## APPENDIX 1

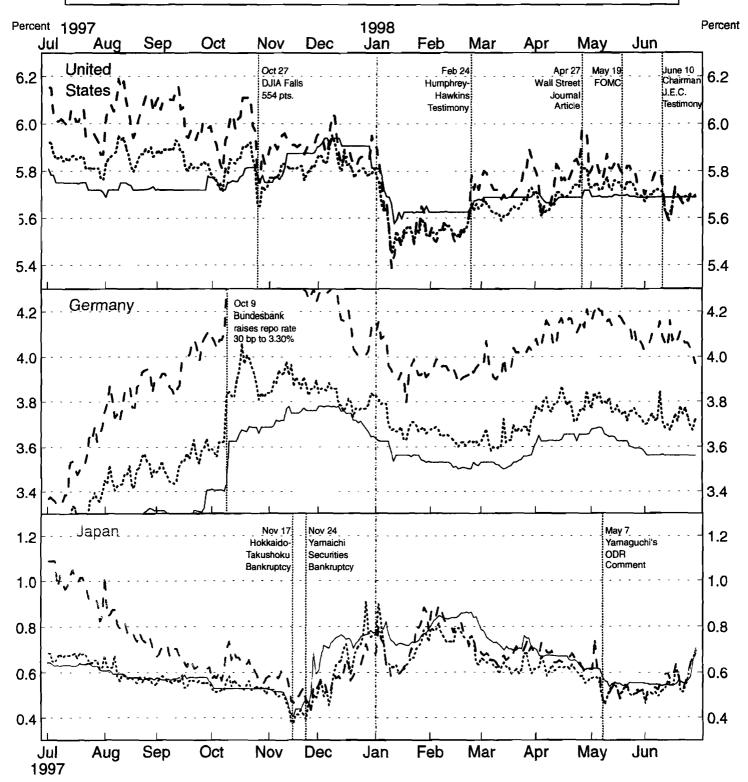
Charts used by Mr. Fisher in his presentation

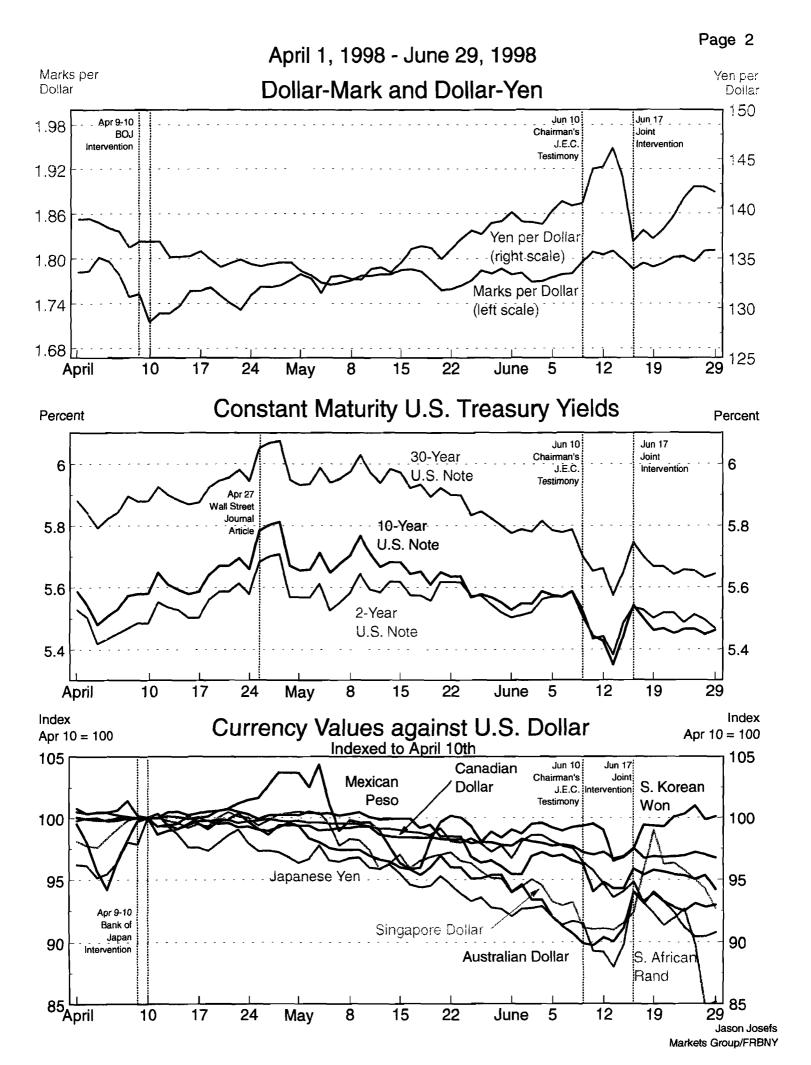
## 3-Month Deposit Rates

July 1, 1997 - June 29, 1998

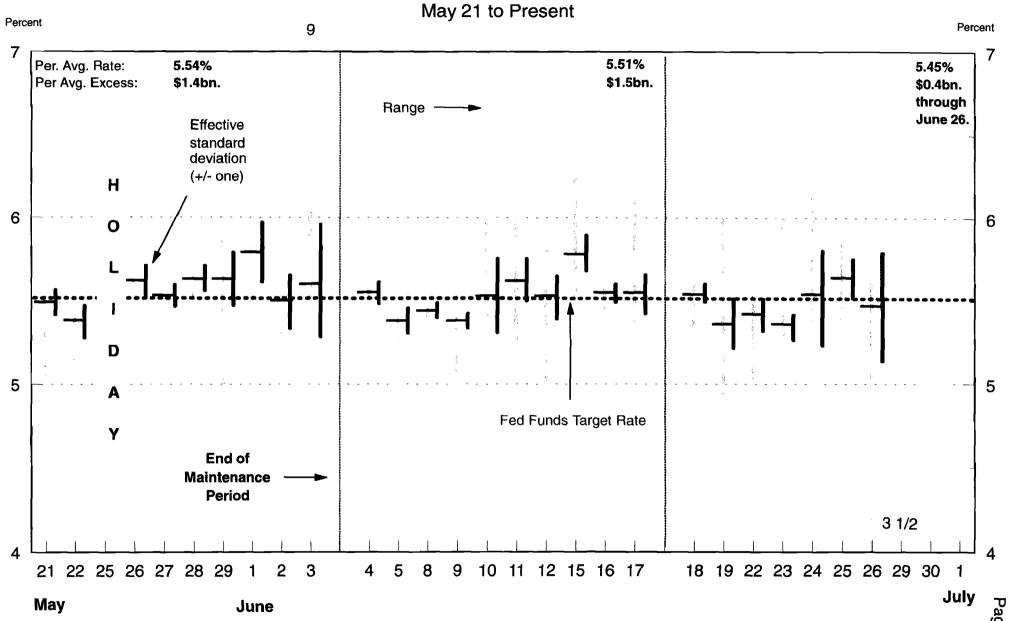
Current Euro-Deposit Rate and Rates Implied by Traded Forward Rate Agreements

