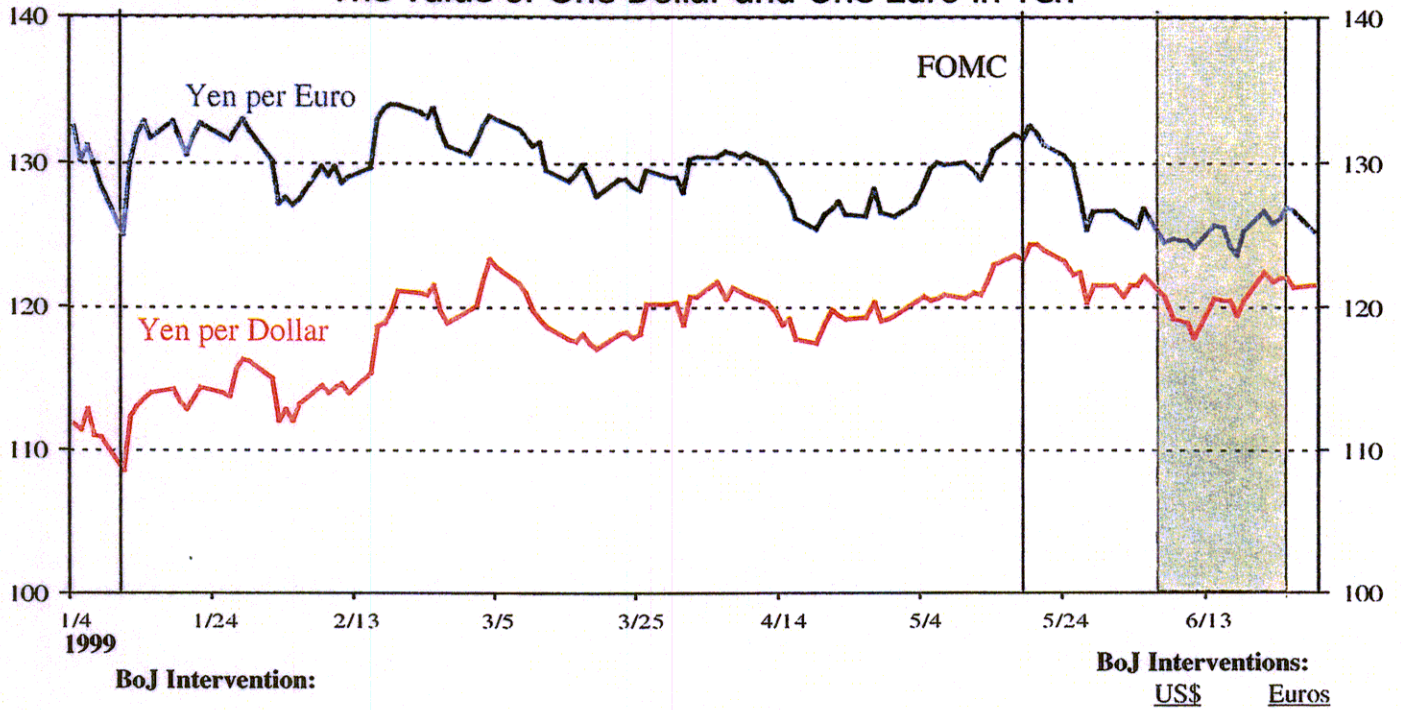
### The Value of One-Hundred Yen in Euros and Dollars and sub-period correlation coefficients of daily changes

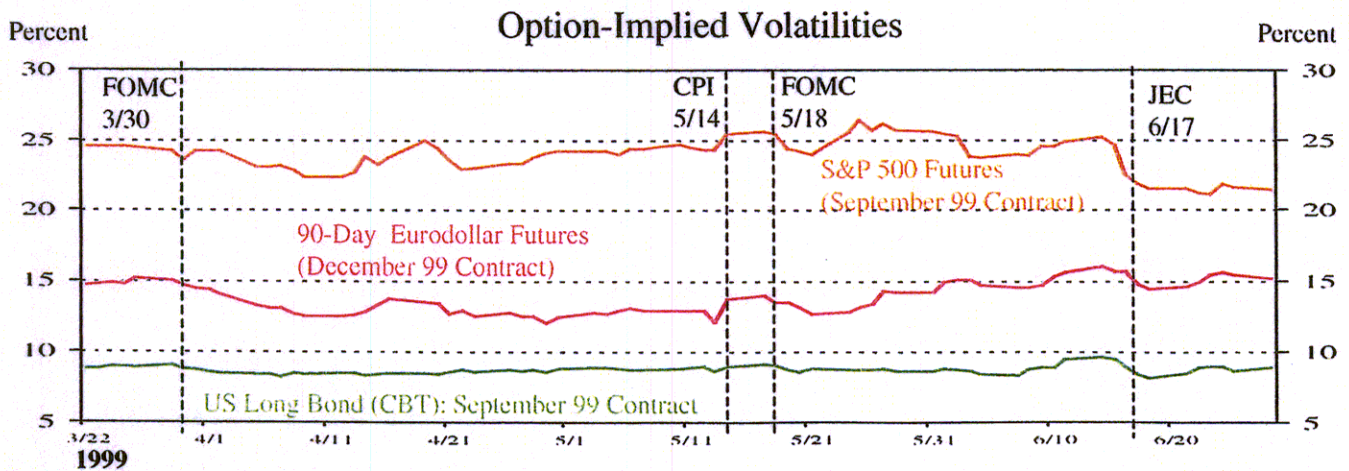
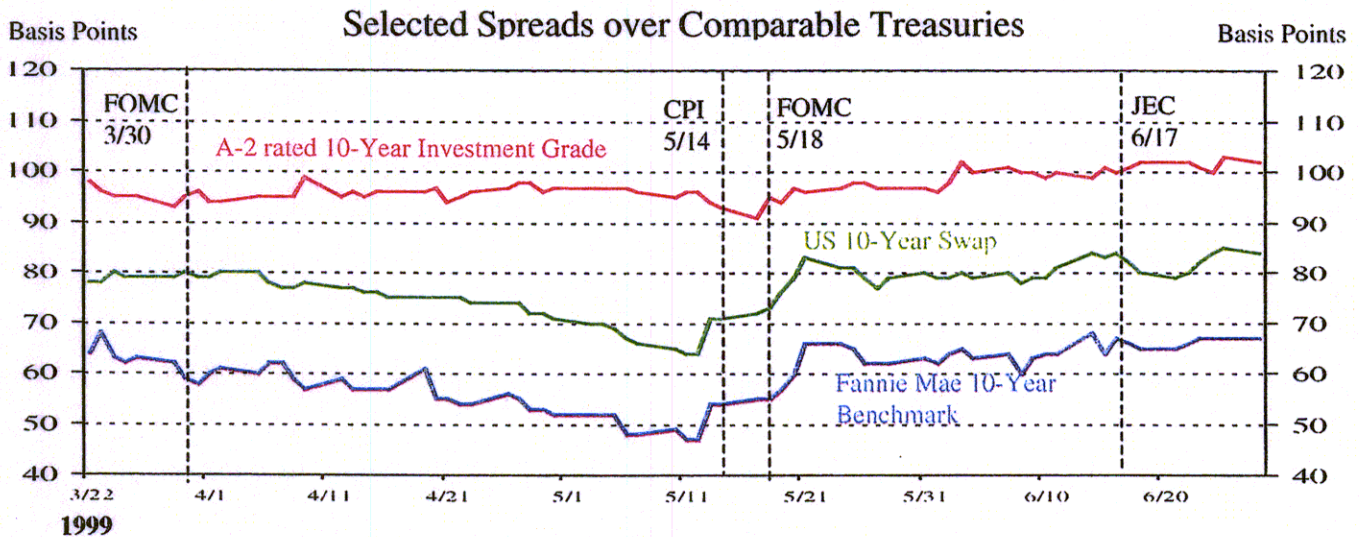
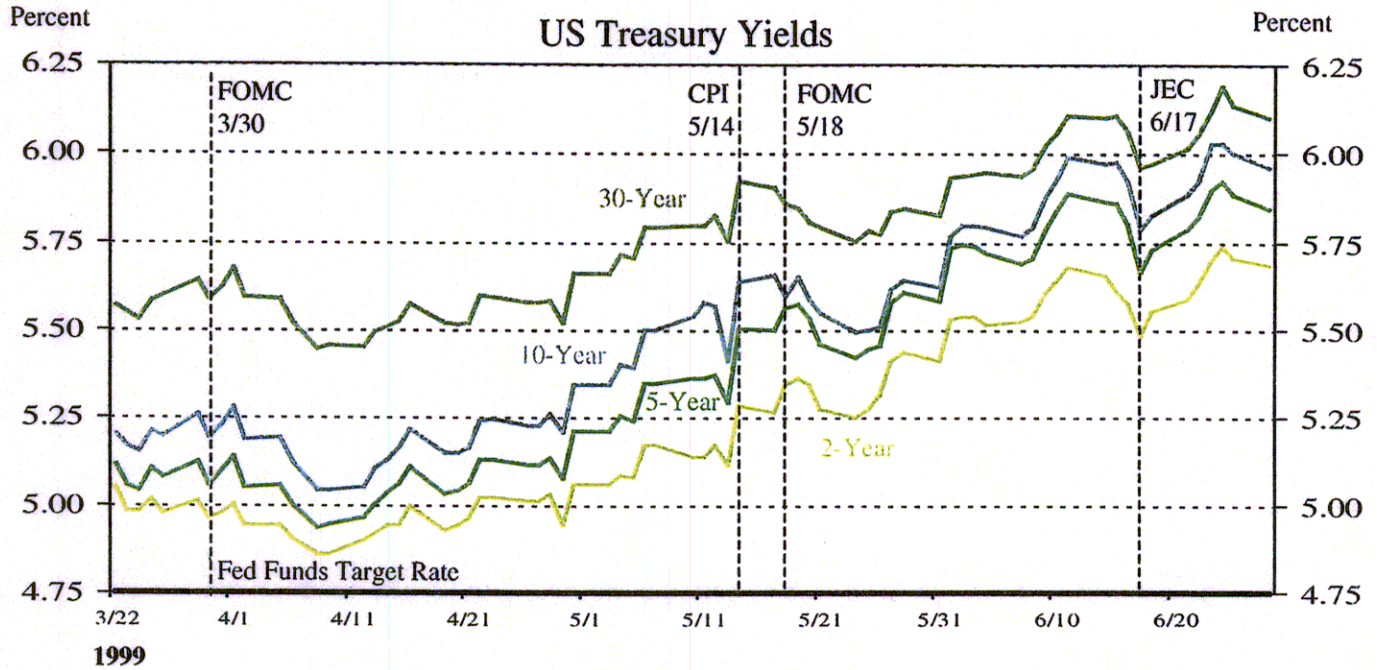


1. The sub-period correlation coefficients in the above graphs were calculated from the natural log of the daily percent changes of the exchange rate pairs in each graph.
2. The euro's synthetic history is derived from the weighted-average performance of the euro's component currencies and is based on a methodology developed by HSBC Markets. The weights of the component currencies reflect the share of a country's exports and imports as a percentage of total intra-Eurozone exports and imports from 1994 to 1996.



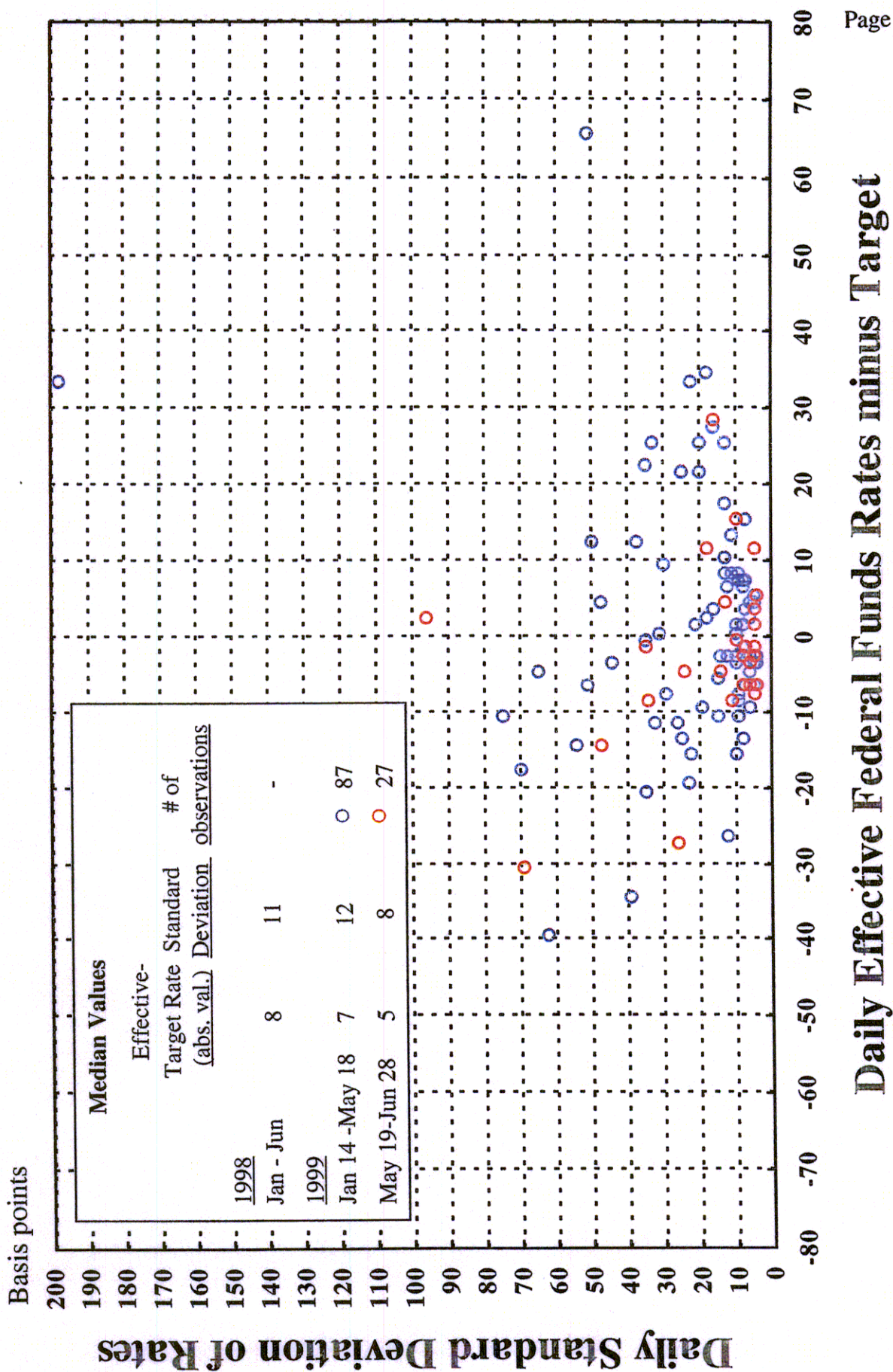
## The Value of One Dollar and One Euro in Yen







