Prefatory Note

The attached document represents the most complete and accurate version available based on original copies culled from the files of the FOMC Secretariat at the Board of Governors of the Federal Reserve System. This electronic document was created through a comprehensive digitization process which included identifying the best-preserved paper copies, scanning those copies,[1] and then making the scanned versions text-searchable.[2] Though a stringent quality assurance process was employed, some imperfections may remain.

Please note that this document may contain occasional gaps in the text. These gaps are the result of a redaction process that removed information obtained on a confidential basis. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

---

[1] In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).

[2] A two-step process was used. An advanced optimal character recognition computer program (OCR) first created electronic text from the document image. Where the OCR results were inconclusive, staff checked and corrected the text as necessary. Please note that the numbers and text in charts and tables were not reliably recognized by the OCR process and were not checked or corrected by staff.

Confidential (FR) Class III FOMC

Part 2

May 14, 1998

CURRENT ECONOMIC AND FINANCIAL CONDITIONS

Recent Developments

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

Confidential (FR) Class III FOMC

May 14, 1998

RECENT DEVELOPMENTS

Prepared for the Federal Open Market Committee
by the staff of the Board of Governors of the Federal Reserve System

DOMESTIC NONFINANCIAL DEVELOPMENTS

The remarkable combination of strong growth and low inflation continued during the first quarter. As expected, net exports exerted a considerable drag on growth of real GDP, but that was more than offset by a large rise in domestic demand. Consumption and home building advanced briskly, and business outlays for equipment surged once again. Perhaps presaging less robust expansion ahead, however, inventory investment also picked up further to an extraordinary pace. The tight labor market has led to a discernible acceleration in labor compensation over the past year, but the steep decline in energy prices and the weakness in non-oil import prices have led to a further deceleration in consumer prices in recent months.

Real GDP: 1998:Q1

The incoming data since the BEA published its initial estimates would appear to translate into a full percentage point upward revision in growth of real GDP. Final sales may be marked down in the next reading, largely because of weaker outlays for state and local government construction and a slightly greater decline in net

REAL GDP AND SELECTED COMPONENTS

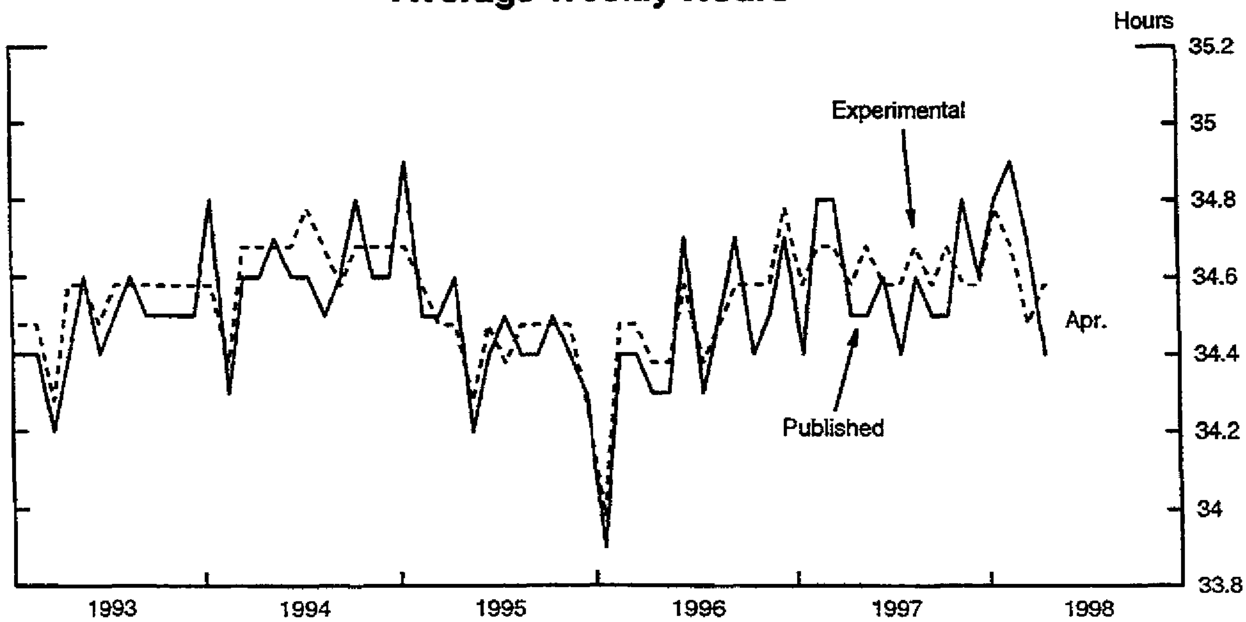
		1998:Q1	
	1997:Q4	BEA adv.	Expected revision
	Percent change annual rate		
Real GDP	3.7	4.2	5.2
Final sales	2.3	4.1	3.5
Private domestic final purchases	2.3	7.7	8.0
Consumption	2.5	5.7	5.8
Business fixed investment	-0.8	17.6	17.7
Residential investment	9.1	17.6	17.6
Federal government	-2.3	-8.3	-8.3
State and local government	1.8	1.7	0.4
	Level, billions of chained (1992) dollars		
Nonfarm inventory investment	64.5	67.0	92.9
Net exports	-159.1	-199.7	-208.0

CHANGES IN EMPLOYMENT
(Thousands of employees; based on seasonally adjusted data)

	1996	1997	1997 Q3	1997 Q4	1998 Q1	1998 Feb.	1998 Mar.	1998 Apr.
	---Average monthly changes---							
Nonfarm payroll employment [1]	212	267	245	358	211	259	-24	262
Private	198	246	220	339	197	228	-26	243
Goods Producing	19	38	19	75	28	35	-95	21
Manufacturing	-5	19	12	40	14	1	-7	-10
Construction	24	19	7	35	15	35	-85	35
Service Producing	178	208	201	265	169	193	69	222
Transportation and utilities	9	16	13	2	27	28	15	-2
Trade	60	60	63	98	21	28	-12	55
Finance, insurance, real estate	11	16	16	23	22	20	28	30
Services	98	116	109	142	99	117	38	139
Help supply services	13	10	5	32	10	57	-21	30
Total government	14	21	25	19	15	31	2	19
Private nonfarm production workers [1]	168	198	161	273	145	271	-46	120
Manufacturing production workers	-5	14	9	32	8	2	-9	-15
Total employment [2]	232	240	123	339	72	80	-169	389
Nonagricultural	226	243	112	351	157	65	33	171
Memo:								
Aggregate hours of private production workers (percent change)[1,3]	2.9	3.0	1.6	4.5	4.8	0.6	-0.7	-0.4
Average workweek (hours) [1]	34.4	34.6	34.5	34.6	34.8	34.9	34.7	34.4
Manufacturing (hours)	41.5	42.0	41.8	42.1	42.0	42.0	41.8	40.7

Note. Average change from final month of preceding period to final month of period indicated.
1. Survey of establishments.
2. Survey of households.
3. Annual data are percent change from Q4 to Q4. Quarterly data are percent change from preceding period at an annual rate. Monthly data are percent change from preceding month.

Average Weekly Hours



exports. However, the March inventory reports came in much stronger than the BEA had assumed, contributing to a $26 billion upward revision to nonfarm inventory investment. The principal piece of information that the BEA will receive prior to its next estimate of first-quarter real GDP is the international trade data for March.

Labor Market Developments

Recent data suggest that labor demand remains robust. Nonfarm payroll employment rose 262,000 in April, and even with a decline in March of 24,000, growth of payroll employment has averaged 224,000 per month so far this year. Moreover, the still-low level of initial claims for unemployment insurance in recent weeks provides little hint of moderation.

In several areas, employment gains in April likely represented rebounds from below-trend March levels. Specifically, bad weather during the March survey reference week seemed to have depressed employment in construction, which rebounded 35,000 in April, and at eating and drinking places, which jumped 33,000. Nonetheless, employment increased solidly in a number of other industries. Strong gains at help supply and computer services firms contributed to a rise of 139,000 in services, and jobs in the finance and real estate industry rose another 30,000. In contrast, manufacturing employment fell 10,000 in April, for a third consecutive month of relative weakness.

As published, aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls declined in April for a second month. However, last month's change was distorted by the length-of-pay-period problem in the measurement of the workweek as well as by difficulties in seasonally adjusting hours in manufacturing for the Easter holiday.[1] Based on the BLS's experimental corrected workweek series, which adjusts for these two factors, aggregate hours rose 0.7 percent in April to stand 0.3 percent (not at an annual rate) above their first-quarter average.

In the household report, the unemployment rate plunged 0.4 percentage point in April, to 4.3 percent, after having held at around 4-3/4 percent since November. Declines were registered for most demographic and education groups. Even the rate for married men with a spouse present--a series that is a less noisy indicator

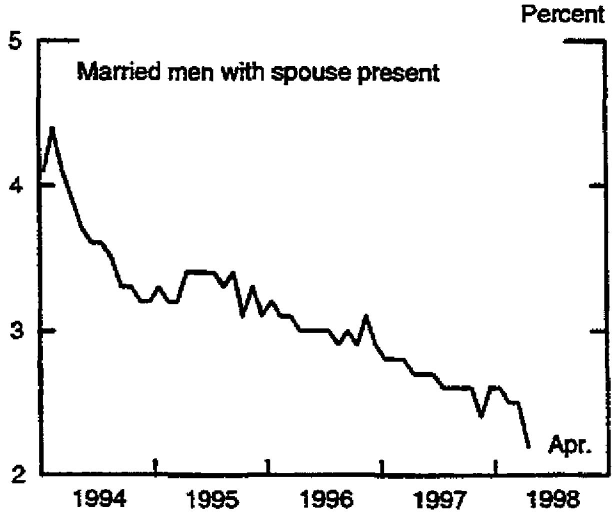
1. Details on the length-of-pay-period problem and its effects on various labor market data series are given in the appendix.