United States	LIBOR Fixing	3-Mo. Forward	9-Mo. Forward
Germany		************	
Japan		*******	





## DAILY FEDERAL FUNDS TRADING RANGE, EFFECTIVE AVERAGE & ONE STANDARD DEVIATION May 21 to Present



#### APPENDIX 2

Charts used by Messrs. Prell, Hooper, and Stockton in their presentation

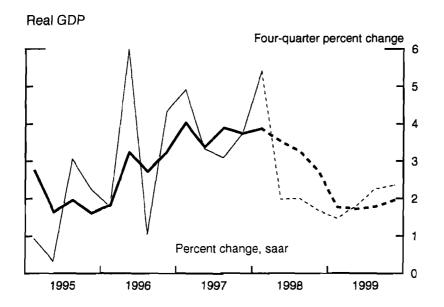
## STRICTLY CONFIDENTIAL (FR) CLASS II-FOMC

Material for

# Staff Presentation on the Economic Outlook

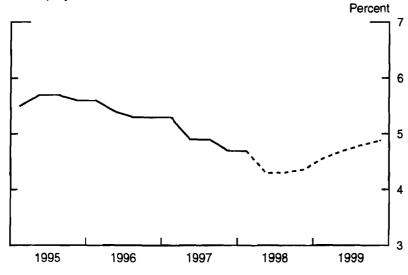
June 30, 1998

## **Forecast Summary**



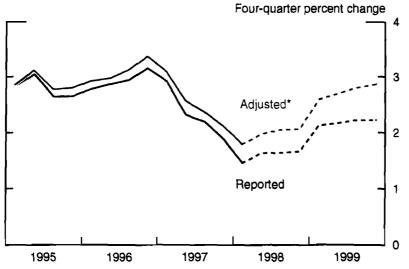
Q4/Q4 percent change						
1995	1.6					
1996	3.2					
1997	3.7					
1998	2.7					
1999	2.0					

**Unemployment Rate** 



	Q4 average	
1995	5.6	
1996	5.3	
1997	4.7	
1998	4.4	
1999	4.9	

Consumer Price Inflation

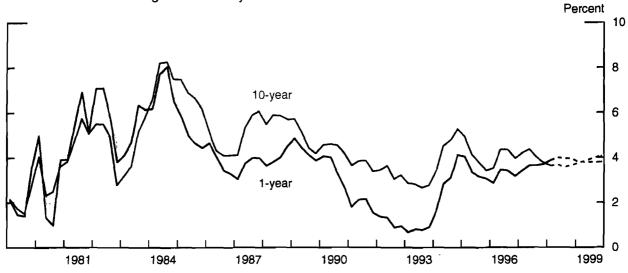


Q4/Q4 percent change								
	Reported Adjuste							
1995	2.6	2.7						
1996	3.2	3.4						
1997	1.9	2.1						
1998	1.7	2.1						
1999	2.2	2.8						

<sup>\*</sup>Adjusted for effects of technical changes implemented by BLS since 1994.

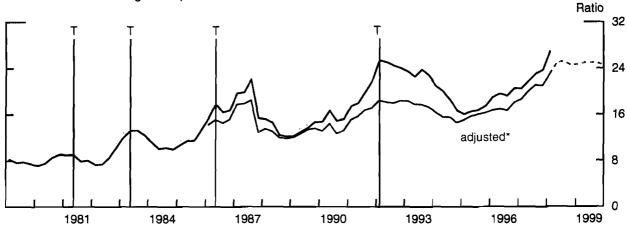
#### **Domestic Financial Conditions**

Real Short-term and Long-term Treasury Yields\*



<sup>\*</sup> Nominal 1-year and 10-year rates minus lagged one and three year GDP inflation rates, respectively.

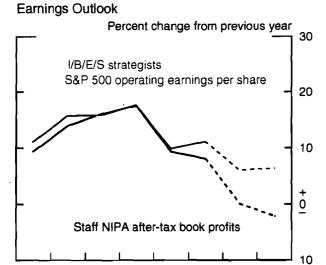
#### S&P 500 Price-Earnings Multiple



<sup>\*</sup> Based on Goldman Sachs' estimates of S&P 500 earnings excluding special restructuring charges. Note: T denotes trough of earnings cycle.