# Volatility of the Daily Federal Funds Rate



## **APPENDIX 2**

**Material used by Mr. Prell and Ms. Johnson in their presentation**



*Material for*

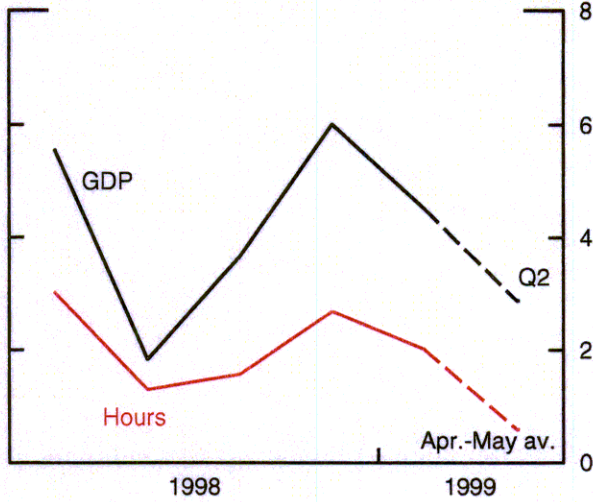
*Staff Presentation on the  
Economic Outlook*

*June 29, 1999*

## Current Quarter Indicators

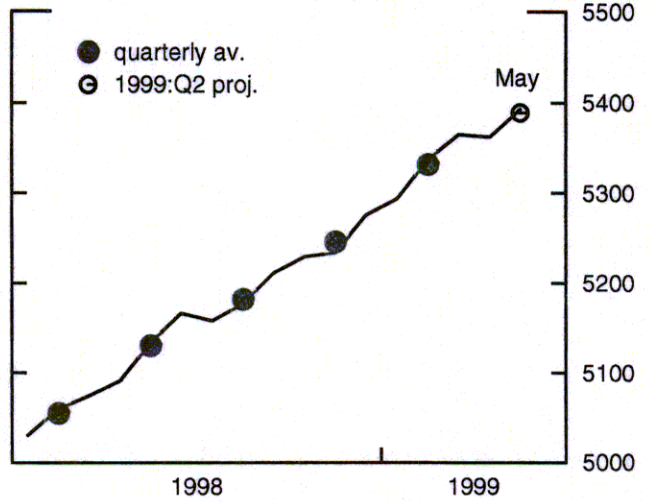
Production Worker Hours and Real GDP

Percent change, saar



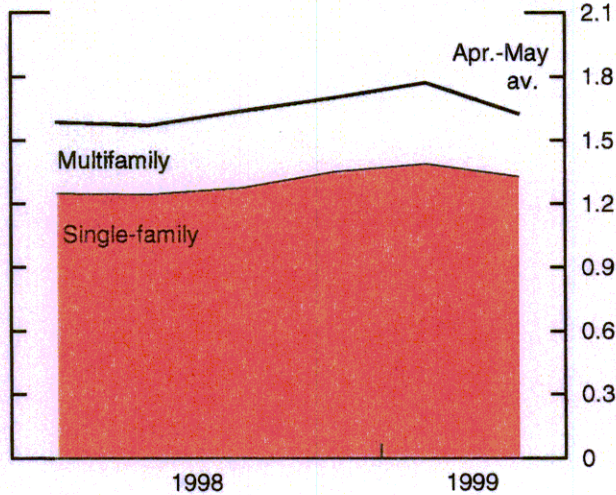
Real PCE

\$ billions, chained (1992), saar



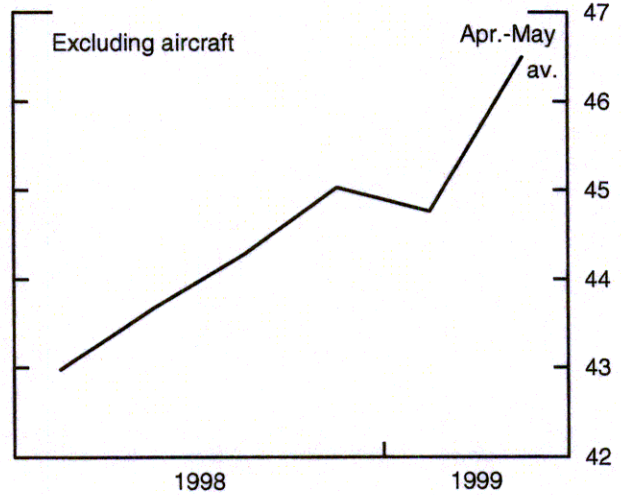
Housing Starts

Millions of units, saar



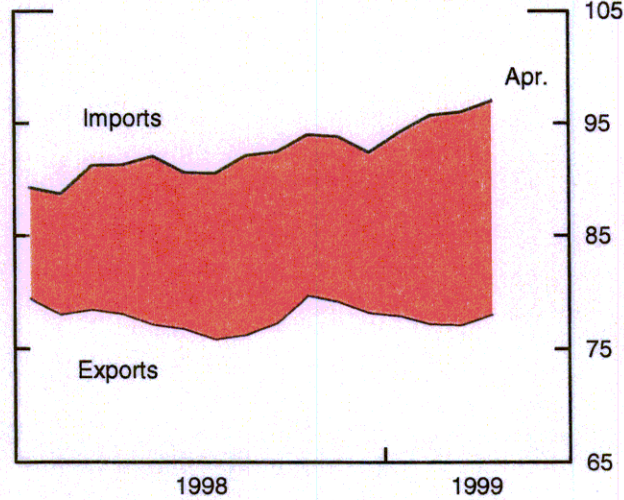
Shipments of Nondefense Capital Goods

\$ billions, sa



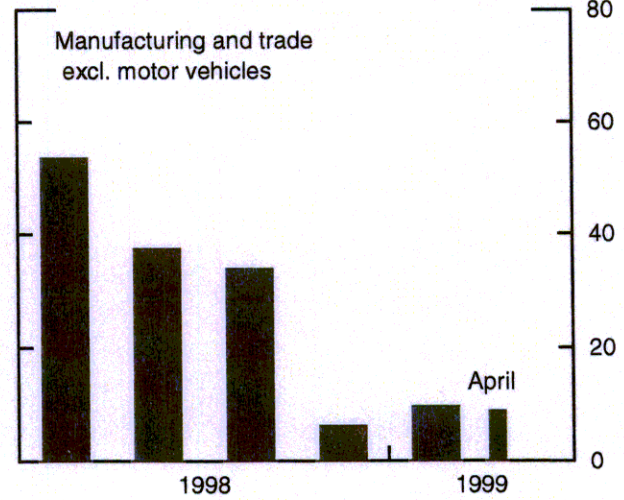
Real Net Exports

\$ billions, chained (1992), sa



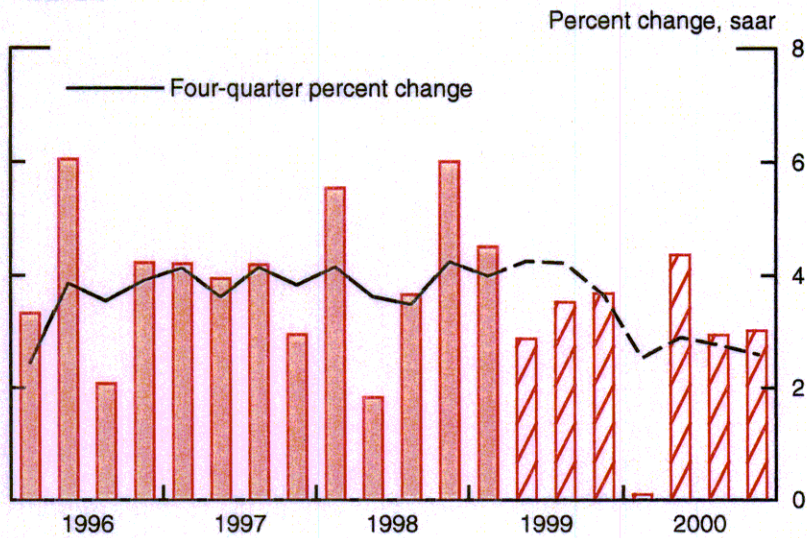
Inventory Investment – Book Value

\$ billions, saar



# Forecast Summary

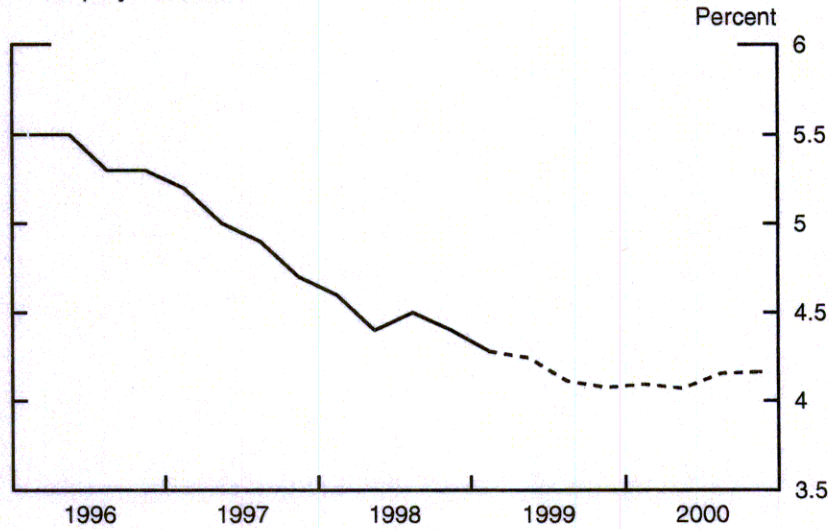
## Real GDP



## Real GDP Percent change, Q4/Q4

	"Actual"	Ex. Y2K
1996	3.9	3.9
1997	3.8	3.8
1998	4.3	4.2
1999	3.7	3.5
2000	2.6	2.8

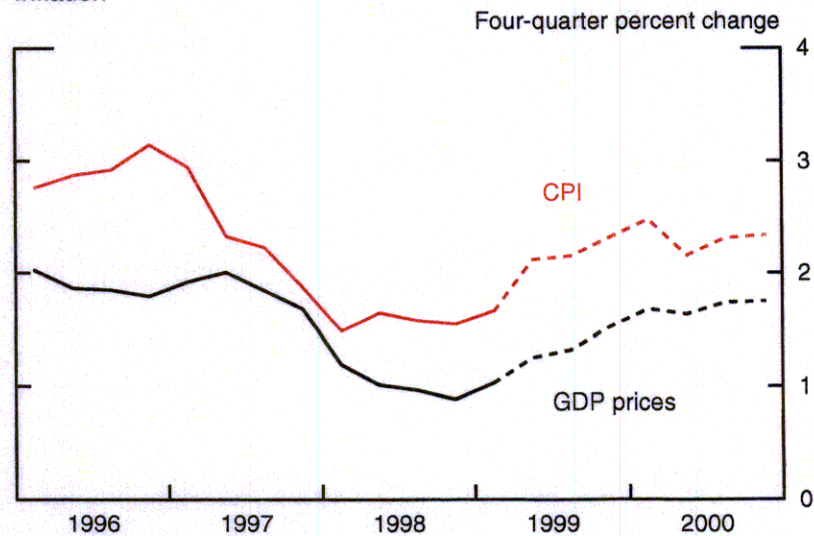
## Unemployment Rate



## Unemployment Rate Q4 average

Year	Rate
1996	5.3
1997	4.7
1998	4.4
1999	4.1
2000	4.2

## Inflation



## Inflation Percent change, Q4/Q4

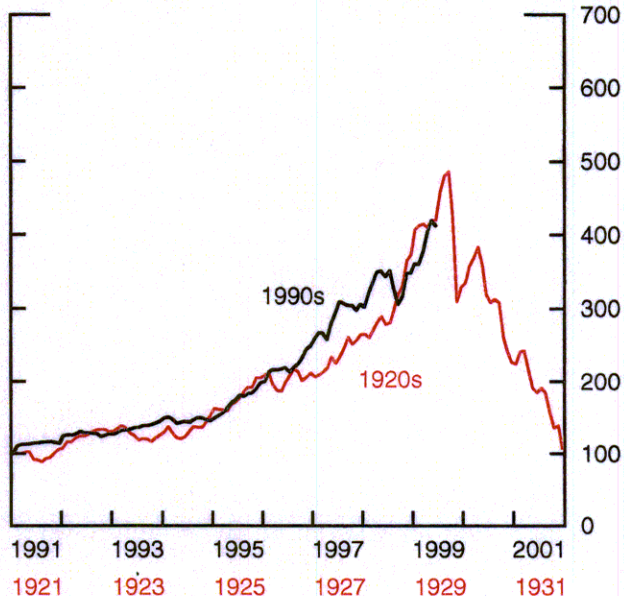
	CPI	GDP Prices
1996	3.1	1.8
1997	1.9	1.7
1998	1.5	.9
1999	2.3	1.5
2000	2.3	1.7



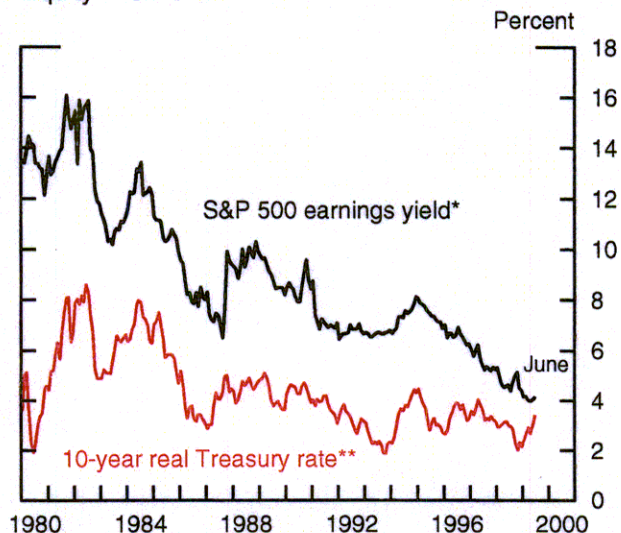
# Stock Market

D-J Industrial Average

Jan. 1921=100  
Jan. 1991=100

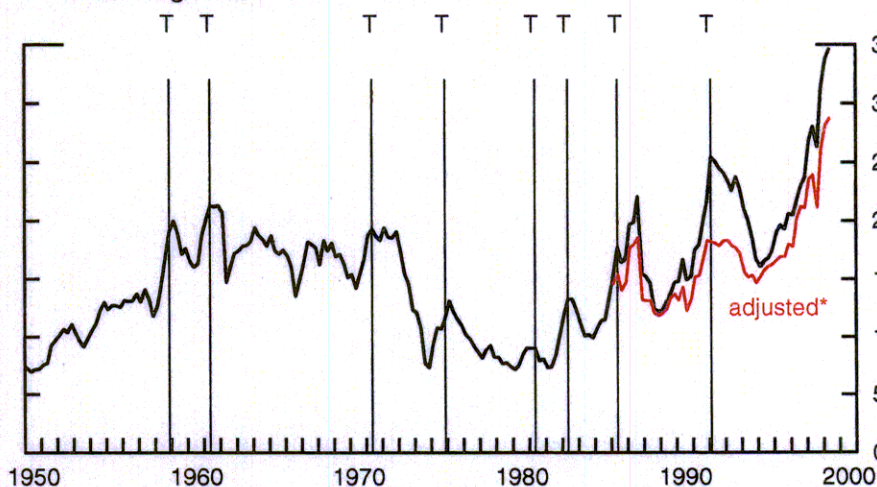


Equity Premium



\* Based on the I/B/E/S consensus estimate of earnings over the coming twelve months.  
\*\* Yield on the 10-year Treasury less the 10-year inflation expectations from the Philadelphia FRB Survey of Professional Forecasters.