SELECTED UNEMPLOYMENT AND LABOR FORCE PARTICIPATION RATES [1]
(Percent; based on seasonally adjusted data, as published)

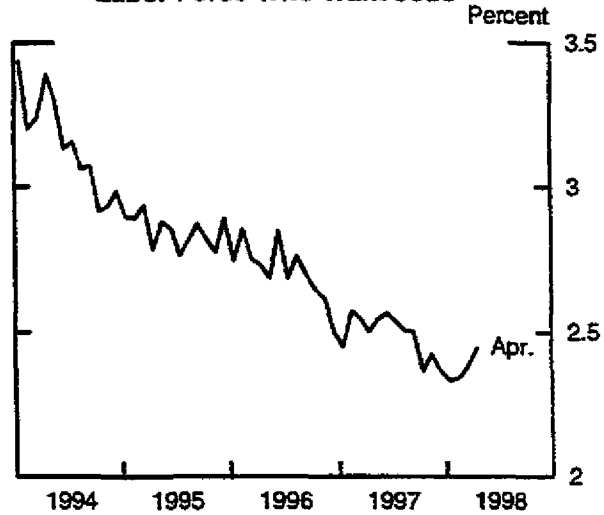
	1996	1997	1997 Q3	1997 Q4	1998 Q1	1998 Feb.	1998 Mar.	1998 Apr.
Civilian unemployment rate (16 years and older)	5.4	4.9	4.9	4.7	4.7	4.6	4.7	4.3
Teenagers	16.7	16.0	16.3	15.0	14.6	14.7	15.0	13.1
Men, 20 years and older	4.6	4.2	4.1	4.0	3.8	3.8	3.9	3.4
Women, 20 years and older	4.8	4.4	4.3	4.0	4.3	4.3	4.3	4.1
Labor force participation rate	66.8	67.1	67.1	67.1	67.3	67.3	67.2	67.0
Teenagers	52.3	51.6	51.1	51.4	53.3	53.3	53.5	51.8
Men, 20 years and older	76.8	76.9	76.9	76.9	76.9	76.9	76.7	76.9
Women, 20 years and older	59.9	60.5	60.6	60.5	60.6	60.6	60.7	60.3
Women maintaining families	65.3	67.4	68.0	68.2	67.9	68.3	66.8	67.3

1. Data for 1998 are not comparable with earlier years because of a methodological change introduced by the BLS in January 1998.

Unemployment Rate*

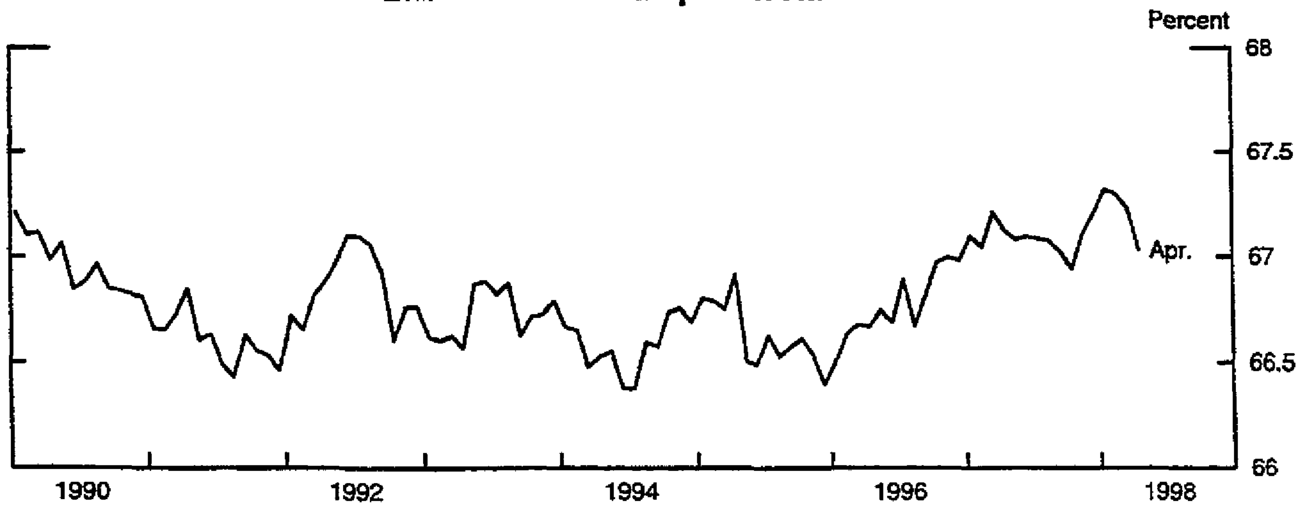


Percent of Population Not in the Labor Force Who Want Jobs*



Note. Seasonally adjusted by FRB staff.

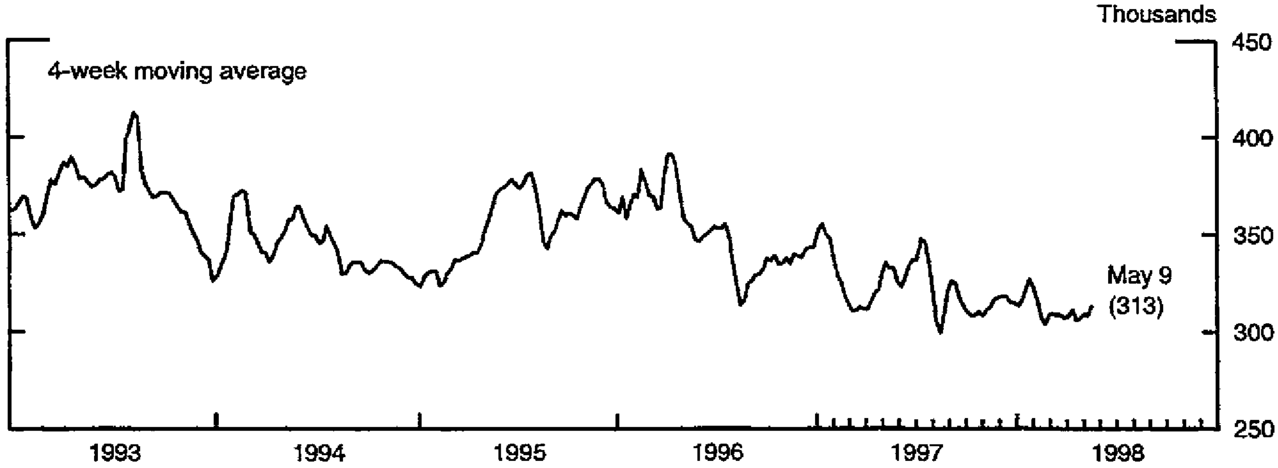
Labor Force Participation Rate*



Data after January 1998 are not strictly comparable to data before January 1998 due to methodological changes introduced by the BLS.

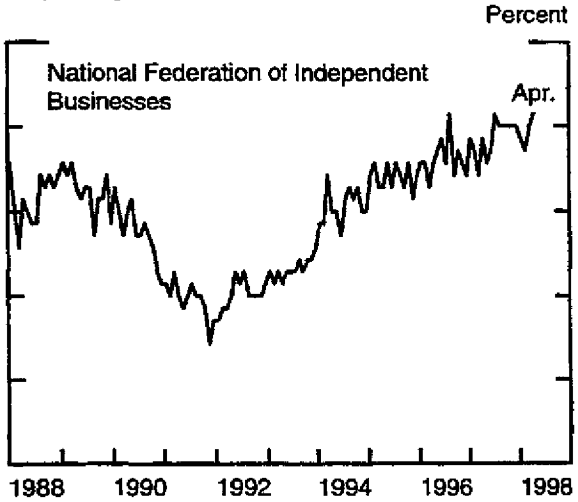
Labor Market Indicators

Initial Claims for Unemployment Insurance

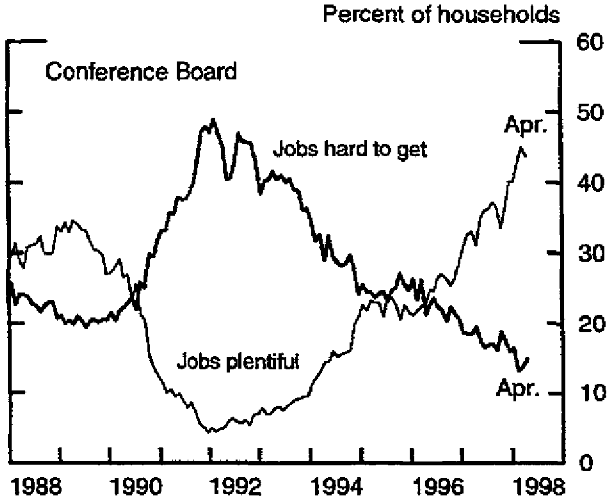


Note. State programs, includes EUC adjustment.