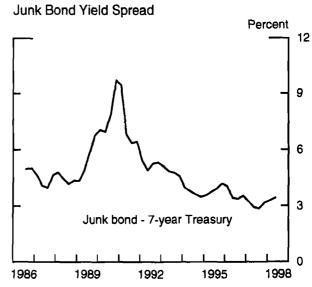
1999

1997



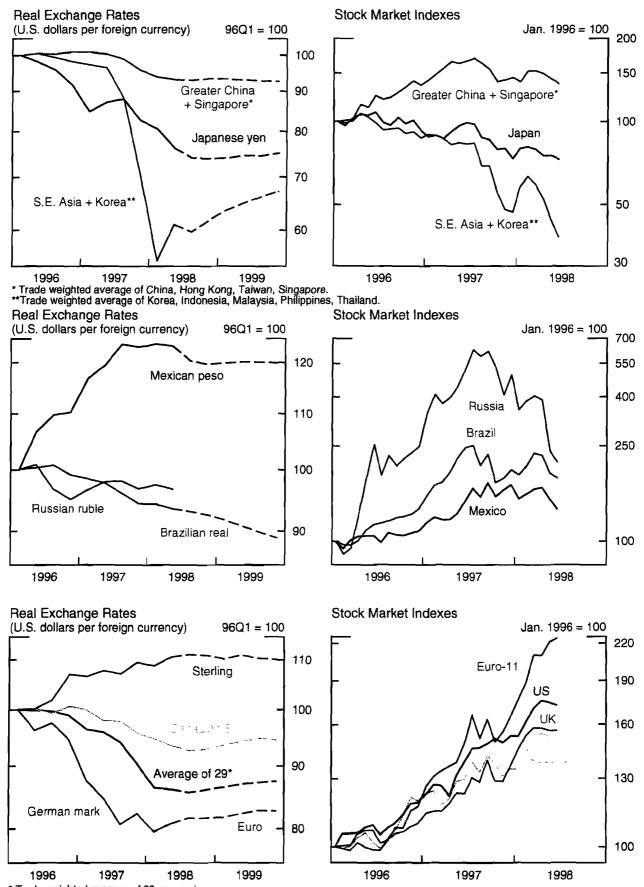
1995

1993



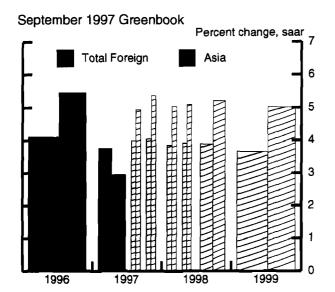
#### **International Financial Markets**

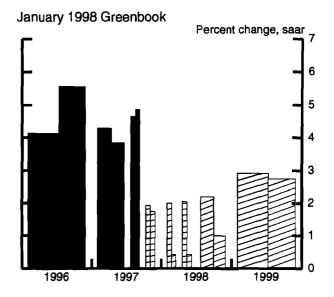
(Ratio scales)

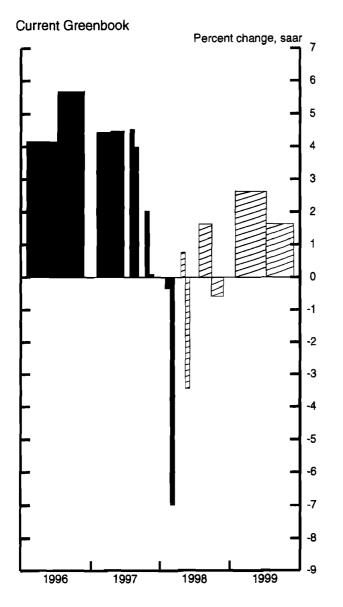


\* Trade weighted average of 29-currencies. Note: Exchange rate data are quarterly; stock market data are monthly.

## Foreign GDP\*







hares of U.S. Nonag Ex nd Foreign GDP -	ports	Perce
	Exports*	GDP**
Asia of which	30	43
Front-line	9	7
Korea	4	2
Indonesia	1	2
Malaysia	2	1
Philippines	1	1
Thailand	1	1
Japan	9	10
Greater China and Singapore	10	16
China	2	14
Hong Kong	2	1/2
Taiwan	3	1
Singapore	3	1/3
Europe	23	34
Canada	22	2
Latin America	20	11
Other	6	10
Total	100	100
1996-1997 * 1996		

<sup>\*</sup> Weighted by shares in U.S. nonagricultural exports.

Chart 5

Front-line Asia

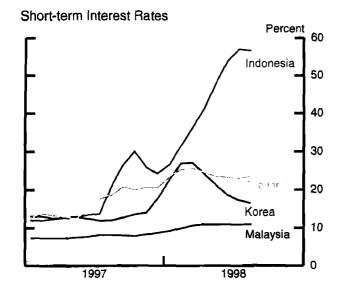
	1996		<u> </u>		1998		1999	
		<u>H1</u>	Q3_	Q4	Q1	Q2	H2	
Korea	7	6	6	-1	-23	-8	-3	2
ndonesia	10	2.7	1	-1	-22	-23	-15	-4
Malaysia	9	8	4	8	-23	-10	-3	0
Philippines	5	8	4	0	-1	-1	-0	2
Thailand	5	-1	-6	-9	-9	-8	-4	-0

<sup>\*</sup> Change from end of preceding period. \*\* Weighted by shares in U.S. nonagricultural exports. Note: Historical quarterly figures for Indonesia and Thailand are estimates.

#### Causes of Downturn

#### Sharp drop in consumption and investment resulting from:

- Massive balance sheet adjustments, drop in wealth
- Uncertainty about future earnings prospects
- Cancellation of projects following overinvestment
- Credit crunch and rising cost of funds



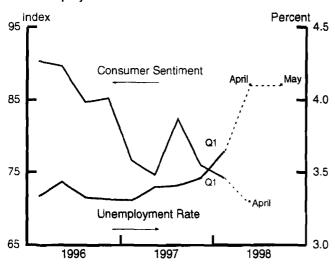


#### Japan

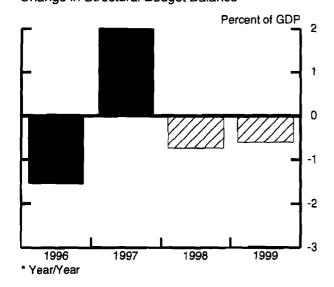
Real GDP

	1996	1997	1998			1999
			Q1	Q2	H2	
GDP	3.4	-0.4	-5.3	-2.4	1.9	0.4
Consumption	2.4	-0.9	0.4	<i>-</i> 5.0	-1.0	0.4
Investment	11.7	-6.1	-14.5	-5.0	-1.0	0.4

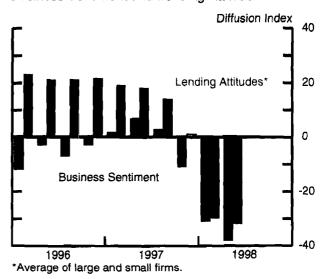
**Unemployment and Consumer Sentiment** 



Change in Structural Budget Balance\*



#### **Business Sentiment and Lending Attitudes**



Imports and Exports

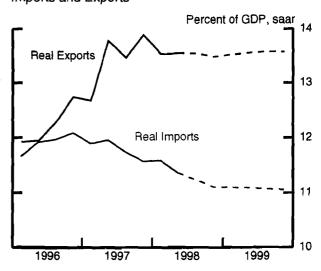


Chart 7

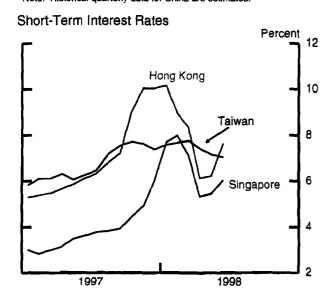
Greater China and Singapore

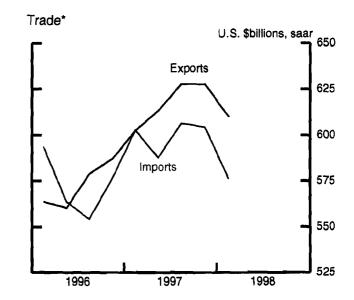
Real GDP

	1996	1997			1998			
		H1	Q3	Q4	Q1	Q2	H2	<del></del>
China	10	9	5	3	6	4	4	7
Taiwan	7	6	9	8	2	1	1	2
Hong Kong	6	8	2	-6	-10	-4	-2	1
Singapore	6	12	6	1	1	-1	-0	2
Total**	7.3	8.8	5.6	2.1	0.8	0.7	0.9	3.4

<sup>\*</sup> Change from end of preceding period. Note: Historical quarterly data for China are estimates.