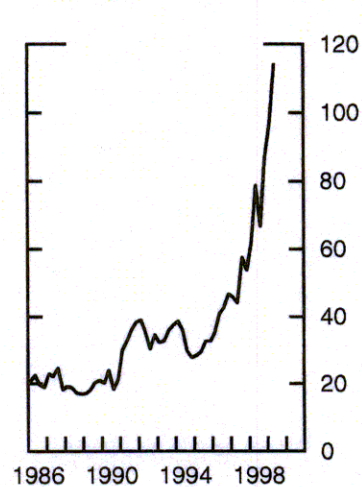
Price-Earnings Ratio - S&amp;P 500



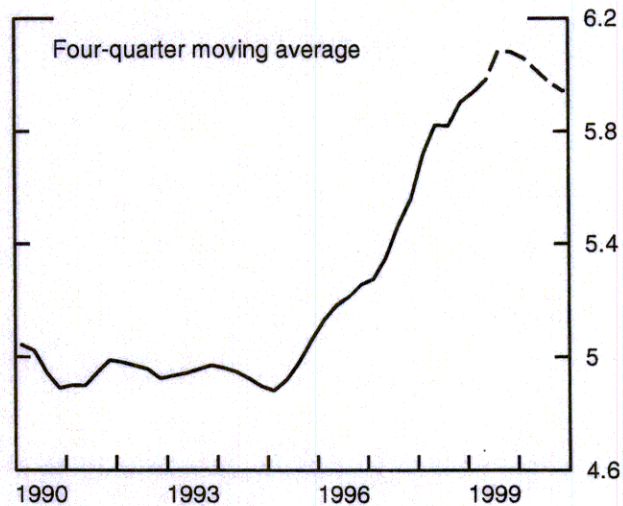
\*Adjusted for special charges; provided by Goldman Sachs.

T=Trough in earnings.

P-E Ratio - NASDAQ



Wealth-to-income Ratio



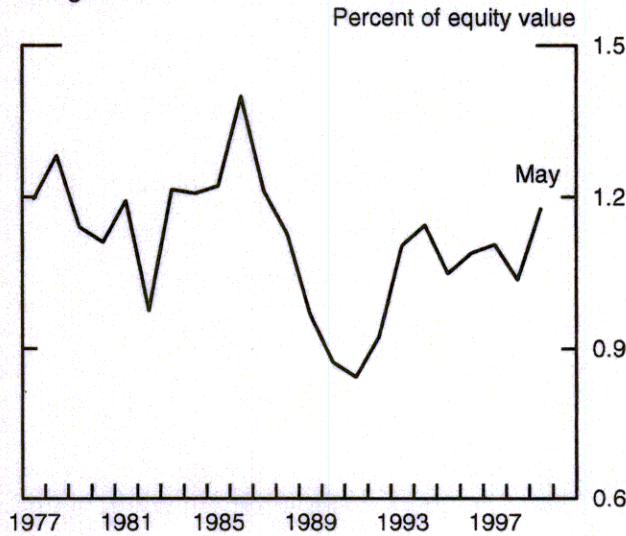
Size of Wealth Effect

	Wealth to income ratio	First year effect on PCE growth of 10% drop in stock market
1994:Q4	4.8	-.2%
1999:Q1	6.1	-.4%

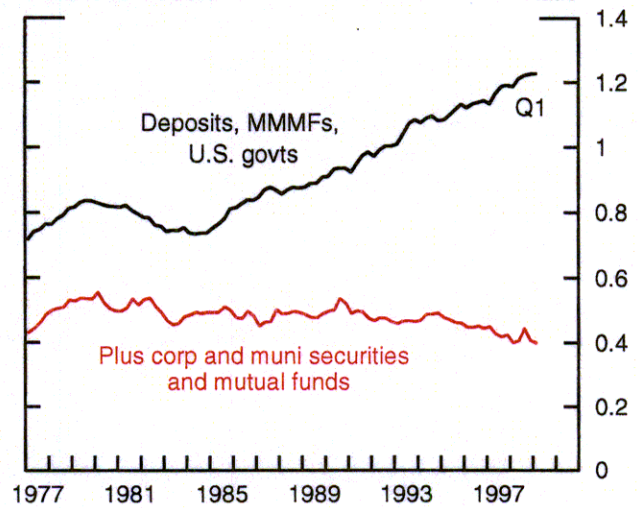


# Financial Fragility?

Margin Debt



Household Debt relative to Holdings of Liquid Financial Assets

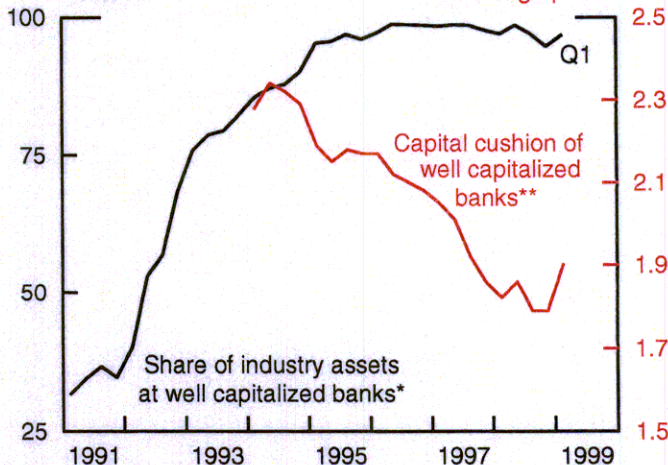
Distribution of Debt across Households  
(percent of total)

	Households without Stock	Households with Stock ≥ 50% of income	< 50% of income
1992	37.9	22.6	39.5
1995	34.9	27.7	37.4
1998	25.5	39.1	35.4

Debt-Service Payments as a Percent of Income  
(median ratios)

	Debtor Households without Stock	Debtor Households with Stock ≥ 50% of income	< 50% of income
1992	15.4	15.1	18.2
1995	15.5	15.6	17.8
1998	17.2	17.7	18.3

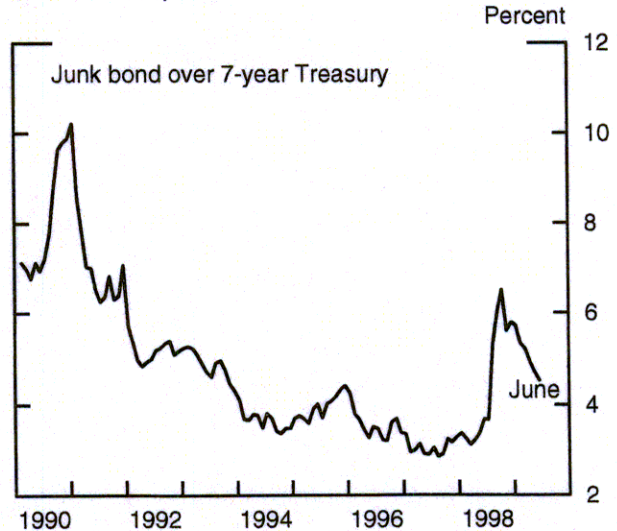
Source: Survey of Consumer Finances.

Bank Capitalization  
Percent

\* Adjusted for examiner ratings.

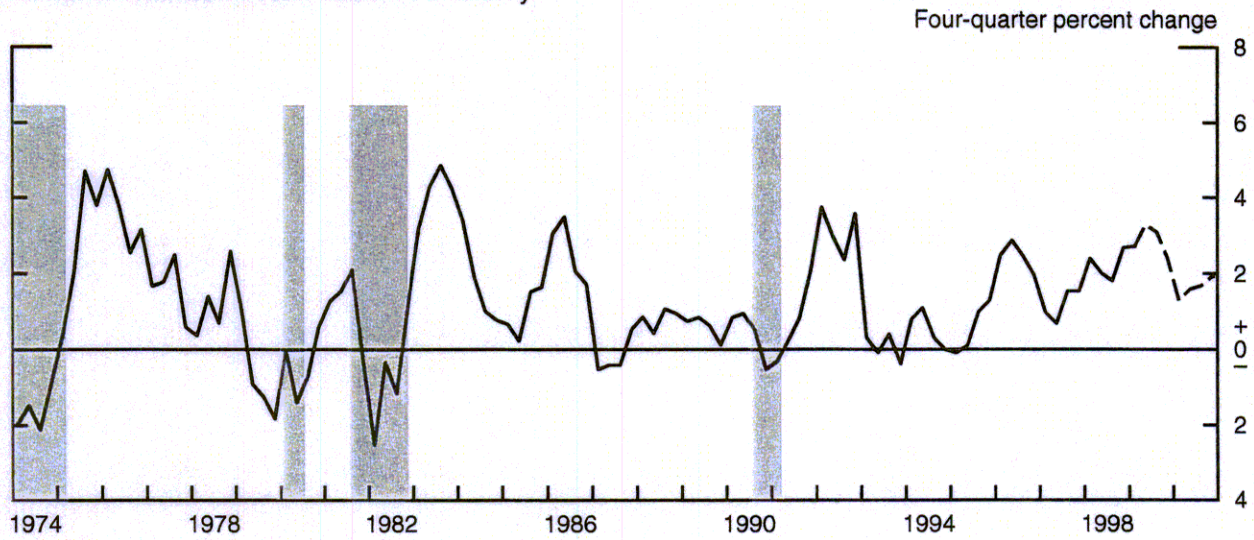
\*\* The average percentage point difference between the tightest capital ratio and the regulatory standard for being well capitalized at well-capitalized banks, weighted by assets.

Junk Bond Spread

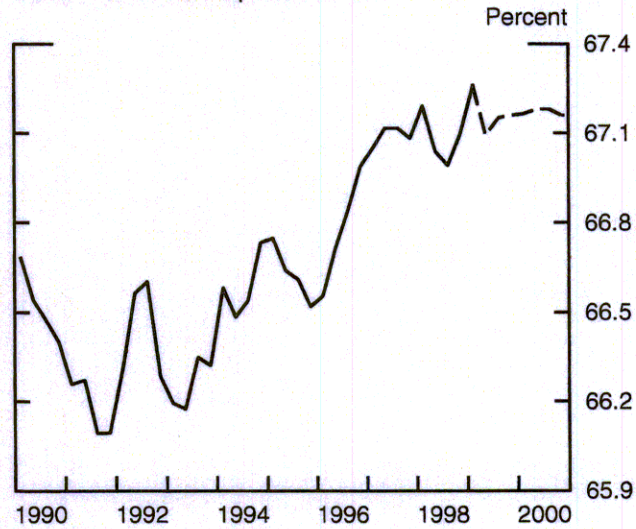
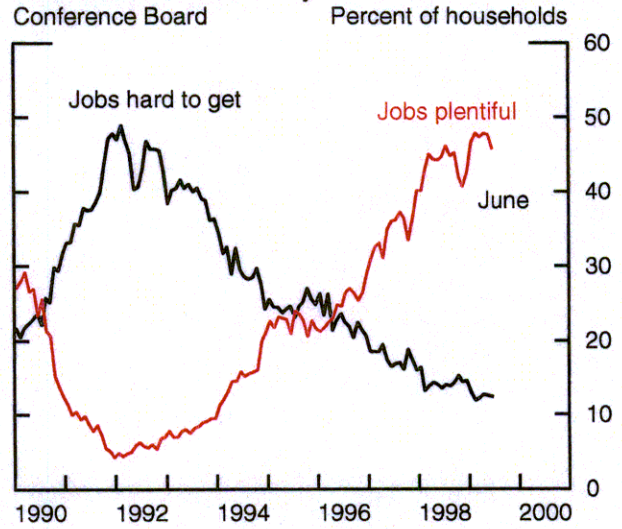


# Labor Markets

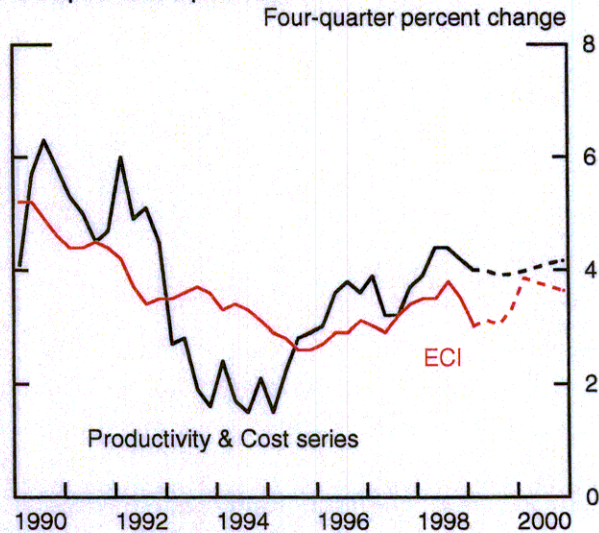
Nonfarm Business Sector Labor Productivity