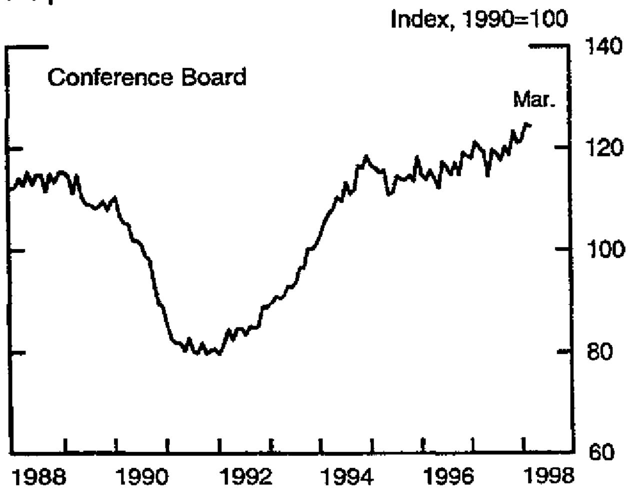
Reporting Positions Hard to Fill



Current Job Availability

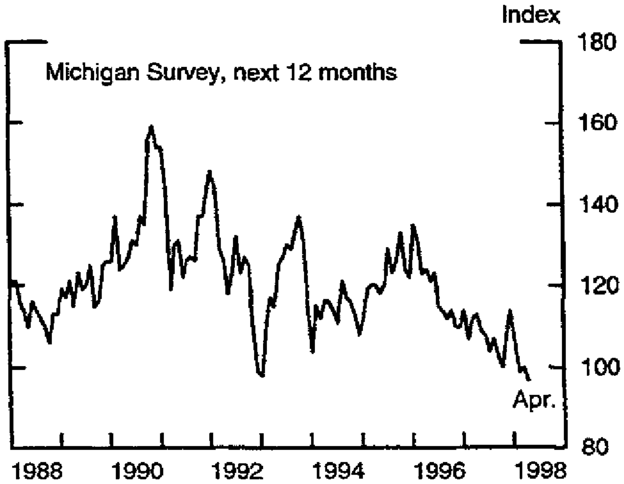


Help Wanted Index



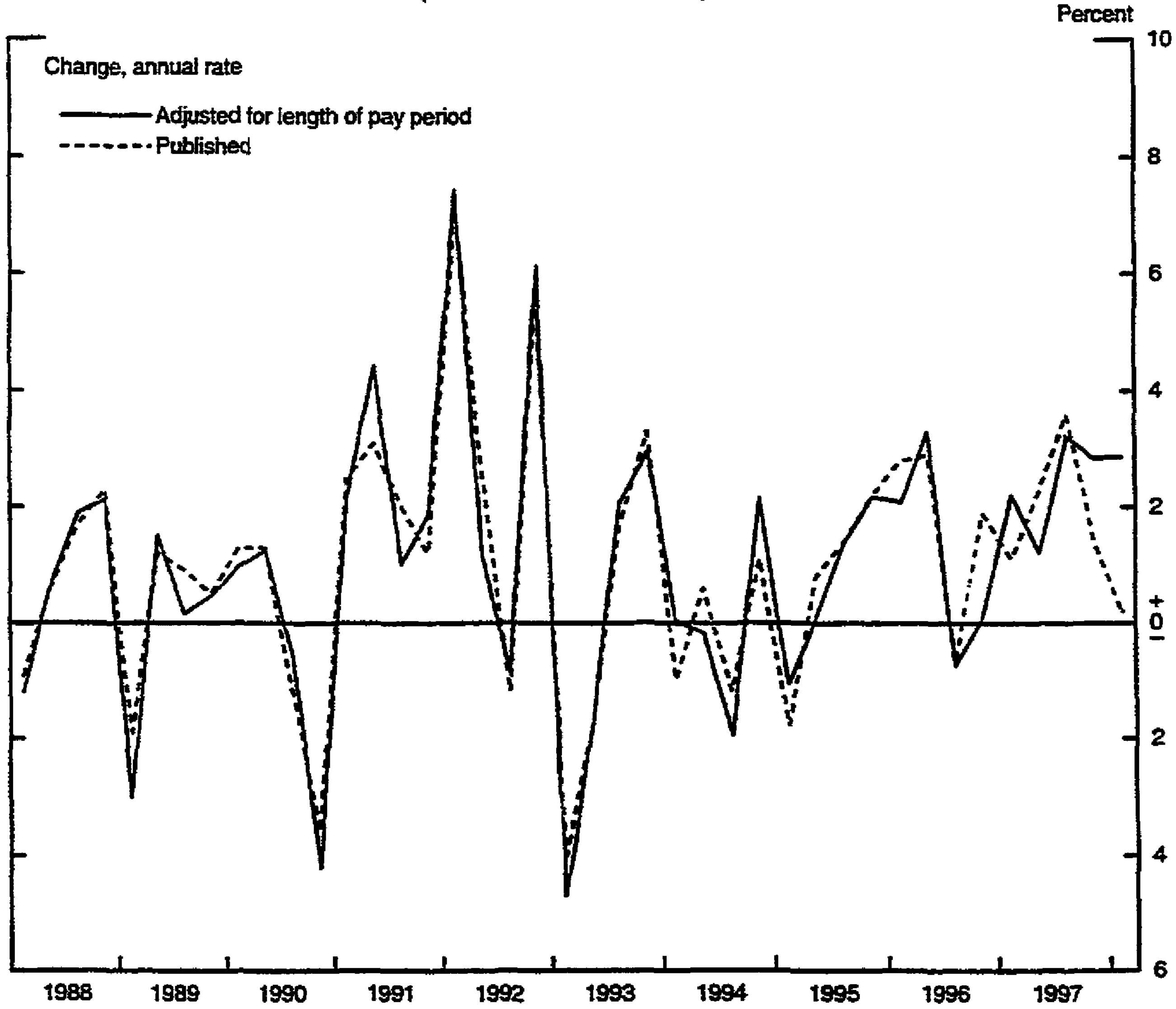
Note. Series has been adjusted to take account of structural and institutional changes, including consolidation of newspaper industry and tendency to increase hiring through personnel supply agencies.

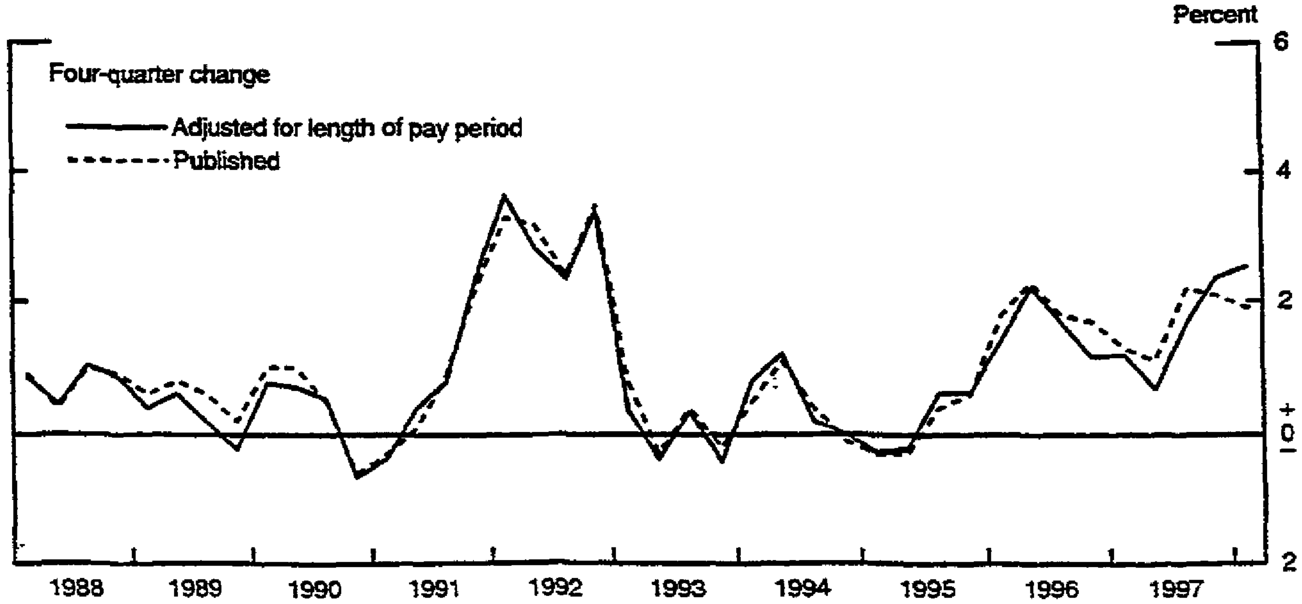
Expected Change in Unemployment



Note. Percentage expecting "more" minus percentage expecting "less" plus 100.

Productivity Growth
(Nonfarm business sector)





than the aggregate rate--fell 0.3 percentage point to its lowest level (2.2 percent) since 1973. The labor force participation rate also dropped back in April, from 67.2 percent to 67.0 percent, primarily because participation among teenagers--which is volatile from month to month--stepped down from its high level during the first quarter.

Other indicators of labor market activity lately have been consistently upbeat. In April, the index of the expected change in unemployment from the Michigan Survey Research Center survey moved to its most favorable reading since 1984. In the Conference Board survey, perceptions of current employment conditions deteriorated a bit in April but remained extremely positive, while consumers' expectations for employment conditions six months hence improved. The National Federation of Independent Businesses survey indicated that the percentage of small businesses reporting vacancies "hard to fill" rose one point, to 29 percent, in April. Although somewhat dated, the Conference Board's index of help wanted advertising held steady in March, well above its level one year earlier.

As published, productivity in the nonfarm business sector rose at an annual rate of just 0.2 percent in the first quarter, reflecting a 5.3 percent increase in output and a 5.0 percent increase in hours. As mentioned above, however, the estimates of the workweek that underlie the published hours numbers have not yet been corrected for the length-of-pay-period problem.[2] Using the BLS's corrected hours estimates, productivity rose 1.6 percent in the first quarter. Incorporating the expected revisions to output and using the corrected hours estimates, productivity rose 2.6 percent over the four quarters ended in 1998:Q1, compared with 1.2 percent over the previous four quarters.

Industrial Production

Industrial activity has decelerated sharply from the rapid pace of the second half of last year: On the basis of production hours and available physical product data, the staff estimates that industrial production rose slightly in April following a weak first

2. Although the BLS in June will revise the historical hours series to account for the workweek reporting problems at the same time it issues its rebenchmarked series, the productivity data will not be revised until August. At that time, the published quarterly patterns for productivity from 1989 through the first quarter of 1998 will change not only because of the updated information on hours, but also because of the incorporation of the annual revision to the output series.

quarter.[3] Some of the slowdown so far this year was attributable to unusually warm weather that damped utility output. More important, manufacturing growth slowed considerably: The staff believes that manufacturing output rose moderately in April following small declines in February and March.

Although motor vehicle assemblies picked up a bit in April, the deceleration in manufacturing so far this year had been exacerbated by the direct and indirect effects of a slower pace of motor vehicle production. Production was boosted temporarily in the latter part of 1997 to make up for shortfalls that occurred last spring and summer; since peaking in November, motor vehicle assemblies have dropped back 0.9 million units, to 12.2 million units at an annual rate in April. Even with this slowdown in production, inventories were a little on the high side in March and April, especially for

PRODUCTION OF DOMESTIC AUTOS AND TRUCKS
(Millions of units at an annual rate; FRB seasonal basis)

	1998			1997	1998	
	Feb.	Mar.	Apr.	Q4	Q1	Q2
						Sched.
U.S. production	12.0	11.8	12.2	12.7	12.1	12.4
Autos	5.4	5.3	5.5	5.9	5.5	5.6
Trucks	6.6	6.5	6.7	6.7	6.5	6.7
Days' supply						
Autos	62.7	64.5	61.3	60.1	64.5	...
Light trucks	75.2	74.9	74.6	70.6	74.9	...

Note. Components may not sum to totals because of rounding.