<sup>\*\*</sup> Weighted by shares in U.S. nonagricultural exports.





#### 10 Asian Economies

Current Account

U.S. \$billions
250
200
150
100
50
0

Trade by Region\*

Change 1997Q1-1998Q1 (U.S. \$billions, AR)									
	Imports Exports Net								
United States	-17	19	36						
Europe	-20	20	40						
Asia	-50	-50	0						
Other	-54	22	76						
Total	-140	11	151						

<sup>\*</sup> Excludes Hong Kong and Indonesia.

Chart 8 Europe, Canada and Latin America

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Percent change, saar

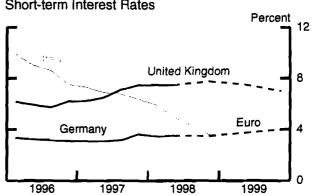
	1996 <u>1997</u>		1998			1999		
		<u>H1</u>	Q3	Q4	Q1	Q2	H2	
Euroland	1.9	3.3	3.4	2.1	3.0	2.3	2.8	3.0
United Kingdom	2.9	2.8	3.6	2.5	2.0	2.3	1.8	2.0
Canada	2.0	4.5	4.3	2.8	3.7	3.6	3.0	2.7

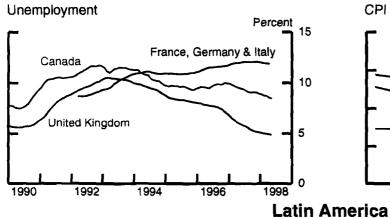
#### Real Net Exports

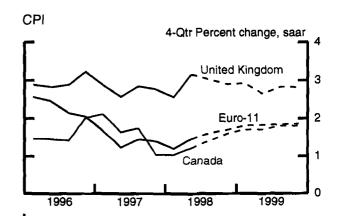
Percent Contribution to GDP Growth

	1998		1999
Q1	Q2	H2	
-2.7	-0.4	-0.3	-0.1
-2.3	-1.1	-0.6	-0.1
2.5	-0.5	-0.5	-0.1
	-2.7	Q1 Q2 -2.7 -0.4 -2.3 -1.1	Q1 Q2 H2 -2.7 -0.4 -0.3 -2.3 -1.1 -0.6