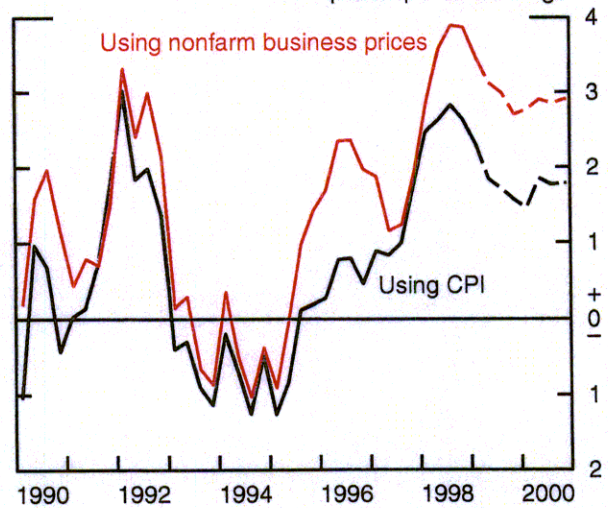
Labor Force Participation Rate

Perceived Job Availability  
Conference Board

Compensation per Hour



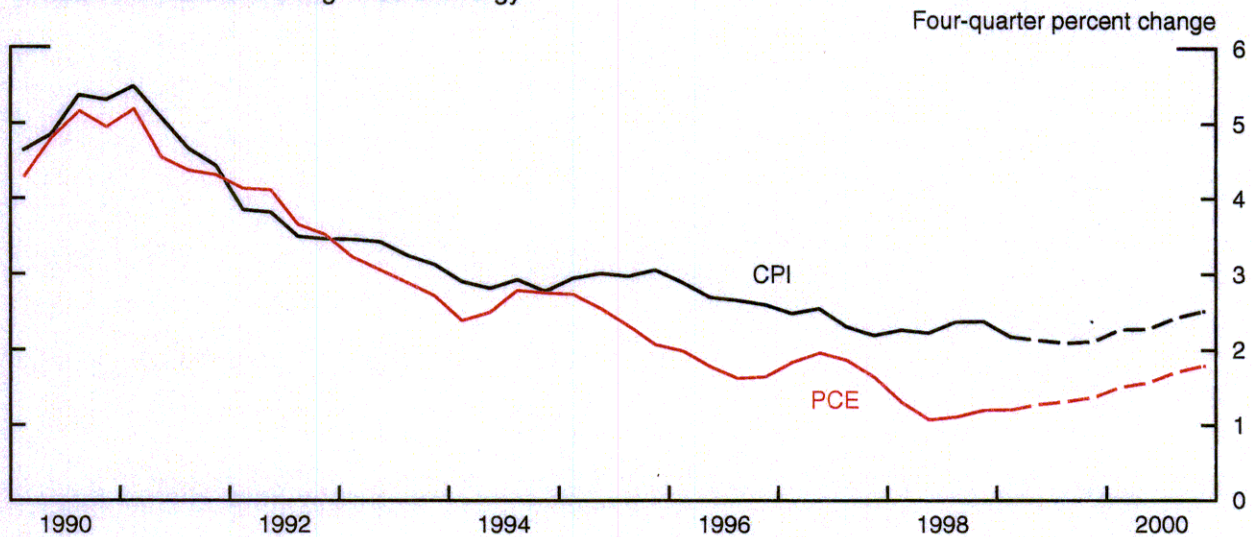
Real Compensation – Productivity &amp; Cost Series



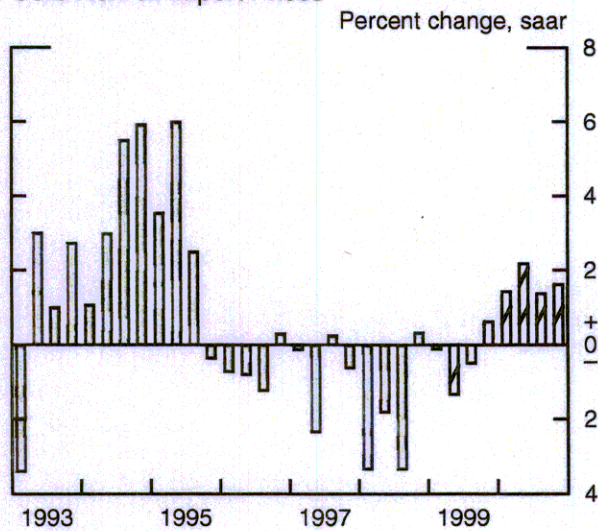


# Prices

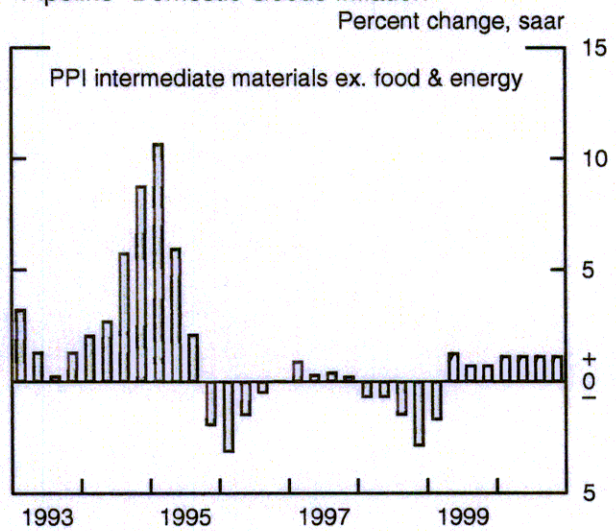
Consumer Prices Excluding Food & Energy



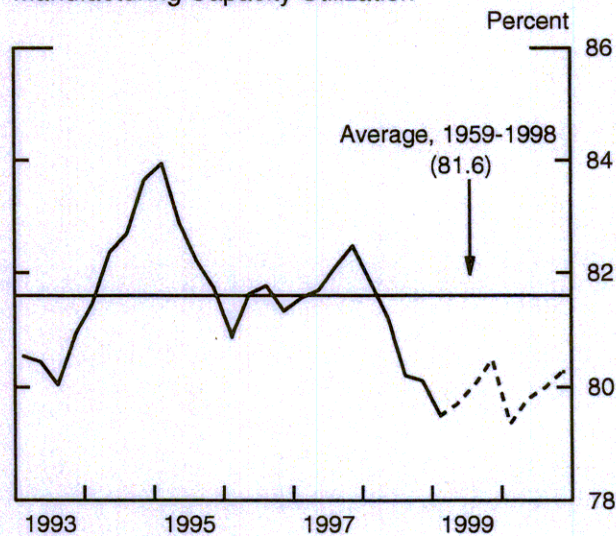
Core Non-oil Import Prices



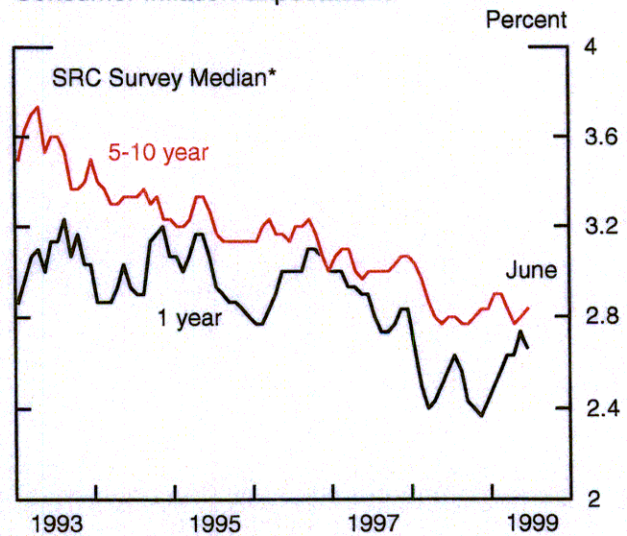
"Pipeline" Domestic Goods Inflation



Manufacturing Capacity Utilization



Consumer Inflation Expectations



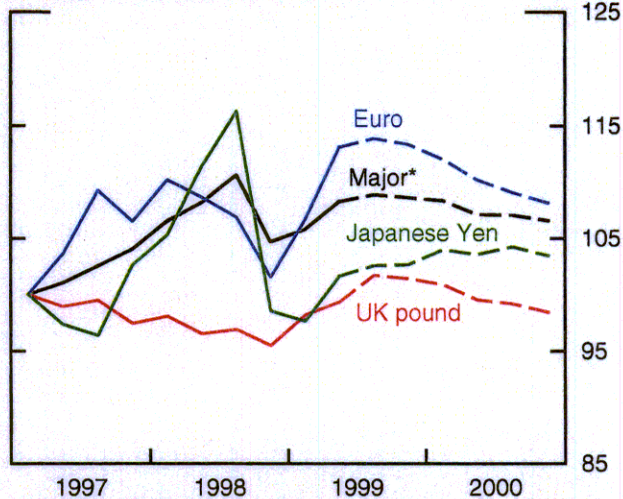
\* 3-month moving average.

# International Financial Markets

Real Exchange Rates

(Foreign currency per U.S. dollar)

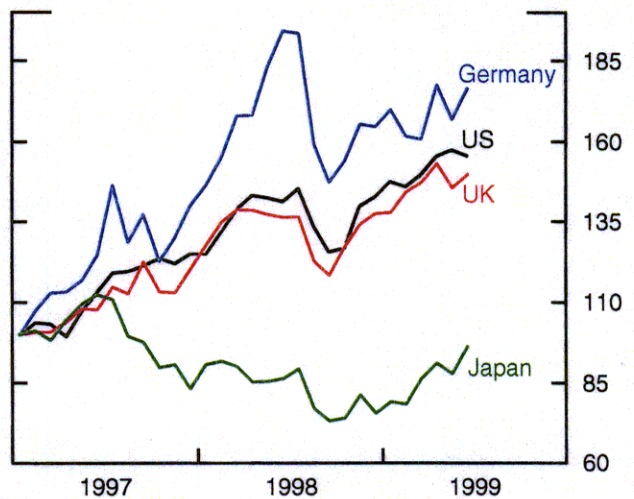
1997Q1 = 100



\*Trade weighted value of dollar against major international currencies

Stock Market Indexes

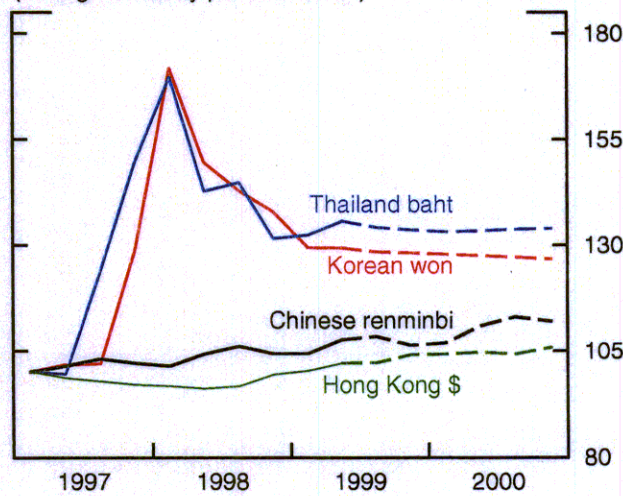
Jan. 1997 = 100



Real Exchange Rates

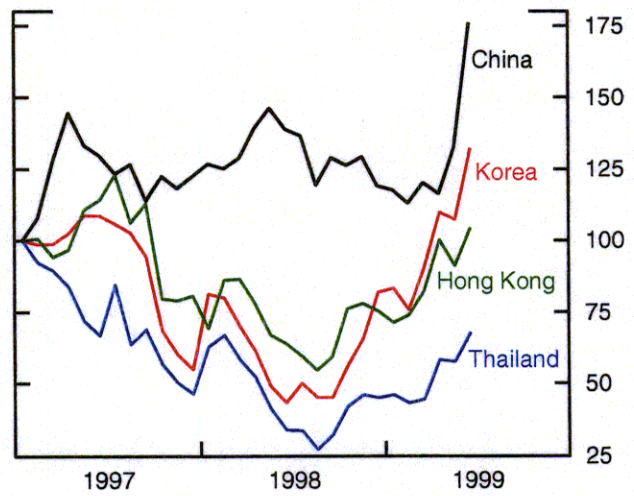
(Foreign currency per U.S. dollar)

1997Q1 = 100



Stock Market Indexes

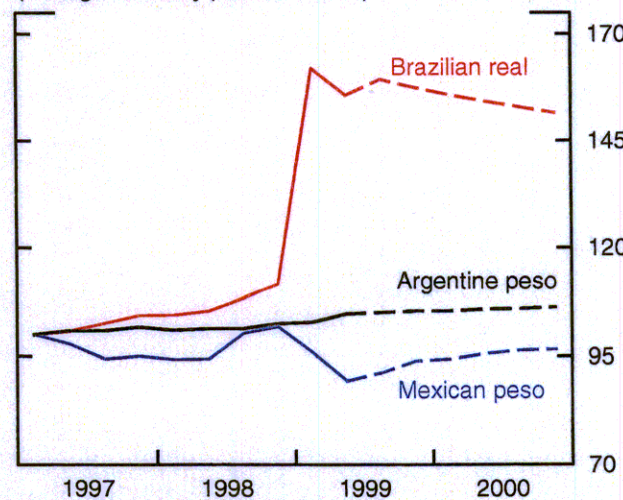
Jan. 1997 = 100



Real Exchange Rates

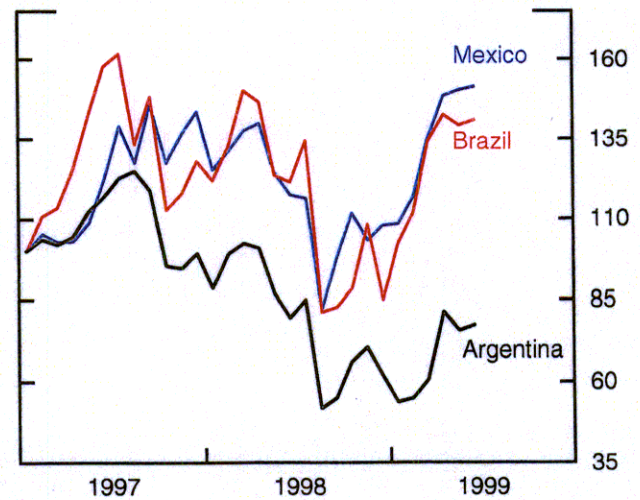
(Foreign currency per U.S. dollar)

1997Q1 = 100



Stock Market Indexes

Jan. 1997 = 100



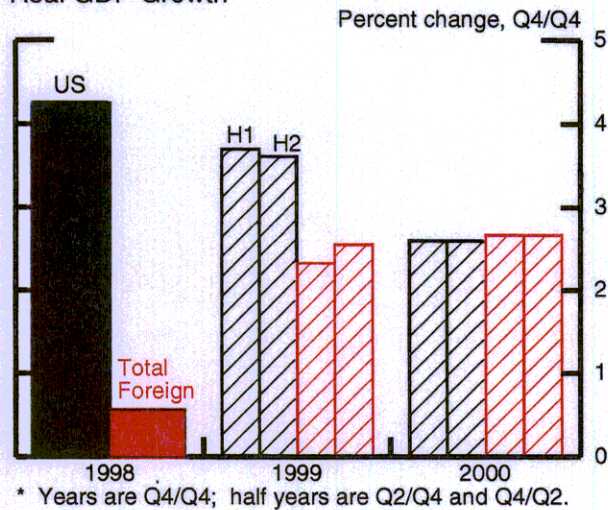
Note: Exchange rate data are quarterly; stock market data are monthly.