3. The staff estimate of growth in manufacturing production worker hours in April is 2.2 percentage points higher than BLS's estimate because of differences in the April seasonal adjustment factors. The differences arose because the BLS seasonal adjustment procedures assume that Easter affects hours paid only when Good Friday lands in the Sunday-to-Saturday pay period containing the 12th of April. This year, with Easter on April 12, Good Friday preceded the Sunday-to-Saturday pay period of April 12 to 18. In contrast to the BLS's procedures, the staff seasonal adjustment procedure allows for other Easter effects, two of which occurred this year. First, some firms, such as those in the motor vehicle industry, have Monday-to-Sunday pay periods, and Good Friday fell in their survey week. Second, some firms may be affected by a holiday for Easter Monday. On the basis of statistical analysis of changes in the workweek in past years, the staff estimates that the Good Friday and Easter Monday effects reduced actual manufacturing production worker hours in April about 1.6 percent.

light trucks. In response, the Big Three have stepped up sales incentives this quarter, as discussed later in the section on consumer spending.

Evidence is mounting that some of the slackening in production is attributable to the Asian crisis, although showing direct causal relationships at the industry level is difficult. The May Beige Book reported reduced Asian exports and increased competition from Asian firms for a variety of industries, particularly metals, industrial machinery, high technology equipment, apparel, paper, and chemicals.[4] Production in the chemical industry has recently slowed, and the inventory-to-sales ratio has risen to the highest level since 1991. Output in the semiconductor industry also appears to have decelerated noticeably in recent months. Manufacturers of semiconductor equipment have been affected by the Asian crisis: Several Asian firms have cancelled or pushed back orders for this equipment, and a survey by the industry trade association indicates that manufacturers expect orders to decline 12 percent this year.

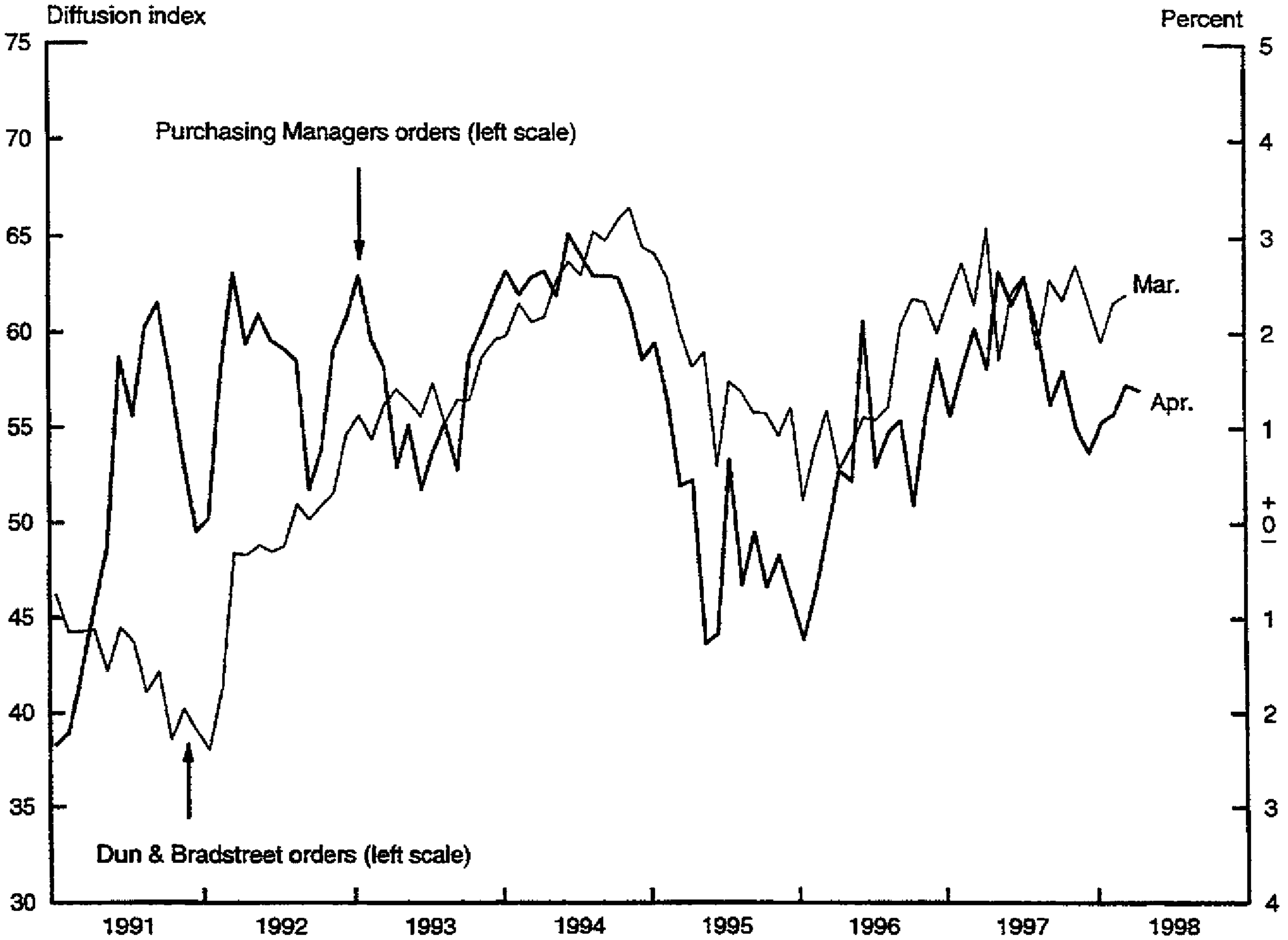
NEW ORDERS FOR DURABLE GOODS
(Percent change from preceding period, seasonally adjusted)

	Share, 1997:H2	1997 Q4	1998 Q1	1998 Jan.	1998 Feb.	1998 Mar.
Total durable goods	100.0	2.0	-.9	1.6	-.9	.5
Adjusted durable goods[1]	69.0	-.1	.9	-.6	1.6	.5
Computers	5.0	-3.5	13.4	3.7	3.7	4.1
Nondefense capital goods excluding aircraft and computers	17.0	-.6	2.3	2.4	2.3	-1.1
Other	47.0	.8	-.7	-1.9	2.0	-.4
Memo:						
Real adjusted orders[2]	...	.6	2.2	-.1	2.0	1.1

1. Orders excluding defense capital goods, nondefense aircraft, and motor vehicle parts.
2. Nominal adjusted durable goods orders were split into three components: computers, electronic components, and all other. These components were deflated and then aggregated in a chain-weighted fashion.

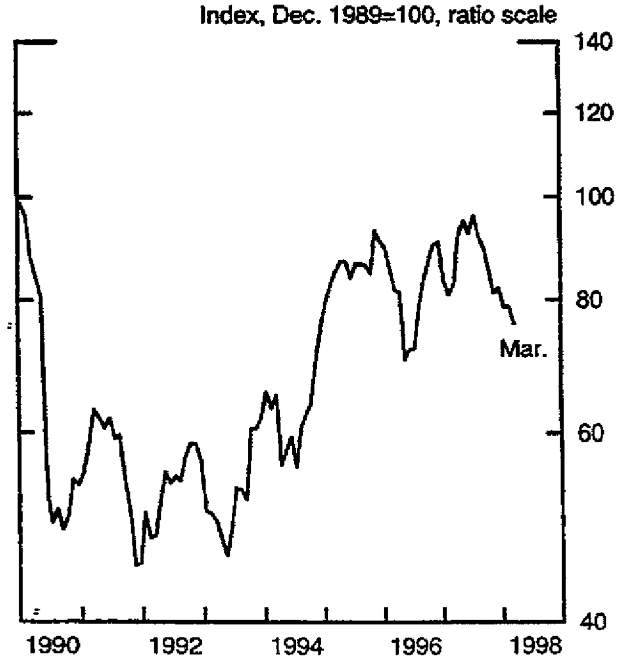
4. In addition, NAPM surveys have indicated that the percentage of manufacturers reporting declines in export orders has exceeded the percentage reporting increases so far this year.

Indicators of Future Production



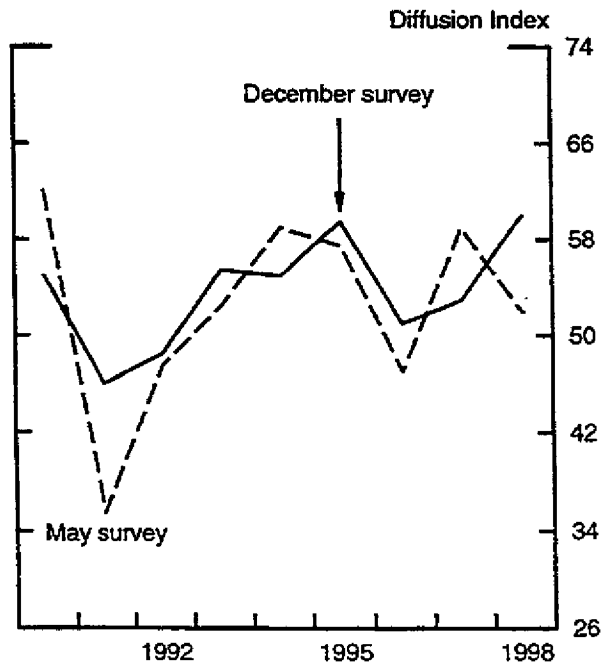
Contracts for Industrial Buildings

(Six-month moving average)



Capital Expenditure Plans

Semiannual NAPM



Leading indicators of industrial production point to moderate growth over the next few months. The staff's estimate of real adjusted durable goods orders advanced 2.2 percent (not at an annual rate) in the first quarter, 1.6 percentage points faster than in the fourth quarter of last year. The new orders index from the National Association of Purchasing Management also turned up in recent months, while the new orders index from the Dun & Bradstreet Manufacturing Survey remains at a high level (chart).

Recent indicators suggest that manufacturers may have scaled back their capacity expansion plans. The six-month moving average of contracts for industrial buildings has fallen from the high level reached last summer (chart). Also, according to a semiannual NAPM survey released this month, a substantially smaller percentage of manufacturers are planning to increase capital spending in 1998 than were planning such an increase in December (chart).

Consumption and Personal Income

Growth in consumer spending has remained strong, and the fundamentals continue to be highly favorable. Real income gains have been robust this year, household net worth has soared further, and consumer sentiment continues to hover near record levels.

The only household spending data available for the second quarter are for goods. Nominal sales in the retail control category, which excludes sales at automotive dealers and building material and supply stores, increased 0.4 percent in April. Nominal outlays rose in all major nondurable goods components. However, sales moved lower at stores selling furniture and appliances and "other durable goods." On the basis of retail sales and CPI reports, the staff estimates that real personal consumption expenditures for goods excluding motor vehicles increased 0.4 percent in April to a level 0.9 percent above that in the first quarter.