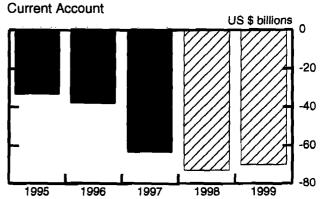




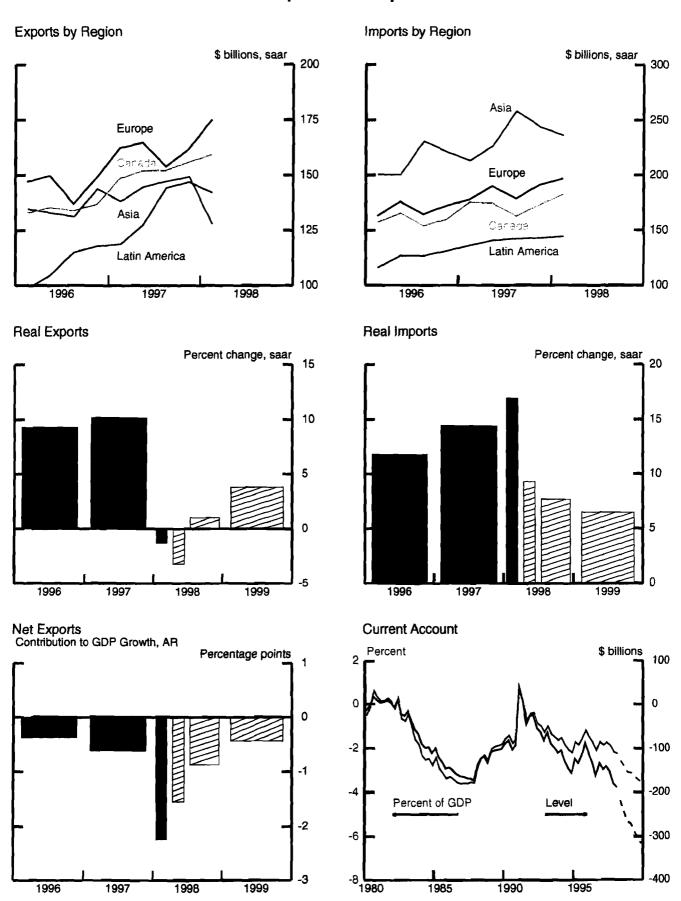
#### Real GDP

Q4/Q4 change, Percent

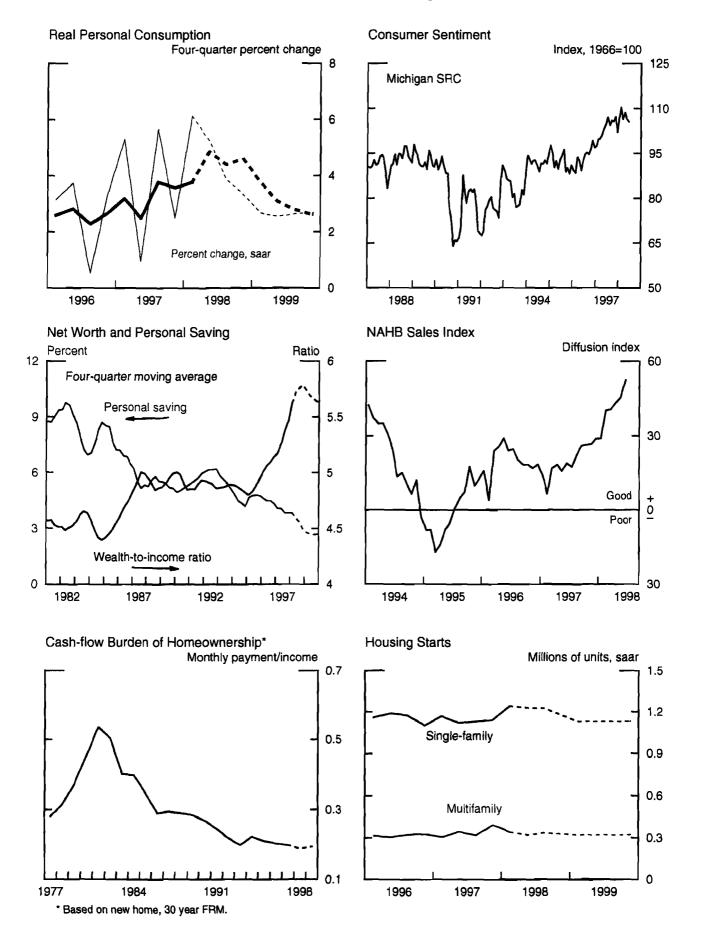
	1997	1998	1999
Mexico	6.7	3.2	5.1
Argentina	7.0	4.6	5.8
Brazil	2.1	-0.3	0.0



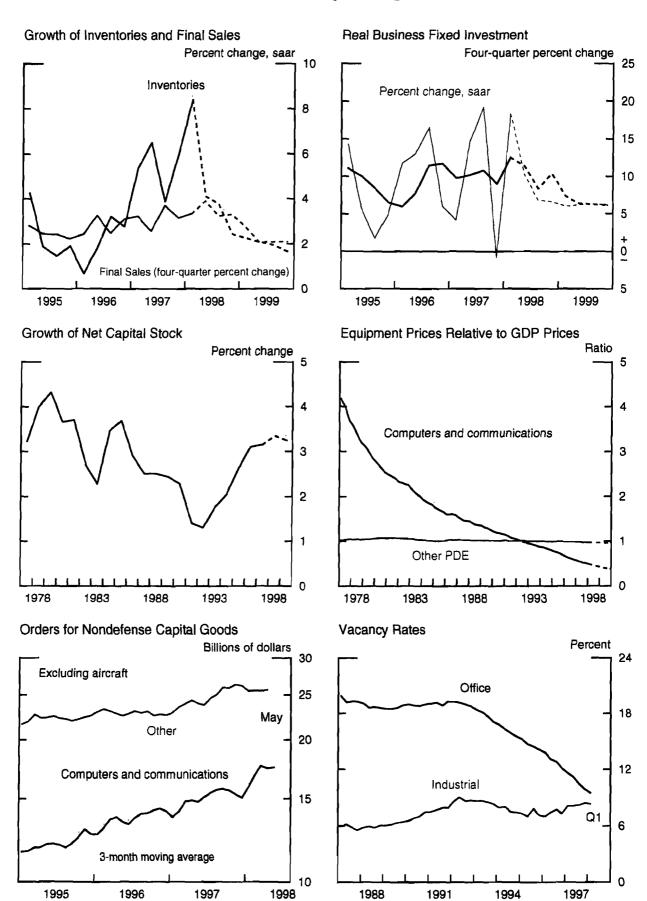
## U.S. Exports and Imports



#### **Household Spending**



## **Business Spending**



Source: CB Commercial.

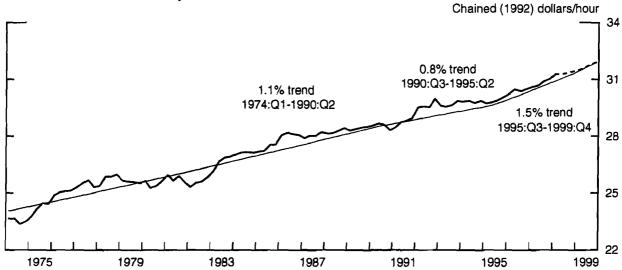
Chart 12

Supply-Side Components of Potential GDP

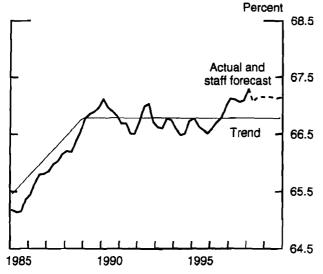
	Long-term trends			Projection	
	1973–79	1979–90	1990–95	1995–99	
1. Potential GDP	3.3	2.6	1.9	2.5	
2. Labor input	2.0	1.6	1.1	1.0	
3. Labor productivity	1.1	1.1	.8	1.5	
4. Capital deepening	.6	.6	.4	.9	
5. Labor quality	.0	.3	.4	.3	
6. Multifactor productivity	.5	.2	.0	.3	
7. Technical factors	.2	1	.0	.0	

Note: Adjusted to place on a technically consistent basis.

#### Nonfarm Business Productivity



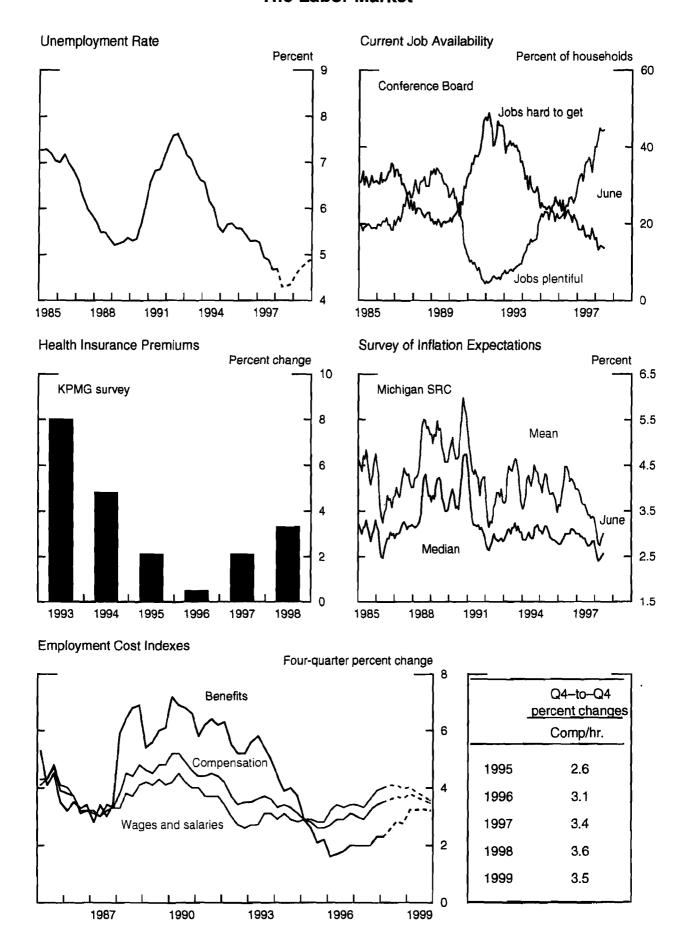
#### Labor Force Participation Rate



	Labor force	Employment*
1995	.6	.6
1996	1.8	2.1
1997	1,4	2.1
1998	1.1	1.4
1999	1.0	.5