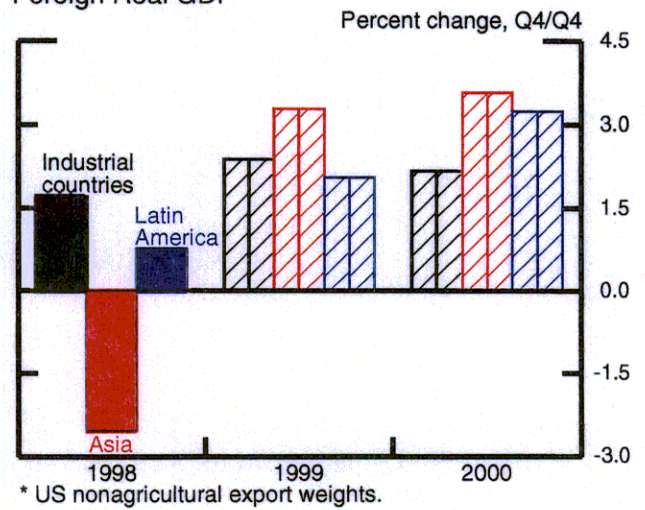
Chart 8

# Foreign Outlook

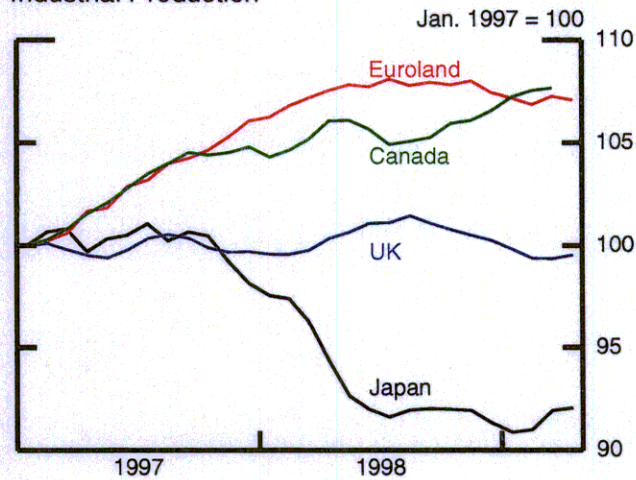
Real GDP Growth



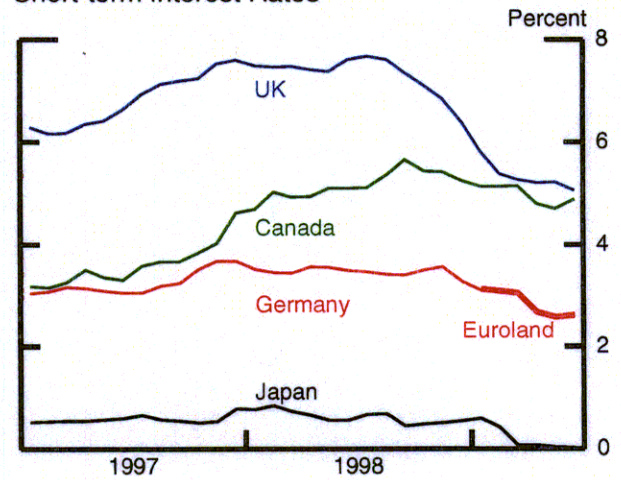
Foreign Real GDP\*



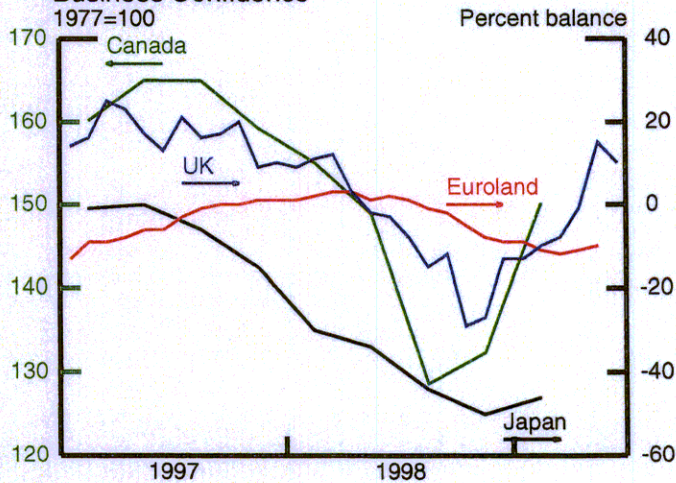
Industrial Production



Short-term Interest Rates



Business Confidence

Foreign Growth  
Percent, saar

	1998	1999		2000
		H1	H2	
Industrial Countries	1.7	2.6	2.1	2.1
Japan	-3.0	2.1	-1.7	0.4
Euroland	2.1	1.7	2.5	2.2
UK	1.1	0.7	2.4	2.2
Canada	2.8	3.6	3.1	2.7

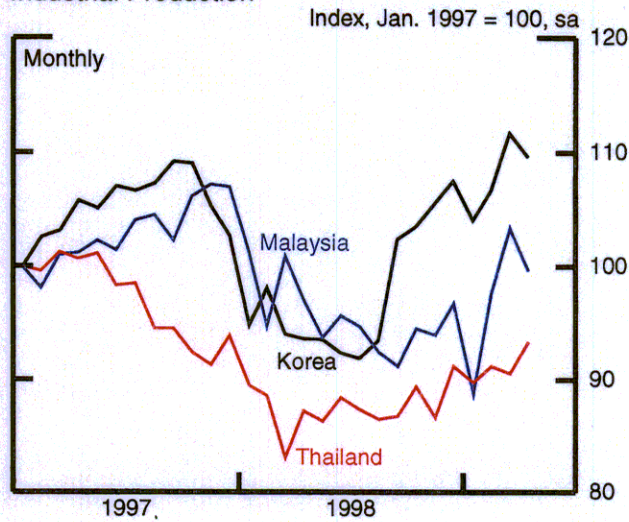
\* Years are Q4/Q4; half years are Q2/Q4 and Q4/Q2.



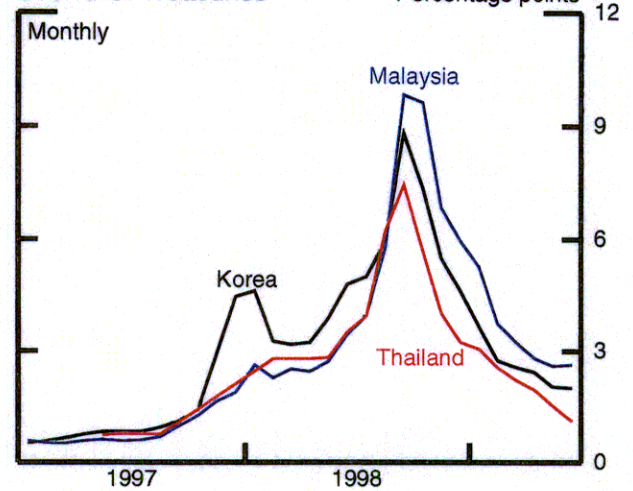
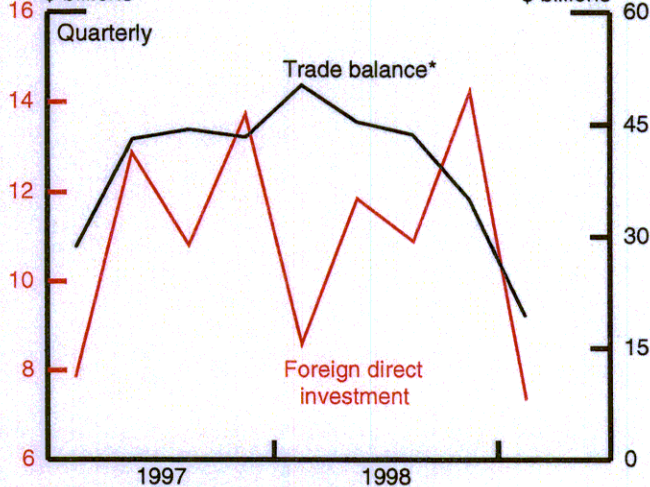
Chart 9

## Developing Asia

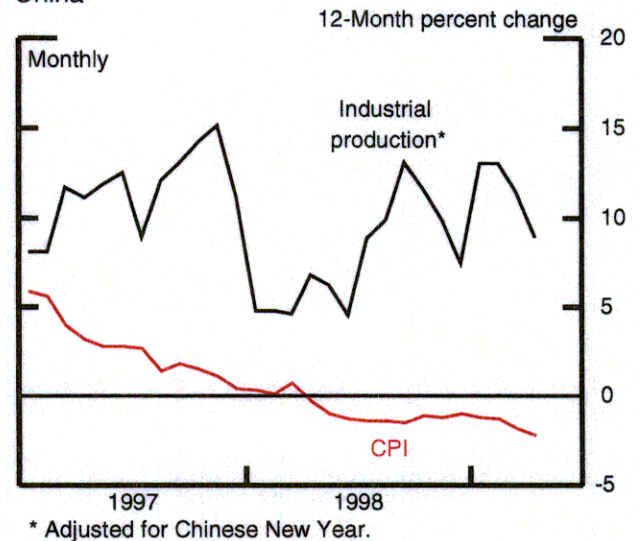
Industrial Production



Dollar Bond Spread Over U.S. Treasuries

China  
\$ billions

China



### Risks

Loss of momentum in the reform process

Banking problems continue, NPLs high

Weakness/deflation in China

Real GDP Growth\*  
Percent, saar

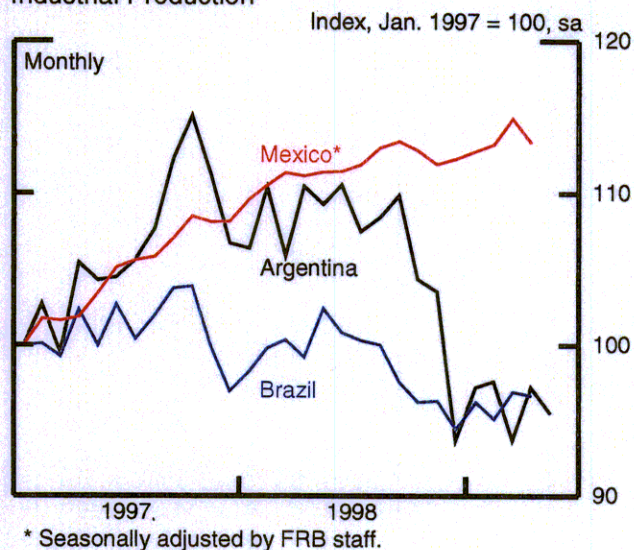
	1998	1999		2000
		H1	H2	
Developing Asia	-2.5	3.2	3.4	3.6
of which:				
China	9.5	3.9	6.0	6.0
Korea	-5.3	7.1	4.9	4.6
Malaysia	-8.1	0.1	2.9	2.9
Thailand	-7.0	-0.2	2.8	2.3

\* Years are Q4/Q4; half years are Q2/Q4 and Q4/Q2.