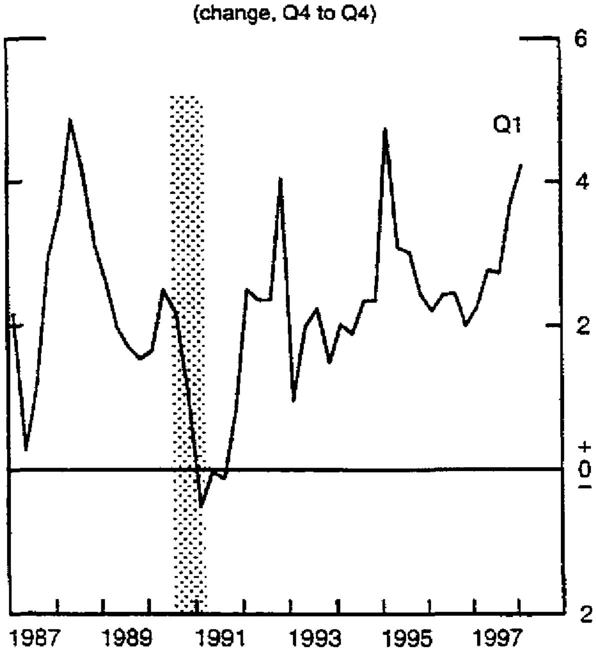
In April, light vehicle sales (adjusted for shifts in reporting periods) rose 200,000 units, to nearly 15-1/2 million units (annual rate). The increase was concentrated in sales at the Big Three and likely reflected, in part, the effects of a sharp increase in incentives (chart). In response to concerns about inventories and market share, the Big Three initiated a "coupon" program that runs to the beginning of July and offers discounts of between $500 and $1,000 per vehicle to original owners who still drive a Big Three vehicle. The combination of aggressive pricing and strong gains in

RETAIL SALES
(Percent change; seasonally adjusted)

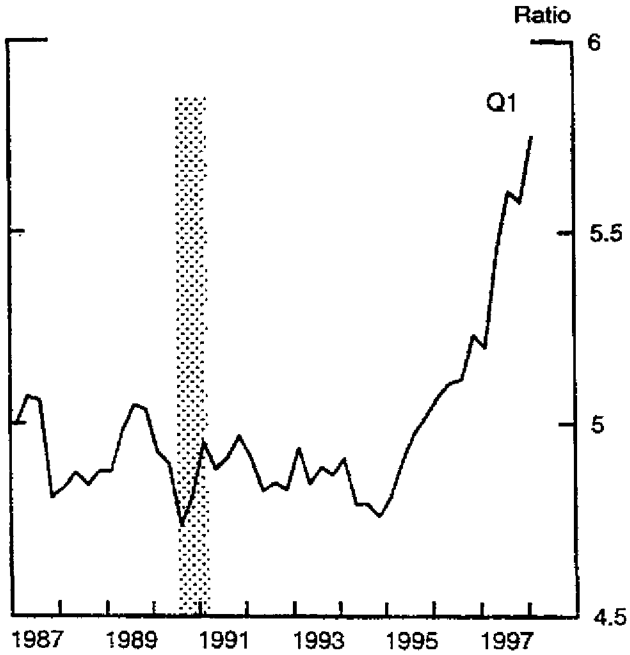
	1997 Q4	1998 Q1	1998 Jan.	1998 Feb.	1998 Mar.	1998 Apr.
Total sales	.2	2.0	1.0	.9	.0	.5
Previous estimate[1]		1.9		.7	-.0	
Building materials and supplies	1.3	5.5	4.0	1.2	.0	1.6
Automotive dealers	-.2	2.2	-.3	1.0	-.1	.7
Retail control[2]	.2	1.6	1.2	.8	.0	.4
Previous estimate[1]		1.5		.6	.3	
Durable goods	2.0	3.9	3.2	.4	-1.1	-.4
Furniture and appliances	1.7	4.8	3.3	.0	-.5	-.4
Other durable goods	2.1	3.1	3.1	.8	-1.5	-.4
Nondurable goods	-.2	1.1	.8	.9	.2	.6
Apparel	-.8	4.0	2.8	1.3	.0	1.3
Food	.3	.1	-.3	.8	.5	.4
General merchandise	.9	2.9	1.9	1.5	.2	.8
Gasoline stations	-.7	-5.0	-2.1	-1.4	-1.3	.1
Drug stores	.7	2.4	2.2	.8	-.2	1.2
Other nondurable goods	-1.1	2.0	1.3	1.2	.6	.5

1 Reflects revised retail sales data released on May 1.
2. Total retail sales less sales at building material supply stores and automotive dealers, except auto and home supply stores.

Real Disposable Personal Income
(change, Q4 to Q4)



Ratio of Net Worth to Disposable Income



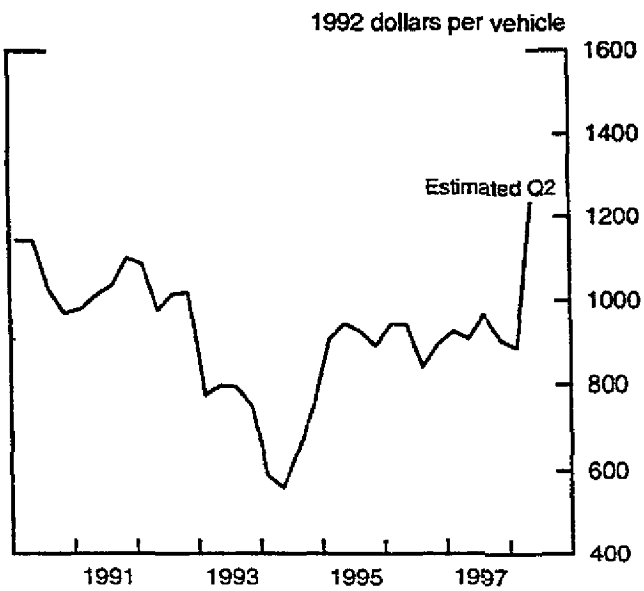
SALES OF AUTOMOBILES AND LIGHT TRUCKS
(Millions of units at an annual rate; FRB seasonals)

			1997		1998	1998		
	1996	1997	Q3	Q4	Q1	Feb.	Mar.	Apr.
Total	15.1	15.1	15.3	15.3	14.8	15.0	15.0	15.4
Adjusted[1]	15.0	15.1	15.3	15.0	15.1	14.9	15.2	15.4
Autos	8.5	8.3	8.4	8.2	7.8	8.0	8.0	8.2
Light trucks	6.6	6.9	6.9	7.1	7.0	7.0	7.1	7.3
North American[2]	13.4	13.2	13.3	13.3	12.9	12.9	13.2	13.5
Autos	7.3	6.9	7.1	6.8	6.5	6.6	6.6	6.8
Big Three	5.3	4.9	5.1	4.8	4.6	4.7	4.7	4.9
Transplants	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9
Light trucks	6.1	6.3	6.3	6.5	6.4	6.3	6.5	6.6
Foreign produced	1.7	1.9	2.0	2.0	1.9	2.1	1.9	2.0
Autos	1.3	1.4	1.4	1.4	1.3	1.4	1.3	1.4
Light trucks	.4	.6	.6	.6	.6	.6	.6	.6

Note. Components may not sum to totals because of rounding. Data on sales of trucks and imported autos for the most recent month are preliminary.

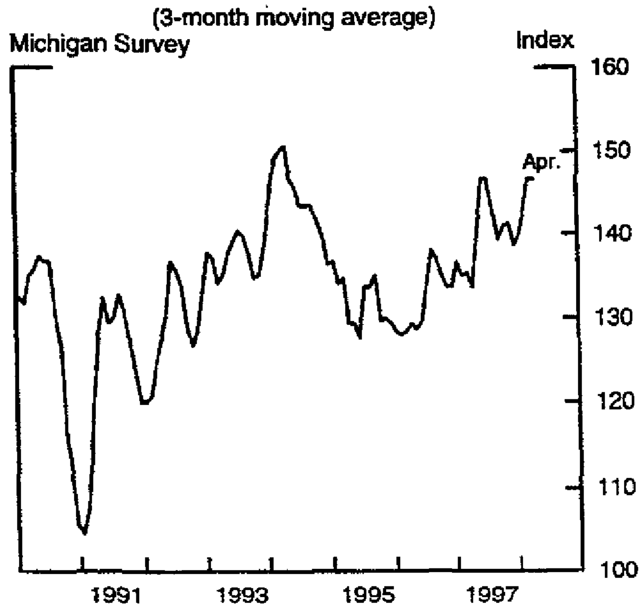
1. Excludes the estimated effect of automakers' changes in reporting periods.
2. Excludes some vehicles produced in Canada that the industry classifies as imports

New Car and Light Truck Incentives



Note. Incentive data from J D. Powers, deflated by CPI for all items.

Buying Attitudes for New Vehicles
(3-month moving average)



REAL PCE SERVICES
(Percent change from the preceding period)

	1997	1997 Q3	1997 Q4	1998 Q1	1998 Jan.	1998 Feb.	1998 Mar.
	Q4/Q4	----- Annual rate		-----	--- Monthly rate		---
PCE Services	4.0	3.9	4.4	3.5	.2	.1	.6
Energy	-.6	-6.6	4.4	-17.1	-6.7	-.2	9.6
Non-energy	4.2	4.4	4.4	4.5	.5	.1	.3
Housing	2.1	2.0	2.1	2.4	.3	.1	.2
Household operation	5.2	8.3	7.2	7.3	.9	.6	.3
Transportation	5.0	6.1	5.6	3.7	-.4	.3	.1
Medical	2.8	3.1	1.5	1.3	-.1	.1	.0
Recreation	7.8	4.8	10.9	13.6	2.5	-.5	.2
Personal business	6.8	7.5	7.8	7.5	1.0	.2	.5
Other	6.4	5.4	6.9	6.7	.9	-.2	.9

Note. Derived from billions of chained (1992) dollars.