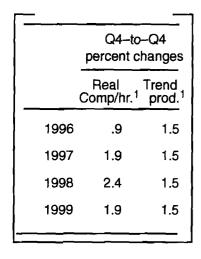
Note: Adjusted for CPS revision.

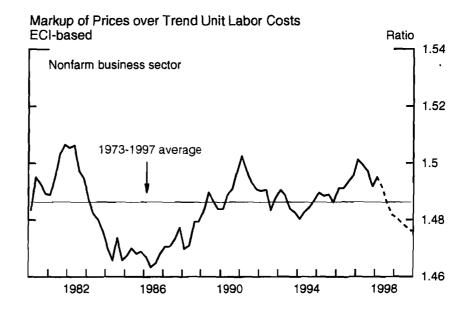
## **The Labor Market**



#### **The Product Market**

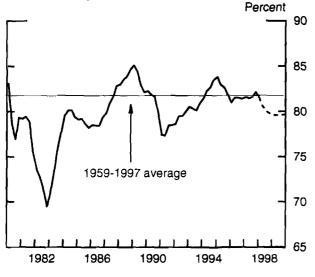
Real Wages

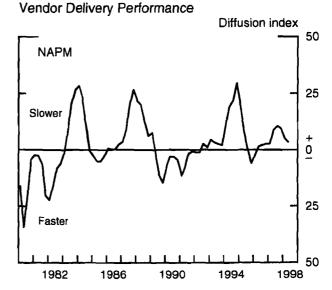


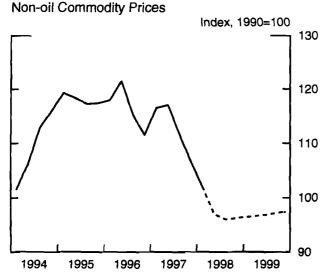


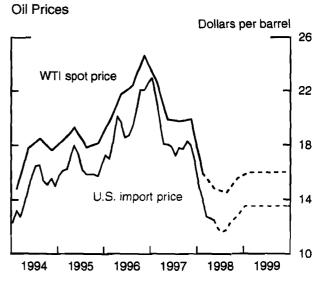
1. Technically consistent basis.



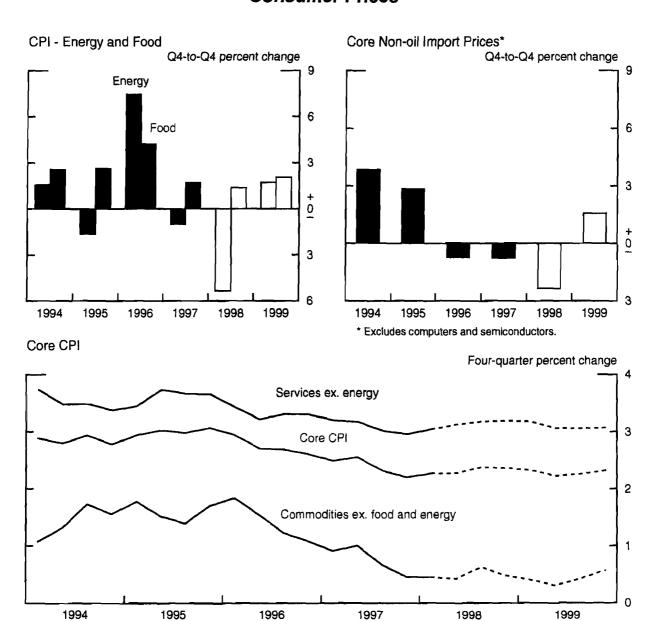








#### **Consumer Prices**



## **Price Projection**

	1996	1997	1998	1999
CPI	3.2	1.9	1.7	2.2
Excluding food and energy	2.6	2.2	2.3	2.3
Excluding food and energy (technically consistent)	2.7	2.4	2.7	3.0
MEMO:				
"Actual" CPI excluding food and energy*	1.4	1.1	1.4	1.7
"Actual" GDP prices*	1.5	1.1	0.8	1.1
	Excluding food and energy Excluding food and energy (technically consistent) IO: "Actual" CPI excluding food and energy*	CPI 3.2  Excluding food and energy 2.6  Excluding food and energy (technically consistent) 2.7  IO:  "Actual" CPI excluding food and energy* 1.4	CPI 3.2 1.9  Excluding food and energy 2.6 2.2  Excluding food and energy (technically consistent) 2.7 2.4  IO:  "Actual" CPI excluding food and energy* 1.4 1.1	CPI 3.2 1.9 1.7  Excluding food and energy 2.6 2.2 2.3  Excluding food and energy (technically consistent) 2.7 2.4 2.7  IO:  "Actual" CPI excluding food and energy* 1.4 1.1 1.4

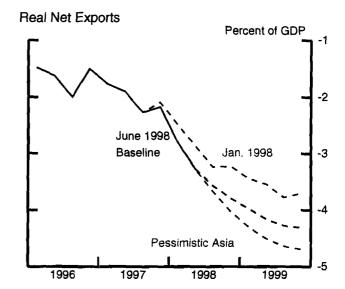
<sup>\*</sup> Adjusted for staff estimate of measurement bias.