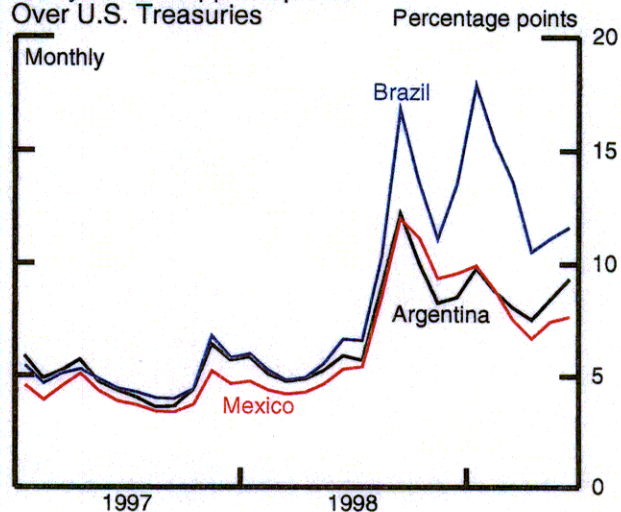
Chart 10

## Latin America

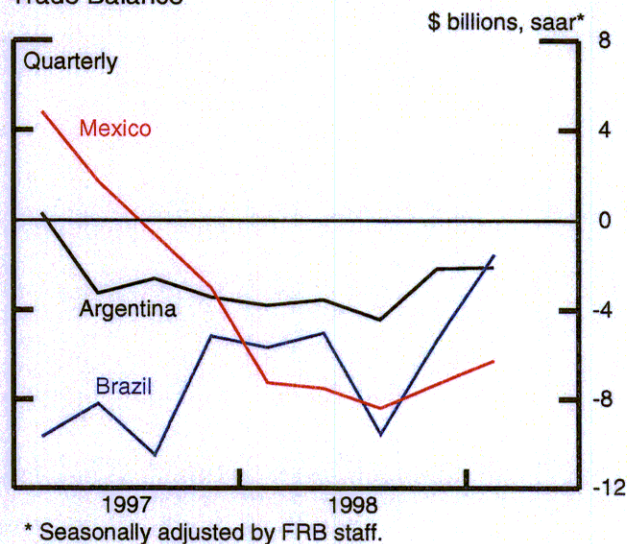
### Industrial Production



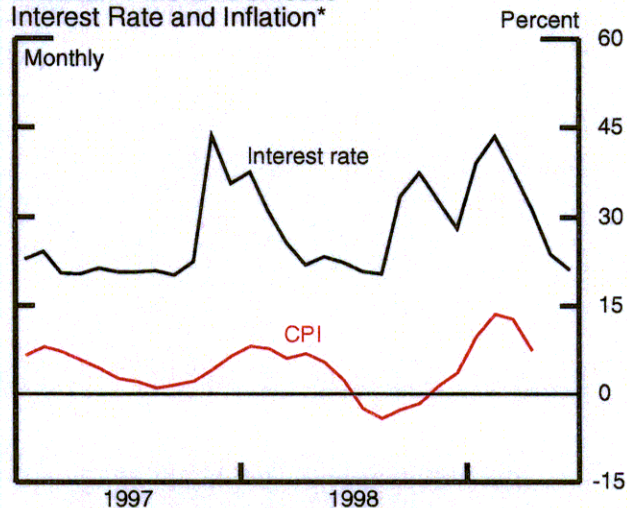
### Brady Bond Stripped Spread Over U.S. Treasuries



### Trade Balance



### Brazilian 1-Month Domestic Interest Rate and Inflation\*



### Risks

Continued fiscal problems in Brazil

Loss of investor confidence in Argentina

Election uncertainties

### Real GDP Growth\*

	1998	1999		2000
		H1	H2	
Latin America	0.8	0.8	3.4	3.2
of which:				
Argentina	-0.5	-4.6	-0.1	4.0
Brazil	-1.9	0.5	2.1	2.5
Mexico	2.9	2.0	4.4	3.6

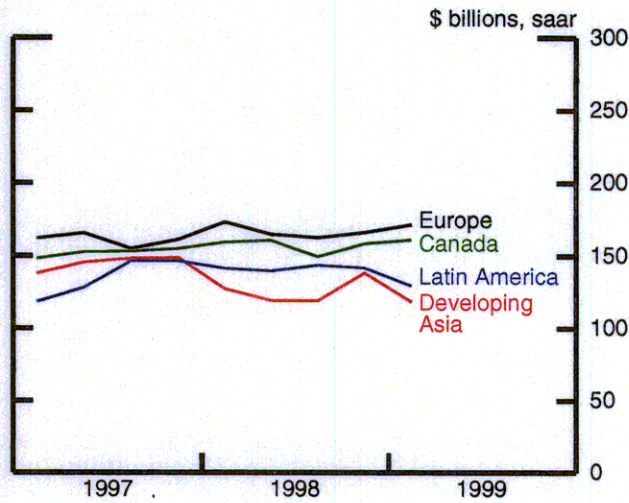
\* Years are Q4/Q4; half years are Q2/Q4 and Q4/Q2.



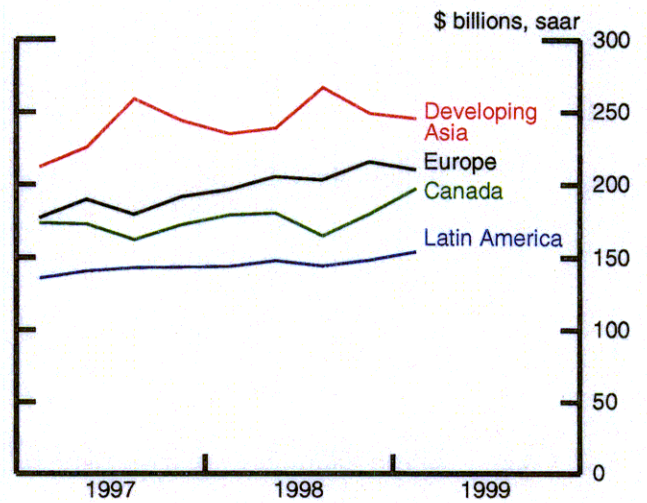
Chart 11

# U.S. Trade

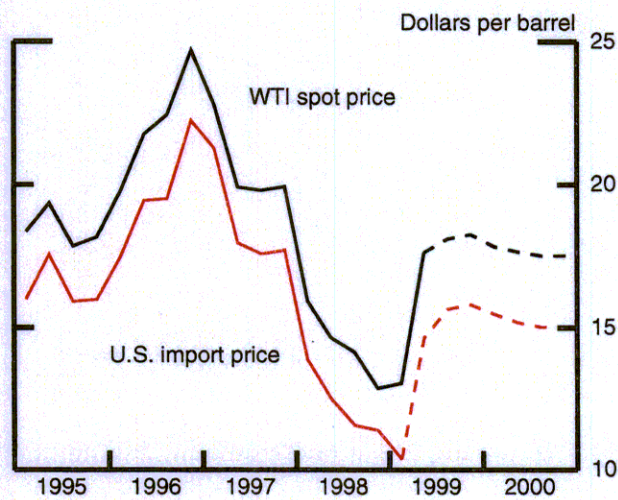
Exports by Region



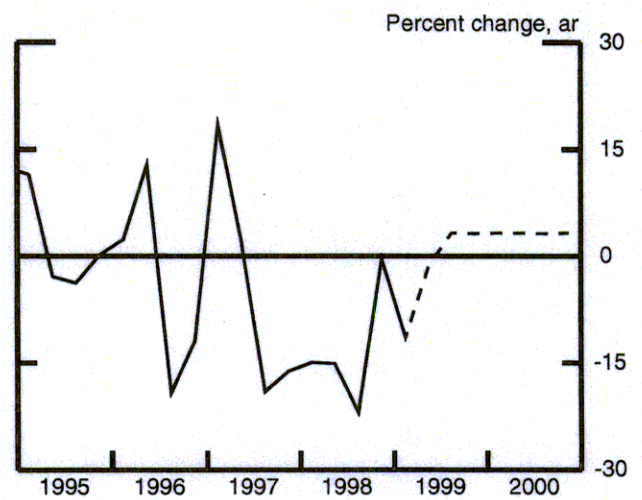
Imports by Region



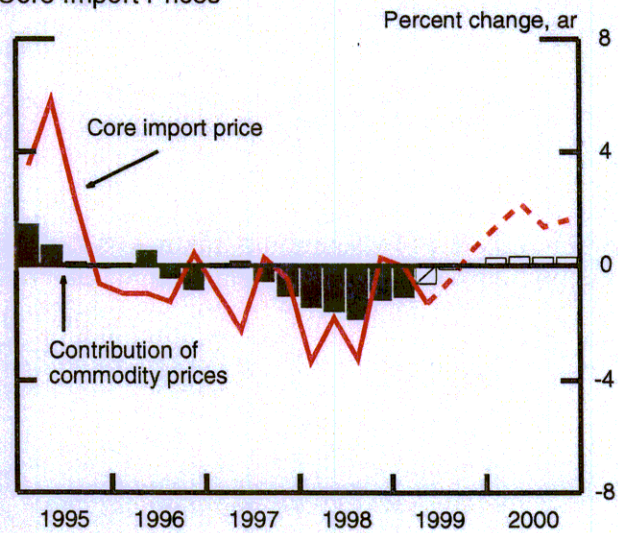
Oil Prices



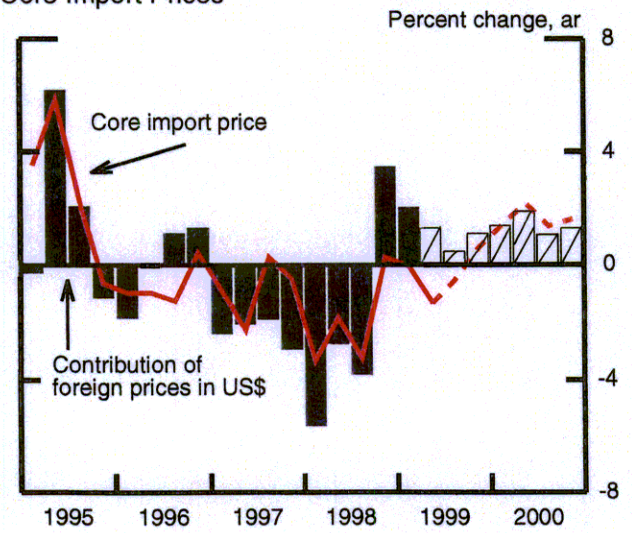
Non-oil Commodity Prices



Core Import Prices



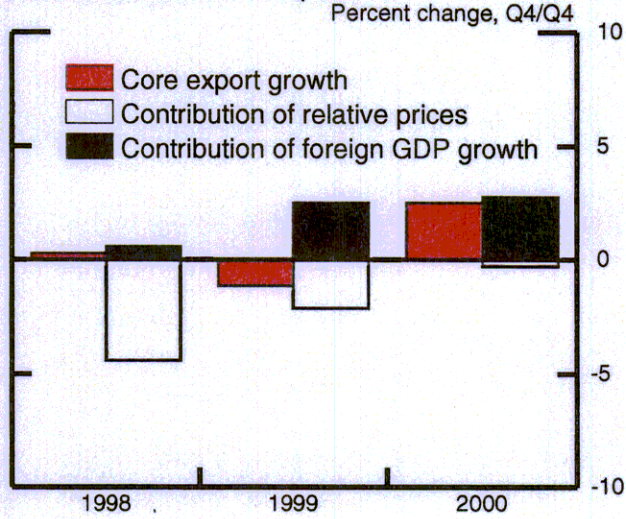
Core Import Prices



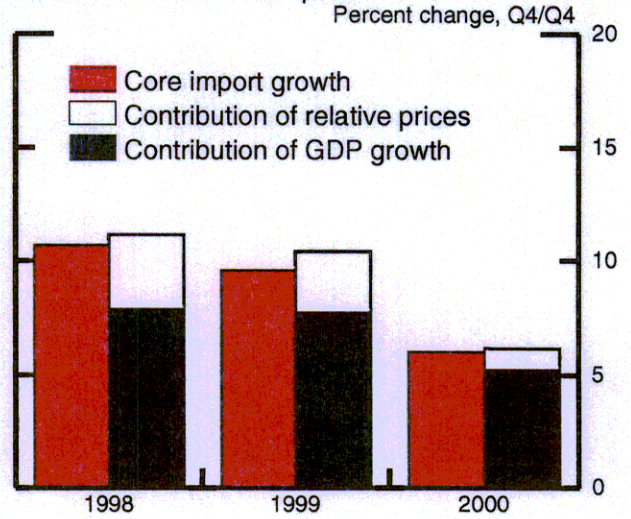


# U.S. External Balance

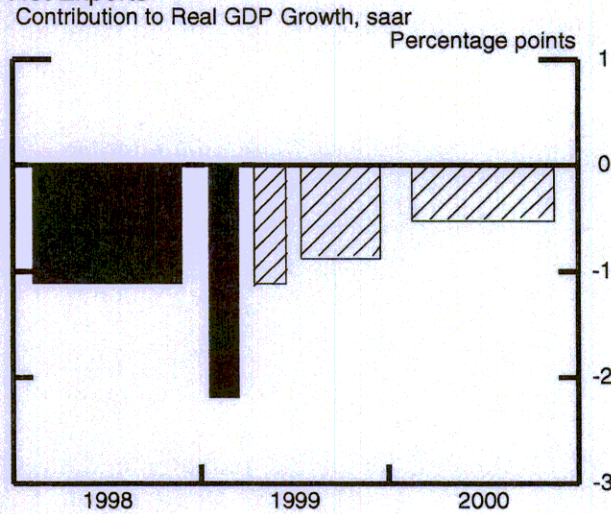
Determinants of Core Exports



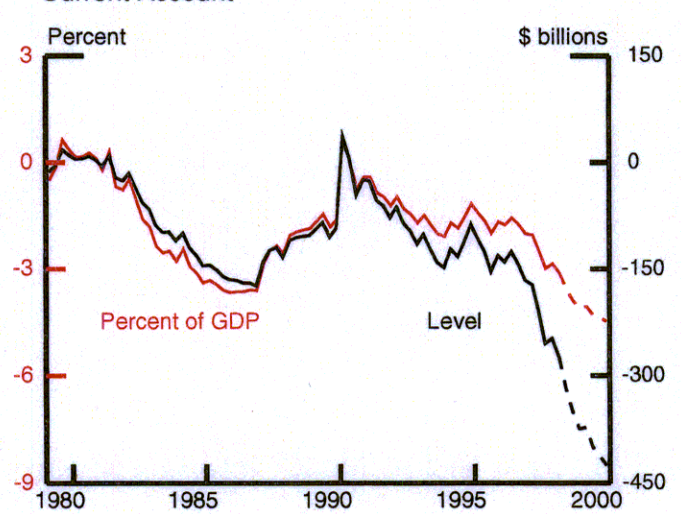
Determinants of Core Imports



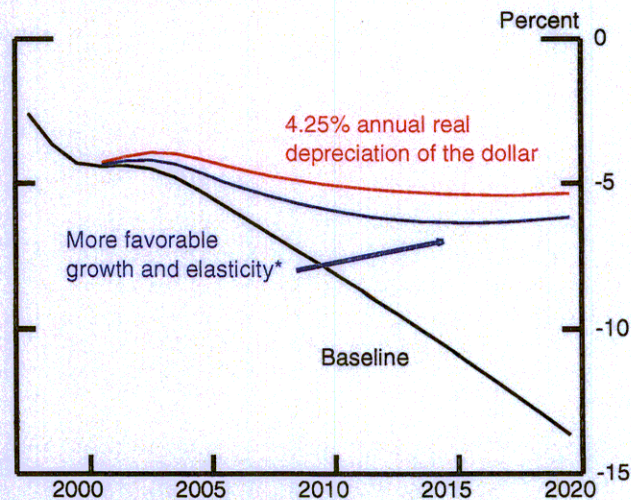
Net Exports



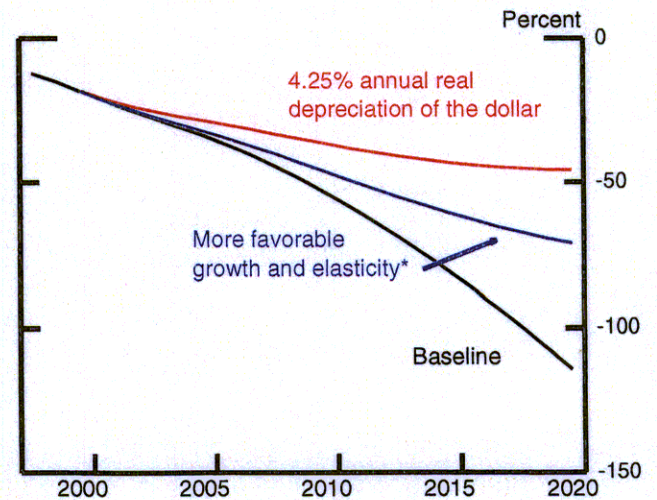
Current Account



U.S. Current Account to GDP Ratio



U.S. Net Investment Position to GDP Ratio



\* Foreign industrial GDP grows by an additional one percentage point per year and the U.S. import elasticity declines to 1.5 by 2015.