PERSONAL INCOME
(Average monthly percent change)

	1997	1997 Q4	1998 Q1	1998 Jan.	1998 Feb.	1998 Mar.
	Q4/Q4	Annual rate		--- Monthly rate		---
Total personal income	6.0	6.3	6.6	.5	.6	.3
Wages and salaries	7.1	8.9	8.8	.7	.9	.2
Private	7.8	10.1	9.6	.8	1.0	.2
Other labor income	3.0	3.6	3.6	.3	.3	.3
Less: Personal tax and nontax payments	10.8	10.0	4.1	-.4	1.0	.0
Equals: Disposable personal income	5.2	5.7	7.1	.7	.6	.4
Memo:						
Real disposable income[1]	3.7	4.5	6.8	.7	.5	.4
Saving rate (percent)	3.9	3.9	4.2	4.1	4.4	4.2

1. Derived from billions of chained (1992) dollars.

income and wealth kept consumer attitudes toward new vehicle purchases at a high level in April (chart).

Real outlays for services rose 3-1/2 percent at an annual rate in the first quarter. Spending for recreation services picked up noticeably, and brisk activity in the stock market helped to boost brokerage services--a component of personal business services. However, warmer-than-average temperatures held down expenditures for energy last quarter. Temperatures in April were about average, and if this pattern were to continue through May and June, we would expect to see higher outlays for energy provide a considerable boost to PCE this quarter.

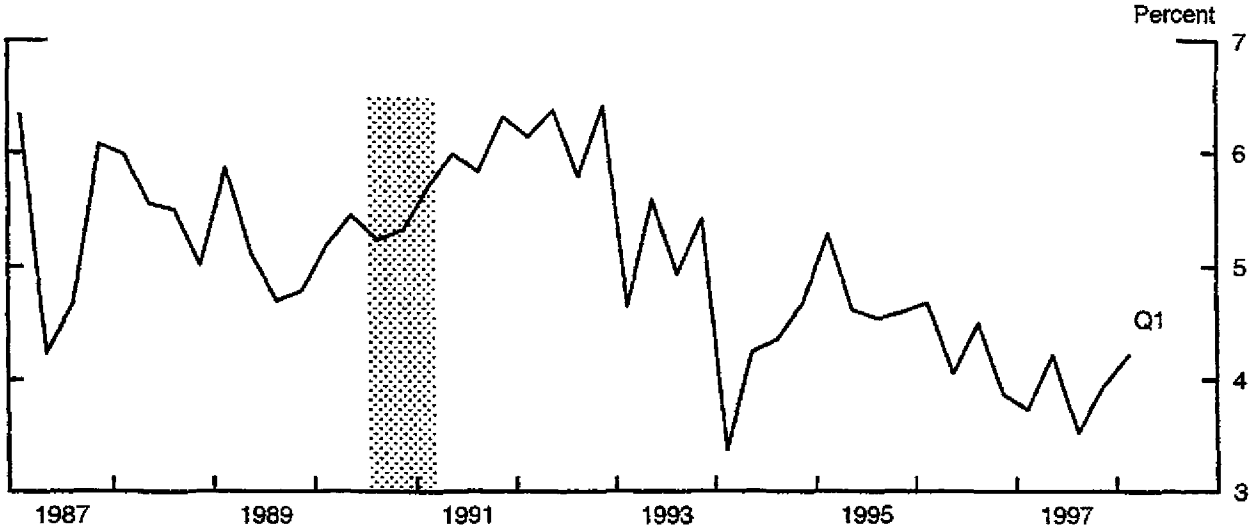
BEA's advance estimate showed that real disposable personal income surged 6-3/4 percent at an annual rate in the first quarter, and the saving rate rose to 4.2 percent. As usually occurs in the first quarter of the year, the level of the saving rate was overstated (about 1/4 percentage point) because the BEA does not seasonally adjust the annual federal government pay increase or cost-of-living adjustments to federal tax and transfer programs that take effect each January.[5] In addition, the introduction of new tax provisions under the Taxpayer Relief Act of 1997 held down personal tax payments in the first quarter--boosting DPI. However, the unanticipated surge in tax receipts this spring, which is discussed in the federal government section, points to an upward revision to NIPA personal income taxes in the first quarter because BEA spreads the April payments over the entire year. All else equal, this revision to personal income taxes would lower BEA's first-quarter estimates of DPI and the saving rate. Turning to April, the labor market report suggests that real DPI posted another sizable gain.[6]

5. The BEA's practice of introducing these changes in the first quarter of each year without seasonal adjustment leads to an overstatement of the saving rate over the first half of the year and an understatement of the saving rate over the second half of the year.

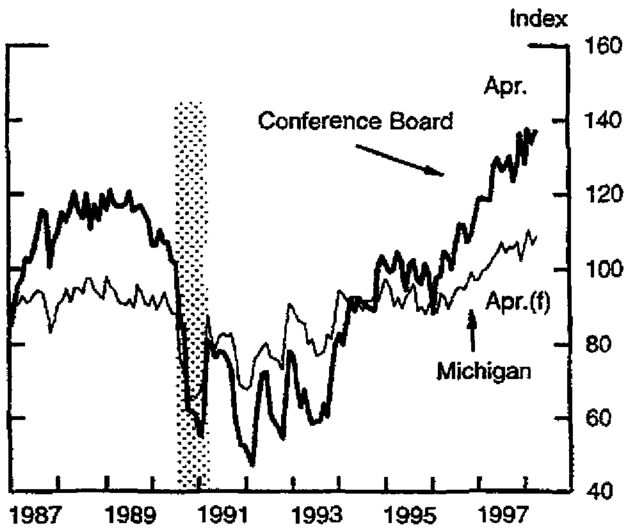
6. As discussed in the section on labor markets, average weekly hours in the employment report were likely understated in April because of reporting problems associated with the length of pay periods and because of seasonal adjustment difficulties with the Easter holiday. This understatement probably will not carry through entirely in the estimate of hours used to generate NIPA wage and salary income because BEA adjusts the BLS data to reflect an estimate of the workweek that likely prevailed over the entire month.

Household Indicators

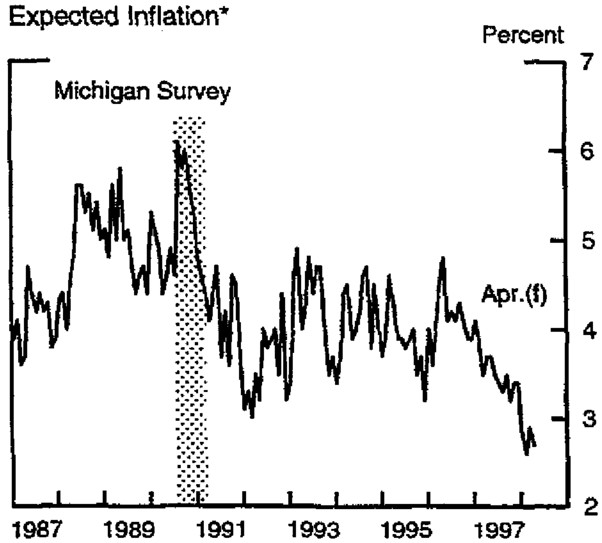
NIPA Personal Saving Rate



Consumer Confidence

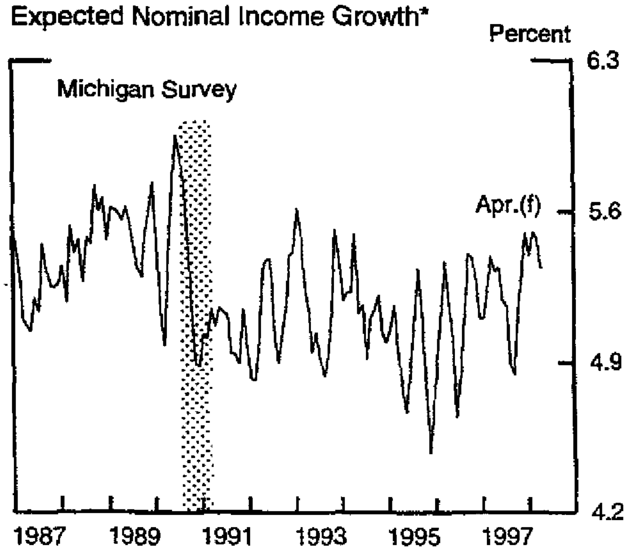


Expected Inflation*



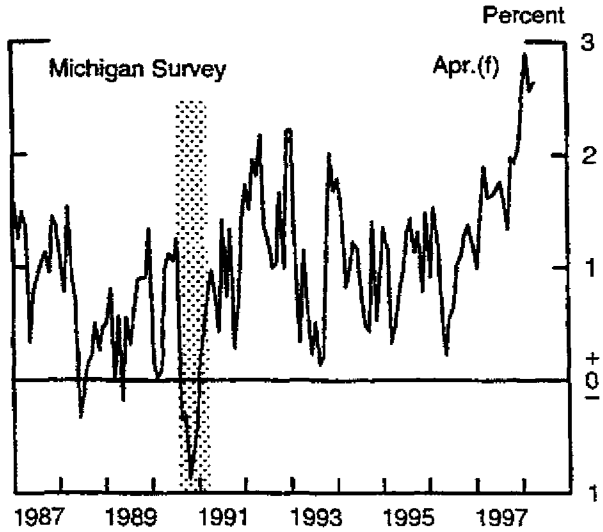
*Mean over the next 12 months.

Expected Nominal Income Growth*



*Over the next 12 months, 3-month moving average.

Expected Real Income Growth*



*Over the next 12 months, 3-month moving average.

Consumers remain extremely upbeat. The Conference Board index of consumer confidence rose in April. Respondents had somewhat less favorable appraisals of current business and employment conditions, but they were considerably more optimistic about business conditions, jobs prospects, and income gains over the next six months. The Michigan SRC index of consumer sentiment also rose in April and remains just a touch below the historical high reached in February. One factor supporting consumer sentiment appears to be favorable appraisals of future *real* income gains, which can be constructed from survey responses regarding nominal income and expected inflation. The improved expectations regarding real income gains reflect the decline in expected inflation, which has been important for some time, and the more recent improvement in expected nominal income growth over the coming year.[7]

Housing Markets

The market for single-family housing has expanded rapidly in recent months. During the first quarter, sales of existing homes rose to a strong 4.7 million unit annual rate;[8] sales of new homes were at the highest pace in any quarter except one in the late 1970s. Home sales have been boosted by the continuing improvement in housing affordability resulting from declining mortgage rates and rapidly growing employment. Also, the huge increase in financial wealth no doubt has added to housing demand.