Chart 16

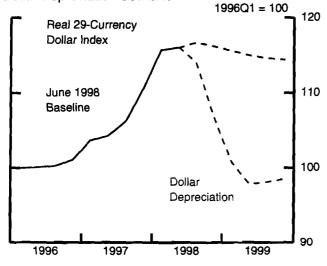
#### **Alternative Scenarios**

#### Pessimistic Asia Scenario

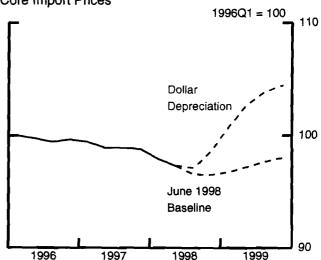
- Policy inaction in Japan; yen falls to 175
- Asian GDP falls 7 percent by the end of 1999
- Contagion in Latin America and Eastern Europe
- U.S. stock market falls 20 percent



#### Dollar Depreciation Scenario



#### Core Import Prices



#### Alternative Scenarios\*

	1998H2	1999	2000
US GDP (Percent changes, AR)			
Baseline	1.8	2.0	2.3
Pessimistic Asia	1.3	0.9	1.4
Dollar Depreciation	2.1	3.3	3.1
US CPI (Percent changes, AR)			
Baseline	2.1	2.2	2.4
			1.3
	2.2	3.2	3.8
Pessimistic Asia Dollar Depreciation	1.9 2.2	1.3 3.2	

<sup>\*</sup> U.S. federal funds rate held unchanged.

#### **ECONOMIC PROJECTIONS FOR 1998**

	FOMC			
	Range	Central Tendency	Administration	Staff
		Percent chan	ge, Q4 to Q4	
Nominal GDP	3 <sup>3</sup> / <sub>4</sub> to 5	$4^{1}/_{2}$ to 5	4.2	4.3
previous estimate	$(3^{1}/_{2} \text{ to } 5)$	$(3^3/_4 \text{ to } 4^1/_2)$	(4.0)	
Real GDP	$2^{3}/_{4}$ to $3^{1}/_{4}$	$3 \text{ to } 3^{1}/_{4}$	2.4	2.7
previous estimate	(1 <sup>3</sup> / <sub>4</sub> to 3)	$(2 \text{ to } 2^3/_4)$	(2.0)	
СРІ	1 <sup>1</sup> / <sub>4</sub> to 2 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub> to 2	1.6	1.7
previous estimate	$(1^{1}/_{2} \text{ to } 2^{1}/_{2})$	$(1^3/_4 \text{ to } 2^1/_4)$	(2.2)	
	Avera	ige level, Q4, per	cent	
Unemployment rate	4 <sup>1</sup> / <sub>4</sub> to 4 <sup>1</sup> / <sub>2</sub>	$4^{1}/_{4}$ to $4^{1}/_{2}$	4.8	4.4
previous estimate	(4 <sup>1</sup> / <sub>2</sub> to 5)	(~4 <sup>3</sup> / <sub>4</sub> )	(5.0)	

#### **ECONOMIC PROJECTIONS FOR 1999**

	FOMC				
	Range	Central Tendency	Administration	Staff	
		Percent char	nge, Q4 to Q4	<del></del>	
Nominal GDP	4 to 5 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>4</sub> to 5	4.1	3.7	
Real GDP	1 <sup>3</sup> / <sub>4</sub> to 3	$2 \text{ to } 2^{1}/_{2}$	2.0	2.0	
СРІ	1 <sup>1</sup> / <sub>2</sub> to 3	2 to $2^{1}/_{2}$	2.1	2.2	
	Average level, Q4, percent				
Unemployment rate	4 <sup>1</sup> / <sub>4</sub> to 4 <sup>3</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>2</sub> to 4 <sup>3</sup> / <sub>4</sub>	5.0	4.9	

NOTE: Central tendencies constructed by dropping top and bottom three from distribution, and rounding to nearest quarter percent.

#### APPENDIX 3

Charts used by Mr. Whitesell in his presentation

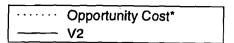
## STRICTLY CONFIDENTIAL (FR) CLASS I - FOMC

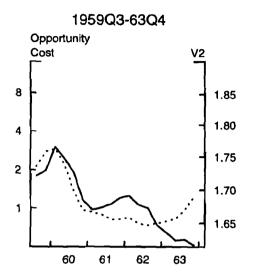
Material for the

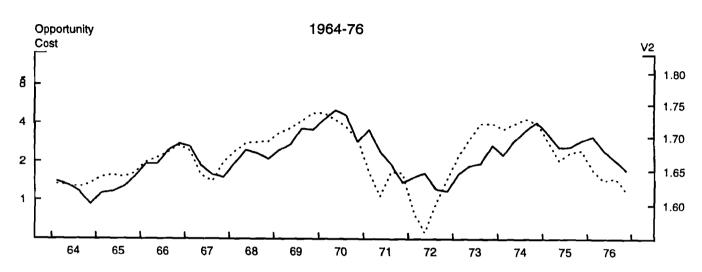
## Staff Presentation on Money and Debt Ranges

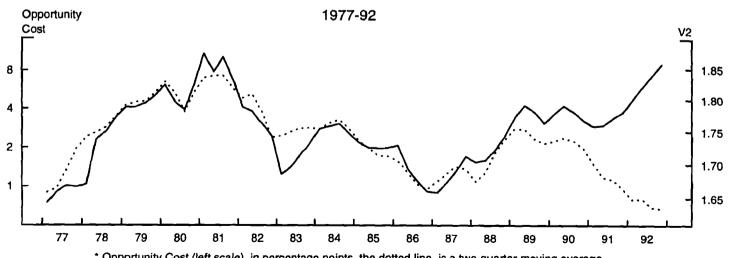
June 30 - July 1, 1998

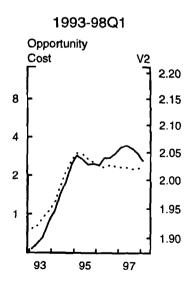
Chart 4
M2 Velocity and Opportunity Cost by Period
(Quarterly, ratio scales)