Chart 13

## PROJECTIONS FOR 1999

	FOMC				
	---Range--- with Y2K	-----Central Tendency----- with Y2K	ex Y2K	---Staff--- with Y2K	--Administration--
	-----Percentage change, Q4 to Q4-----				
Nominal GDP February 1999	4¾ to 5½ (3¾ to 5)	5 to 5½	4¾ to 5½ (4 to 4½)	5.2 (4.1)	4.8 (4.0)
Real GDP February 1999	3¼ to 4 (2 to 3½)	3½ to 3¾	3½ to 3¾ (2½ to 3)	3.7 (2.6)	3.2 (2.0)
CPI February 1999	1¾ to 2½ (1½ to 2½)	2¼ to 2½	2¼ to 2½ (2 to 2½)	2.3 (2.3)	2.4 (2.3)
	-----Average level, Q4, percent-----				
Unemployment rate February 1999	4 to 4½ (4¼ to 4¾)	4 to 4¼	4 to 4¼ (4¼ to 4½)	4.1 (4.3)	4.3 (4.9)

## PROJECTIONS FOR 2000

	FOMC				
	---Range--- with Y2K	-----Central Tendency----- with Y2K	ex Y2K	---Staff--- with Y2K	--Administration--
	-----Percentage change, Q4 to Q4-----				
Nominal GDP	3¾ to 5¼	4 to 5	4¼ to 5	4.4	4.2
Real GDP	2 to 3½	2½ to 3	2½ to 3½	2.6	2.1
CPI	1½ to 2¾	2 to 2½	2 to 2½	2.3	2.4
	-----Average level, Q4, percent-----				
Unemployment rate	4 to 4-½	4¼ to 4½	4¼ to 4½	4.2	4.7

## **APPENDIX 3**

**Material used by Mr. Madigan in his presentation**



***Material for***

***Staff Presentation on  
Money and Debt Ranges***

***June 28-29, 1999***

Chart 1  
Ranges for Money and Debt Aggregates

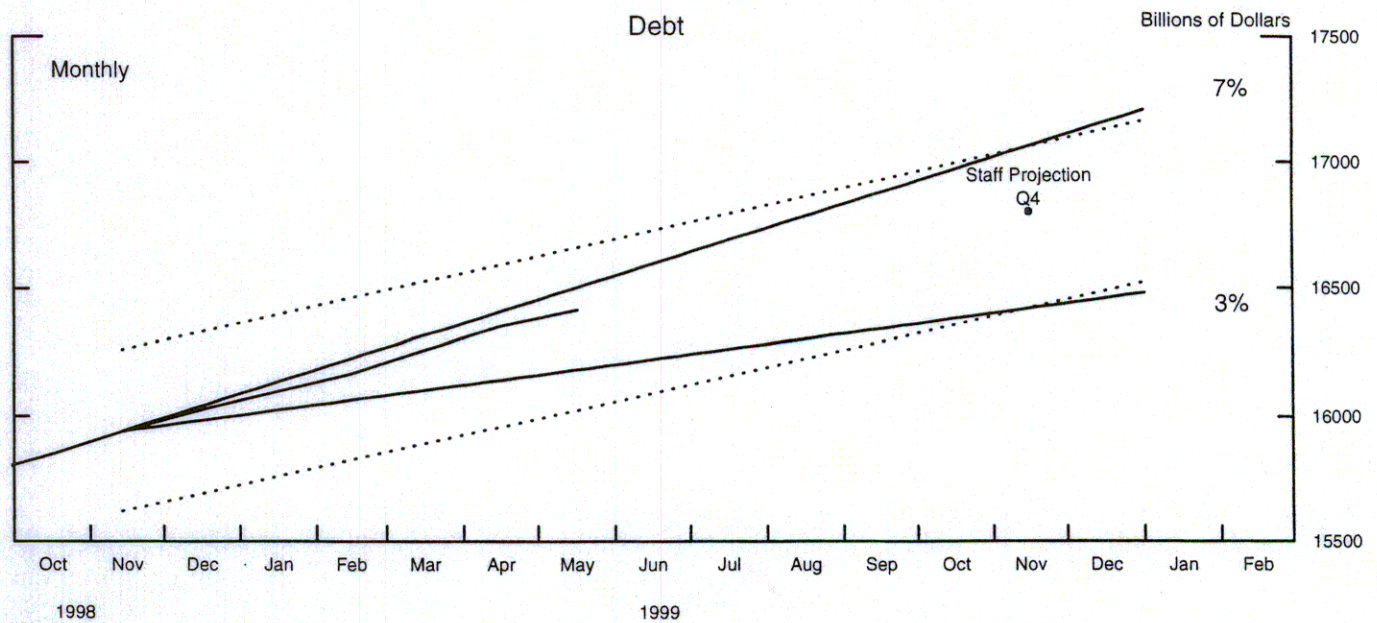
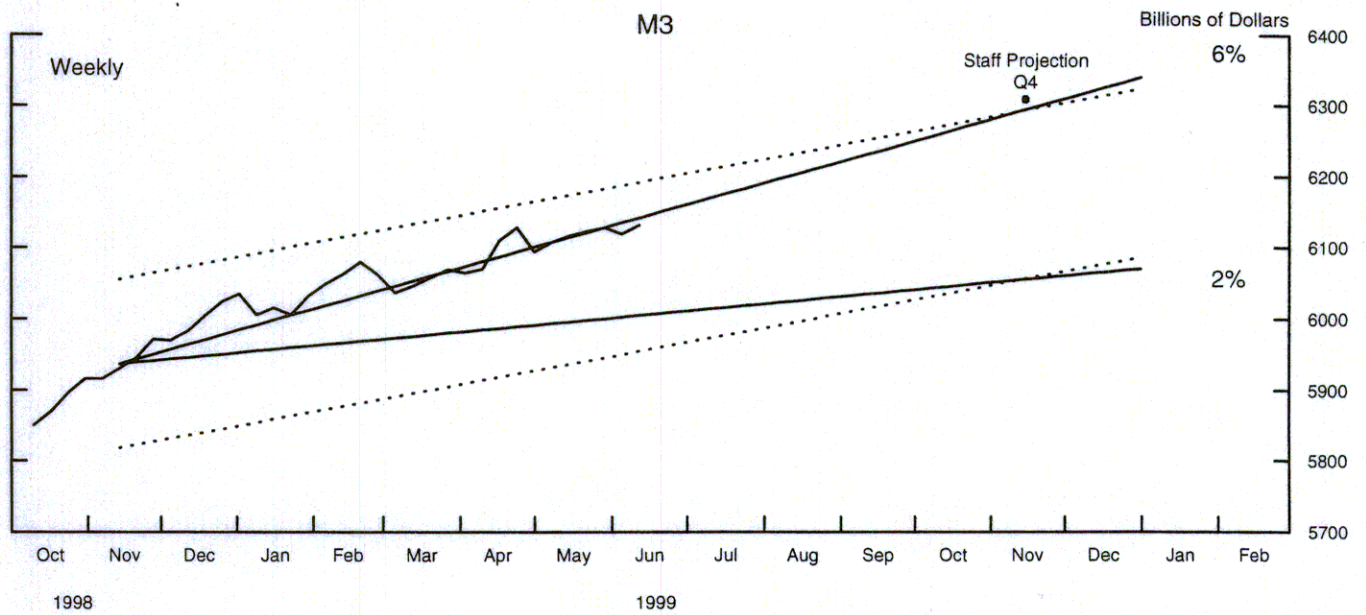
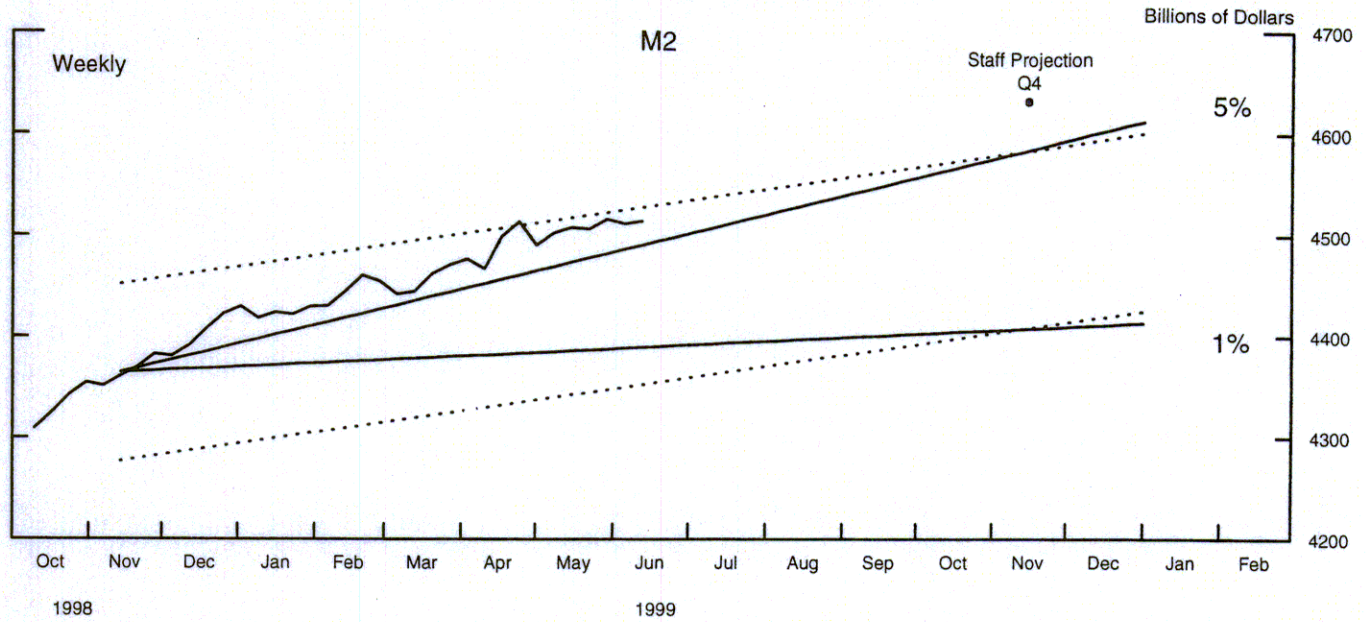