Construction of single-family homes rose 9 percent in the first quarter, to an annual rate of 1.24 million units, the highest quarterly average since late 1993. Many analysts had attributed a large part of the strength of starts in January and February to an artificial boost from unusually warm weather. However, the weather

7. Each month, the SRC reports the expected nominal income growth over the coming year by the share of respondents in fixed ranges. The ranges are 1-4 percent, 5 percent, 6-9 percent, 10-24 percent, and 25 percent or more. Expected nominal income growth was generated by weighting the midpoint of each range by the respective share of respondents. The value for the top range was set at 25 percent. Individuals who assumed that their incomes would rise but did not specify a value were given the midpoint of the lowest range (2.5 percent). The SRC does not report a value for those who expect their incomes to decline, so they were assigned the value of -2.5 percent. This construction implies that the *change* in expected nominal income growth is a more reliable indicator than the level.

8. Existing home sales have also been running quite high relative to the stock of housing units that are either owner occupied or vacant and for sale; however, this ratio was not as high in the first quarter as during the late 1970s.

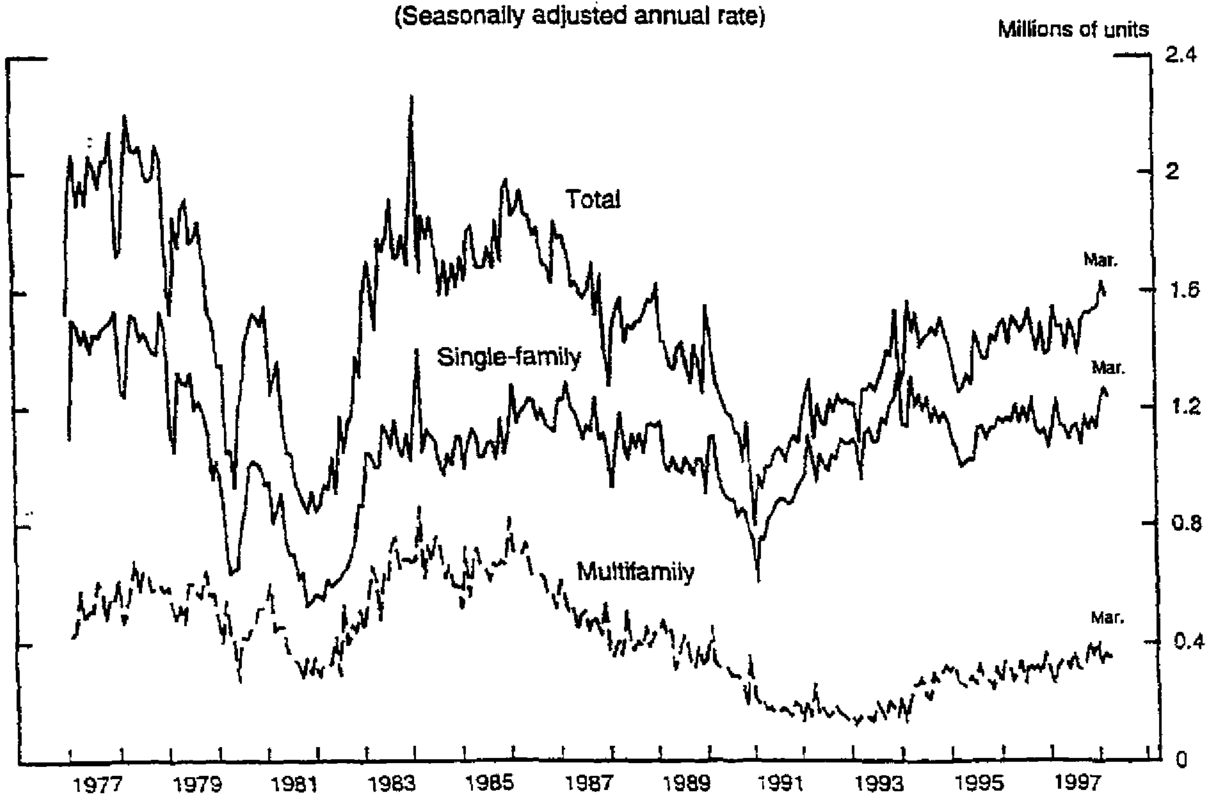
Private Housing Activity
(Millions of units; seasonally adjusted annual rate)

	1997	1997		1998			
	1997	Q3	Q4	Q1p	Jan.r	Feb.r	Mar.p
All units							
Starts	1.47	1.45	1.53	1.59	1.55	1.64	1.59
Permits	1.44	1.42	1.47	1.58	1.53	1.63	1.58
Single-family units							
Starts	1.13	1.13	1.14	1.24	1.23	1.27	1.24
Permits	1.06	1.04	1.07	1.15	1.13	1.16	1.15
Adjusted permits[1]	1.12	1.10	1.15	1.23	1.24	1.24	1.22
New home sales	.80	.81	.83	.85	.85	.87	.83
Existing home sales	4.22	4.25	4.38	4.68	4.37	4.77	4.89
Multifamily units							
Starts	.34	.32	.39	.35	.32	.37	.35
Permits	.39	.38	.40	.43	.39	.46	.44
Mobile homes							
Shipments	.35	.35	.35	n.a.	.36	.38	n.a.

Note. p Preliminary. r Revised. n.a. Not available.

1. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas, and a correction for starts occurring in permit issuing places, but without a permit.

Private Housing Starts
(Seasonally adjusted annual rate)



in January and February was also extremely wet, which generally depresses construction. Furthermore, single-family starts declined only 2-1/2 percent in March, even though the weather turned colder than normal and remained unusually wet. The absence of an appreciable "payback" in March suggests that the strength of single-family starts in the first quarter may have been due less to the weather and more to the underlying fundamentals.

Builders appear to have been exercising considerable restraint with regard to inventories, presumably in an effort to avoid repeating past episodes of overbuilding. For example, from the first quarter of 1997 to the first quarter of this year, the average number of units for sale declined 4 percent, even though sales rose nearly 4 percent. In terms of the number of months of sales, the inventory declined from 4.5 months to only 4.1 months, the lowest quarterly ratio on record.[9] The historically low level of unsold homes in relation to sales has likely been an additional factor underlying the increase in single-family starts in the first quarter.

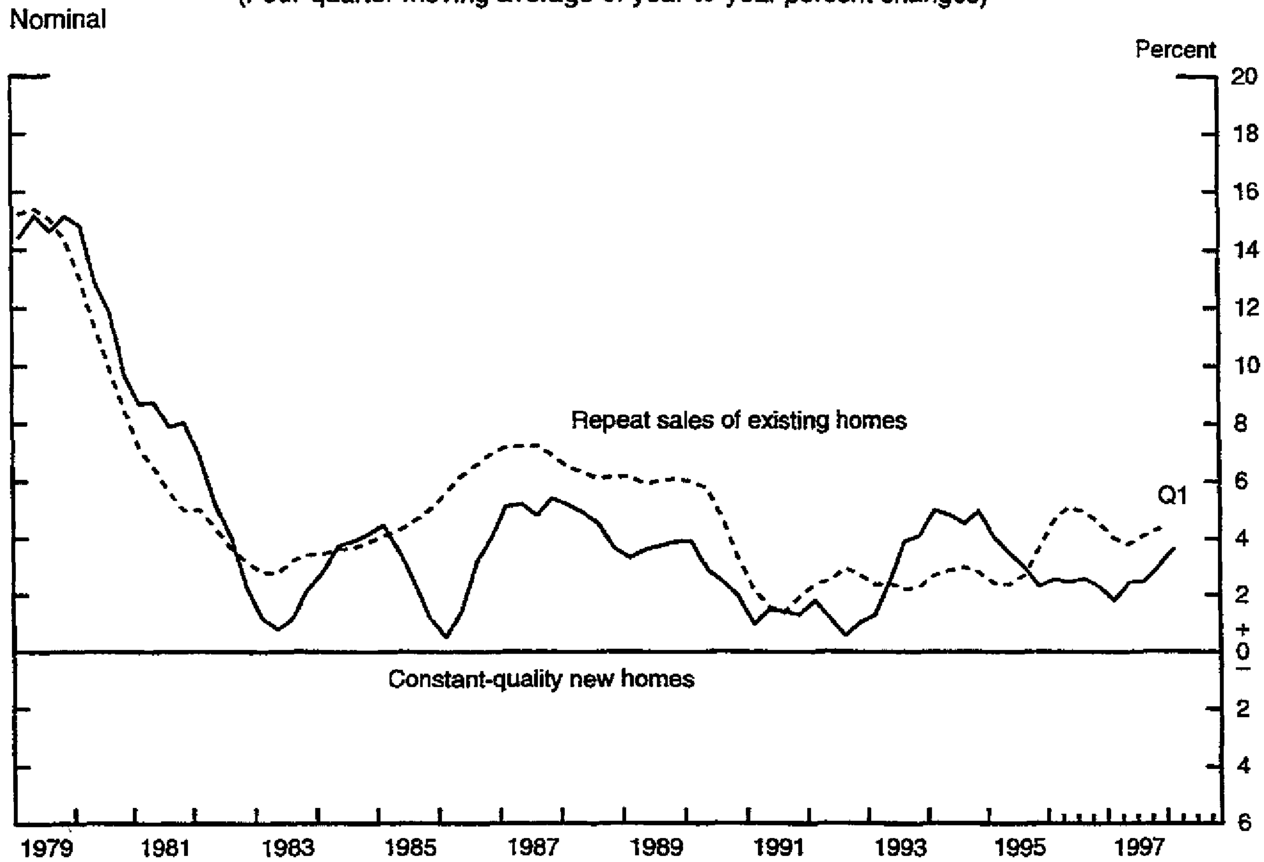
The combination of strong sales and declining inventories has been reflected in rising house prices. The rates of increase in the nominal price indexes for both new (constant-quality) homes and for repeat sales of existing homes have moved above their respective averages for the period beginning in the early 1980s but remain below the upper end of their ranges in recent years (chart, upper panel).[10] In real terms, these house prices have also accelerated