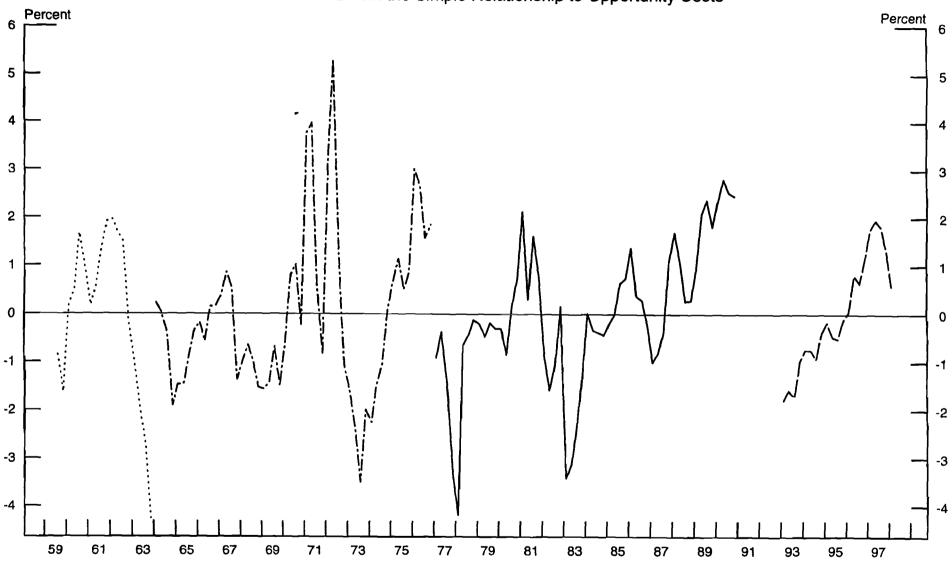






\* Opportunity Cost (left scale), in percentage points, the dotted line, is a two-quarter moving average, V2 (right scale), the solid line, is in levels; both are ratio scales.

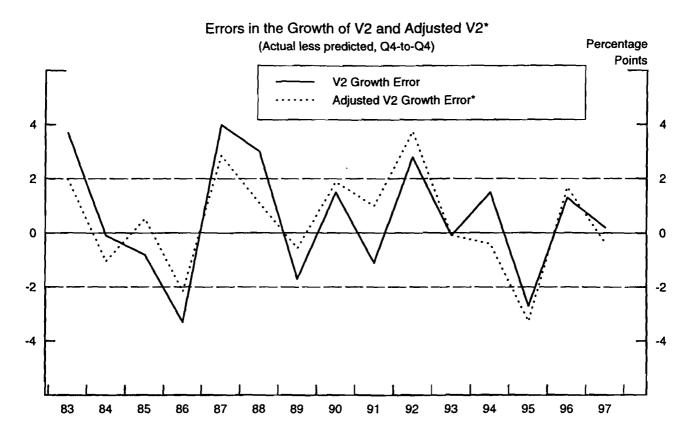
Chart 5
Deviations of V2 from the Simple Relationship to Opportunity Costs\*

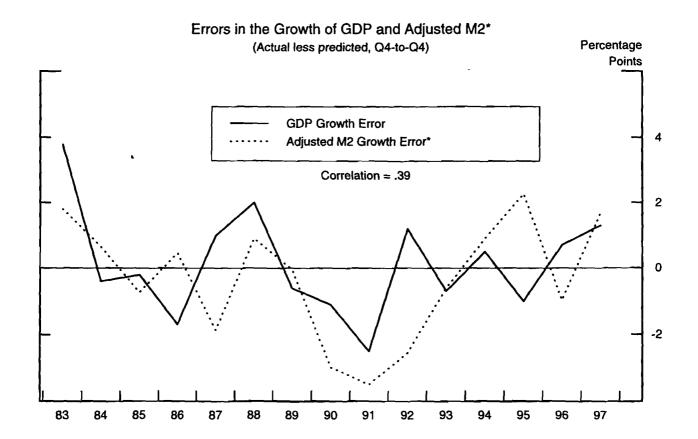


<sup>\*</sup> Percentage deviations from actual V2 of estimates based on opportunity costs.

The years 1991 and 1992, when long-run velocity was shifting up sharply, are omitted.

Chart 6
Analysis of Judgmental Projections of M2 Made in February for the Current Year





<sup>\*</sup> The errors are adjusted for the effects of deviations of the federal funds rate from Greenbook assumptions, based on the semi-elasticity of 1.9 implied by the correlation between the forecast errors of V2 growth and of the funds rate.

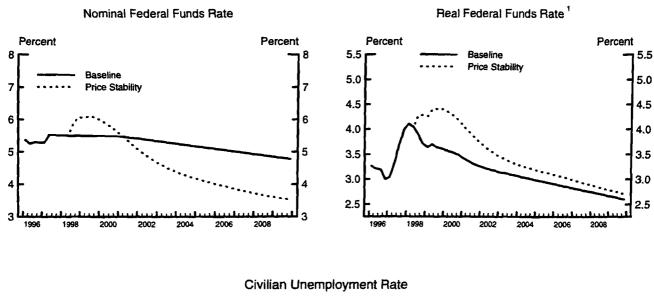
## Growth of Money and Debt and Alternative Ranges (percent)

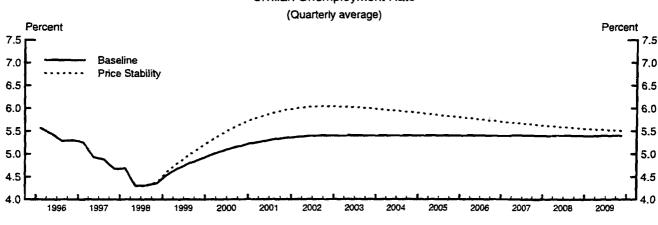
	1998 pro	1999 jected	Alt. I (current)	Alt. II	Alt. III
M2	6	4	1 to 5	2 to 6	1 to 5
M3	9	6½	2 to 6	4 to 8	2 to 6
Debt	5½	4½	3 to 7	2 to 6	1 to 5
Memo: Nominal GDP	41/4	3¾			

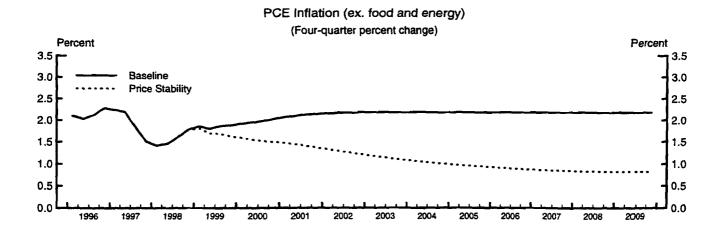
#### APPENDIX 4

Chart used by Mr. Lindsey in his presentation

Chart 2
Alternative Strategies for Monetary Policy







<sup>1.</sup> The real federal funds rate is calculated as the quarterly nominal funds rate minus the four-quarter percent change in the PCE chain-weight price index excluding food and energy.