Chart 2

# M2 Velocity and Opportunity Cost

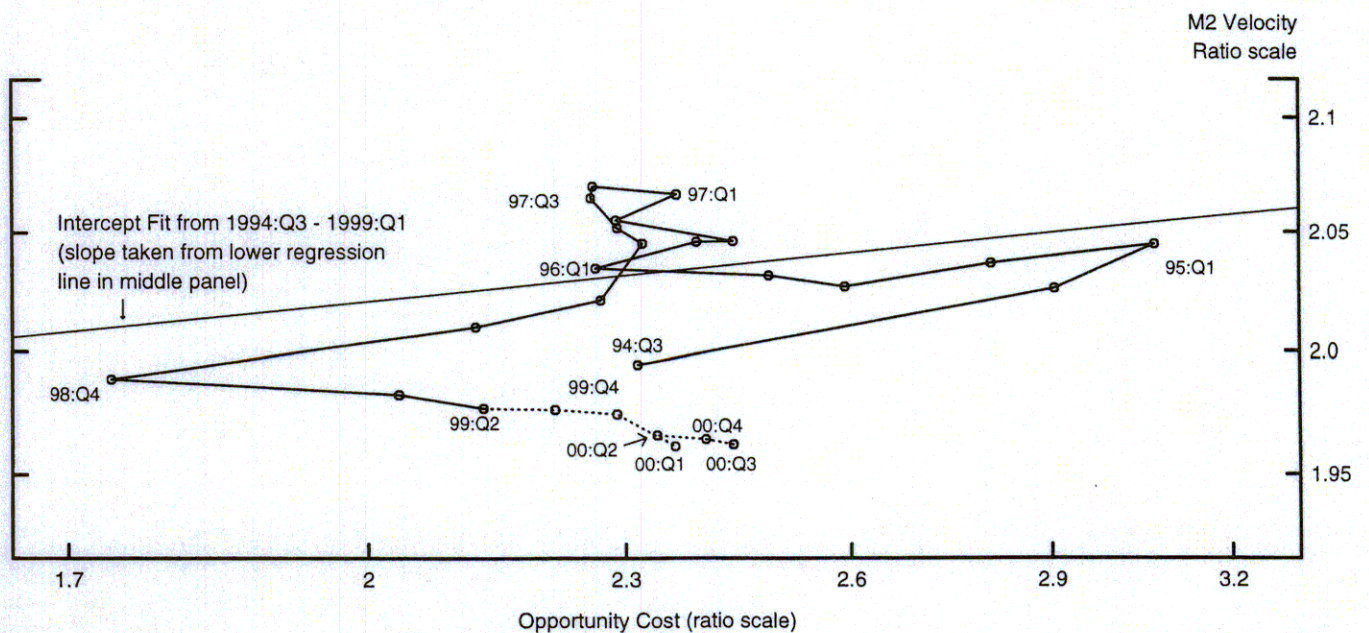
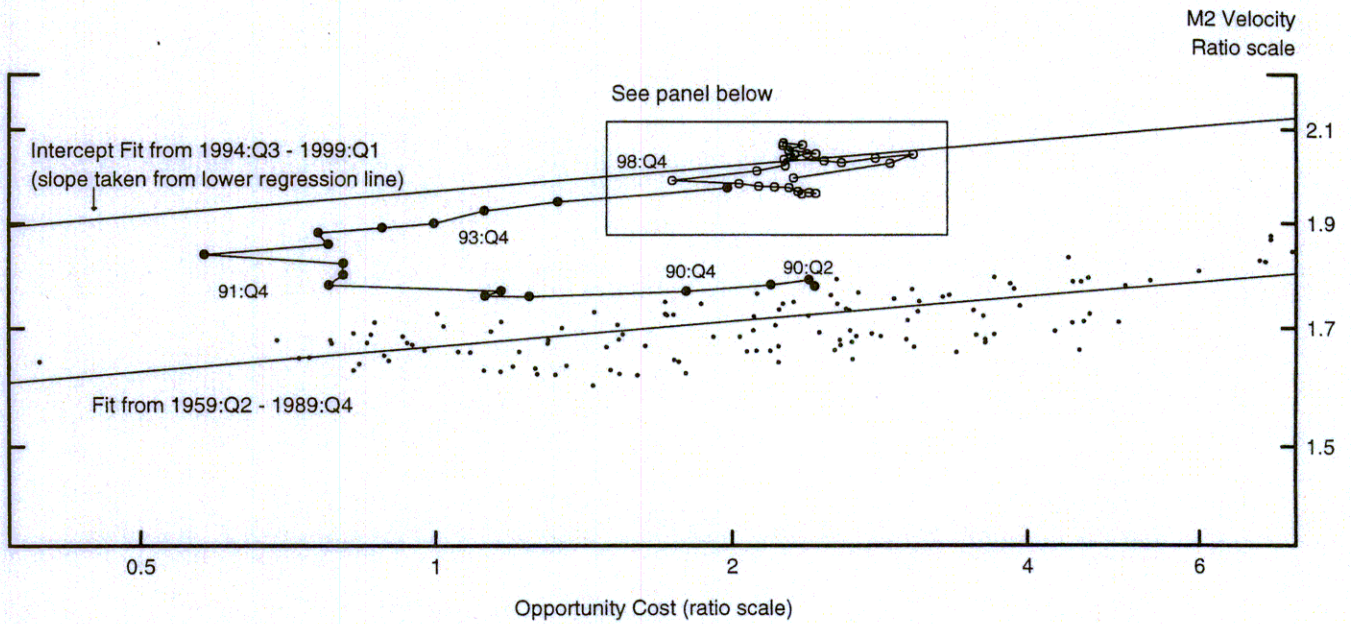
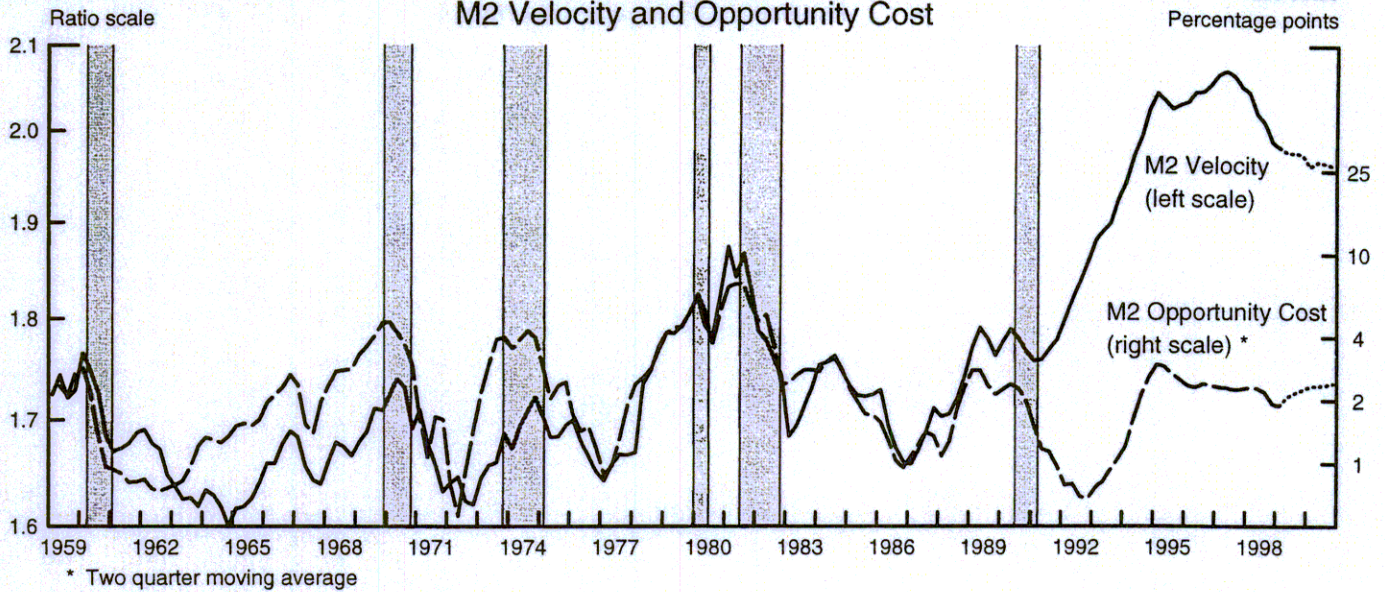
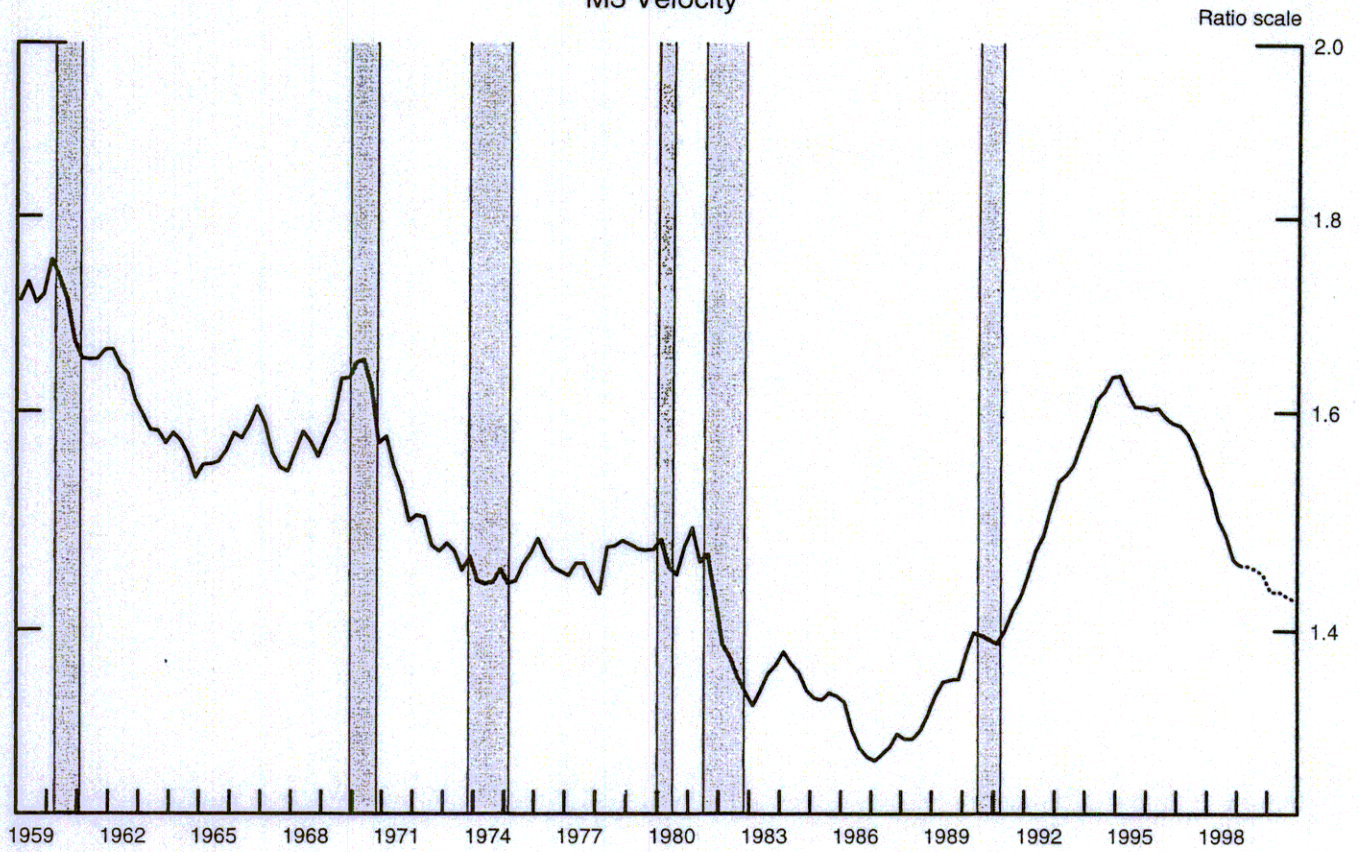
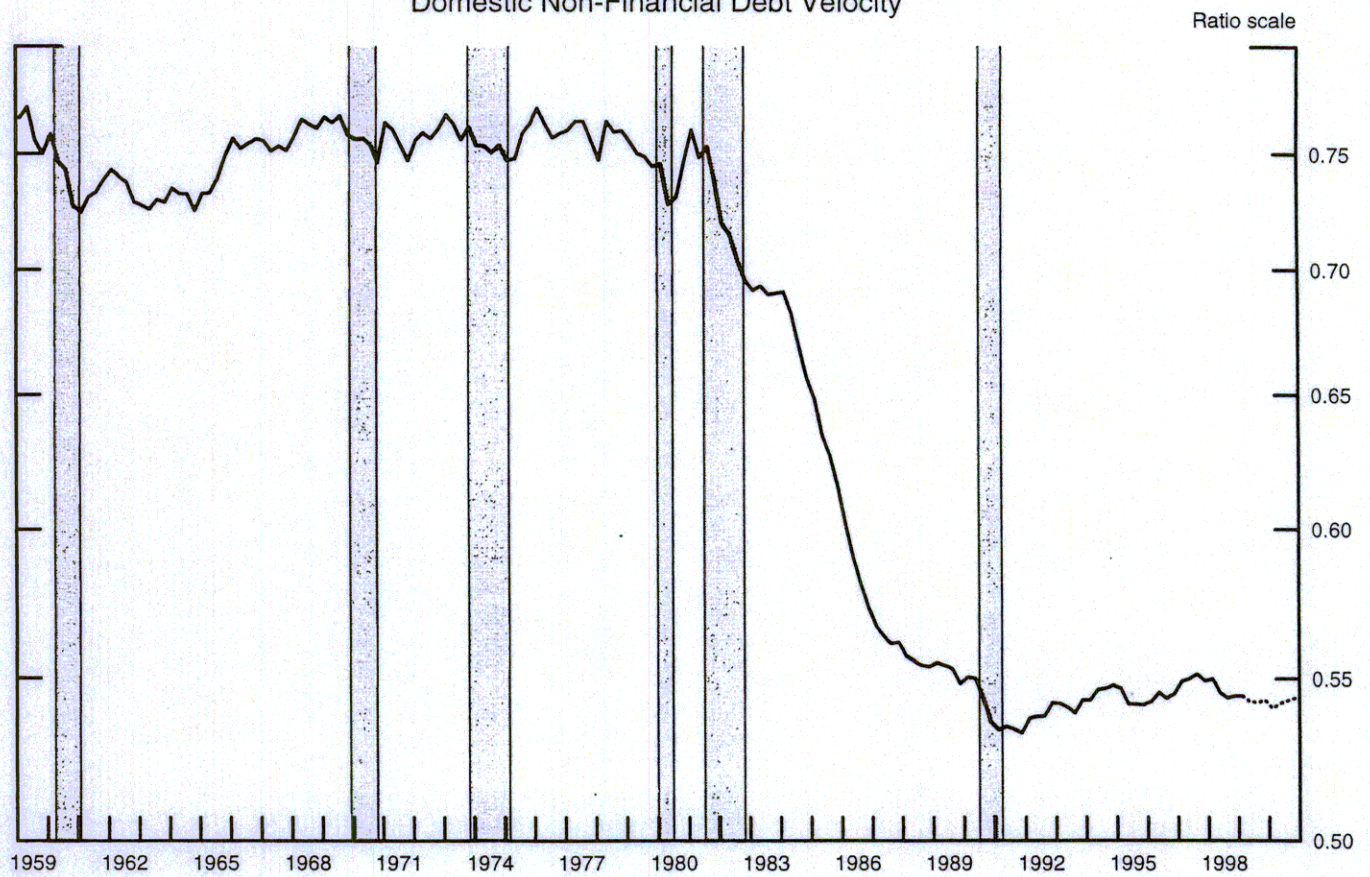




Chart 3  
M3 Velocity



Domestic Non-Financial Debt Velocity



**Table 1**  
**Staff Projections of Money and Debt Growth**  
**(percent)**

	<b>1998</b> <b>(Actual)</b>	<b>1998:Q4-1999:Q2</b> <b>(Est./Proj.)</b>	<b>1999</b> <b>(Projected)</b>	<b>2000</b> <b>(Projected)</b>
<b>M2</b>	8.5	6.5	6	5
<b>M3</b>	10.9	6.1	6-1/4	6
<b>Debt</b>	6.1	6.0	5-1/2	4-1/4
<b>Memo:</b>				
<b>Nominal</b>	5.2	5.4	5-1/4	4-1/2
<b>GDP</b>				



**Table 2**  
**Staff Projections and Alternative Money and Debt Ranges**  
**(Q4 to Q4, percent)**

	Staff Projections		Alternative I		Alternative II	
	1999	2000	1999 (current)	2000	1999	2000
<b>M2</b>	6	5	1 to 5	1 to 5	2 to 6	2 to 6
<b>M3</b>	6-1/4	6	2 to 6	2 to 6	3 to 7	3 to 7
<b>Debt</b>	5-1/2	4-1/4	3 to 7	2 to 6	3 to 7	2 to 6