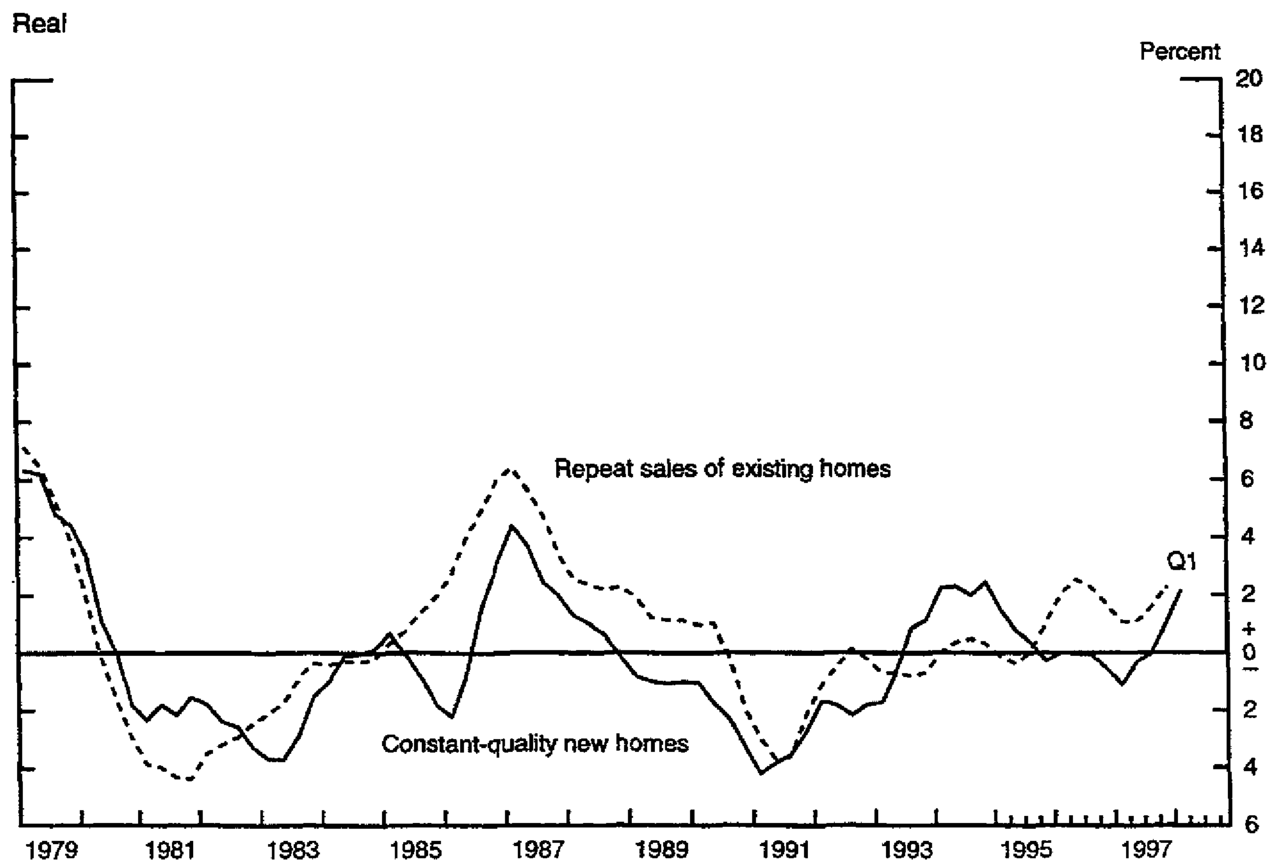
9. Part of the decline in inventories reflects adjustments made by the Census Bureau from mid-1996 to mid-1997 to weed out units that were classified as for sale but that no longer were being actively marketed. In addition, in recent months builders in some regions have reported difficulty in hiring skilled workers; although such reports suggest that some of the decline in inventories may reflect an inability of builders to increase construction as quickly as they desire, these reports have not been widespread.

10. The chart shows the year-over-year changes in the constant-quality price index for new homes and in the repeat sales index for existing homes that are smoothed with a four-quarter moving average. Both indexes control for the regional composition of sales and seek to minimize the effects of shifts in the mix of structural features of homes sold. However, in addition to changes in the underlying trend of house prices, the repeat sales index reflects the net effect of home improvements, structural deterioration, and changes in neighborhood characteristics between earlier and later dates of sale; observations that show extremely large increases or decreases in price are excluded.

Change in House Prices

(Four-quarter moving average of year-to-year percent changes)





Note: Nominal house price indexes divided by the consumer price index excluding shelter.

in recent quarters (lower panel);[11] these recent rates of increase are near the upper end of their ranges in recent years, although they are still below the levels of the late 1970s and the mid-1980s. In sum, both nominal and real house prices have risen; however, the acceleration to date has been modest.

Multifamily housing starts retreated sharply in the first quarter following a burst of activity in the fourth quarter of 1997, but they remained above the average pace during 1997. Nonetheless, starts appear to have been running low relative to permit issuance, and the stock of unused permits for multifamily units has edged up, suggesting some potential for construction to rise. Moreover, the multifamily rental vacancy rate in the first quarter was unchanged from its level a year earlier, which was the lowest first-quarter level since 1986.[12]

Business Fixed Investment

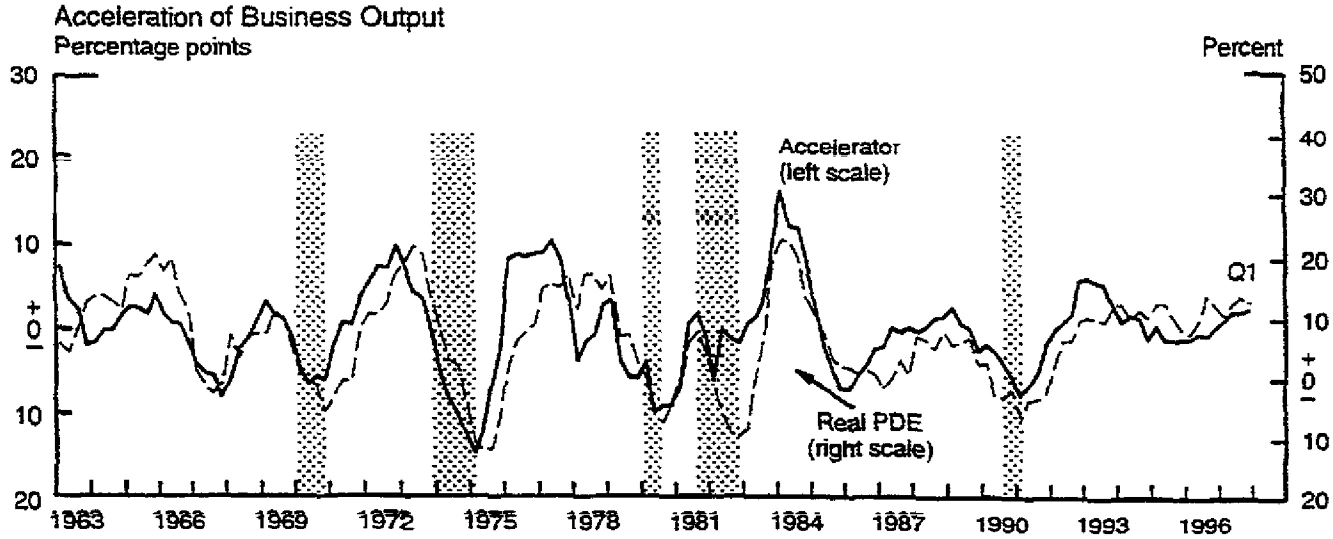
Real business fixed investment rebounded from its fourth-quarter decline to post an increase of 18 percent at an annual rate in the first quarter. This expansion was driven by soaring expenditures on producers' durable equipment, which grew at a 29 percent annual rate, the largest quarterly gain since the fourth quarter of 1983. Outlays on nonresidential structures, however, remained depressed. Looking forward, some slowdown from the heady growth of the first quarter seems likely, although a strong orders picture and the recent strength in business output point to the potential for growth to remain at a substantial pace in coming quarters.

While the first-quarter surge in spending on producers' durable equipment reflected widespread strength, real outlays on office and computing equipment again led the way. The first-quarter growth rate of 93 percent at an annual rate for this category was driven by the steepest decline in prices in twenty years. A number of factors contributed to this exceptional price decline. First was Compaq's decision to cut inventories by moving toward the "channel assembly" method of production, which involves pushing inventory closer to the customer by shipping components to resellers, who then assemble them into a branded computer. This inventory adjustment was facilitated

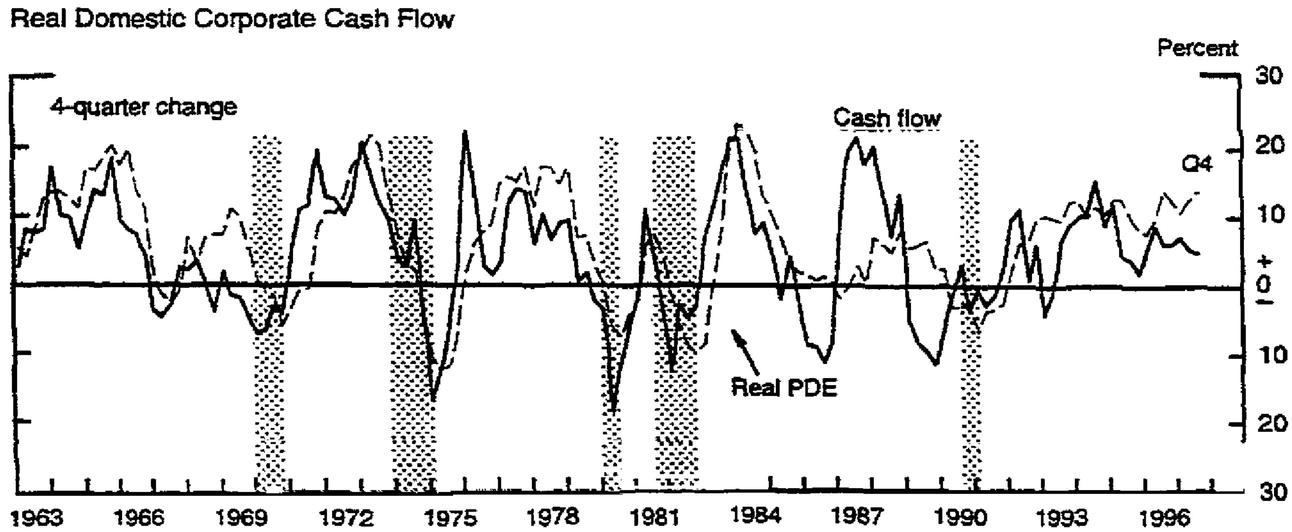
11. Real house price indexes were calculated by dividing the nominal house price indexes by the consumer price index excluding shelter.

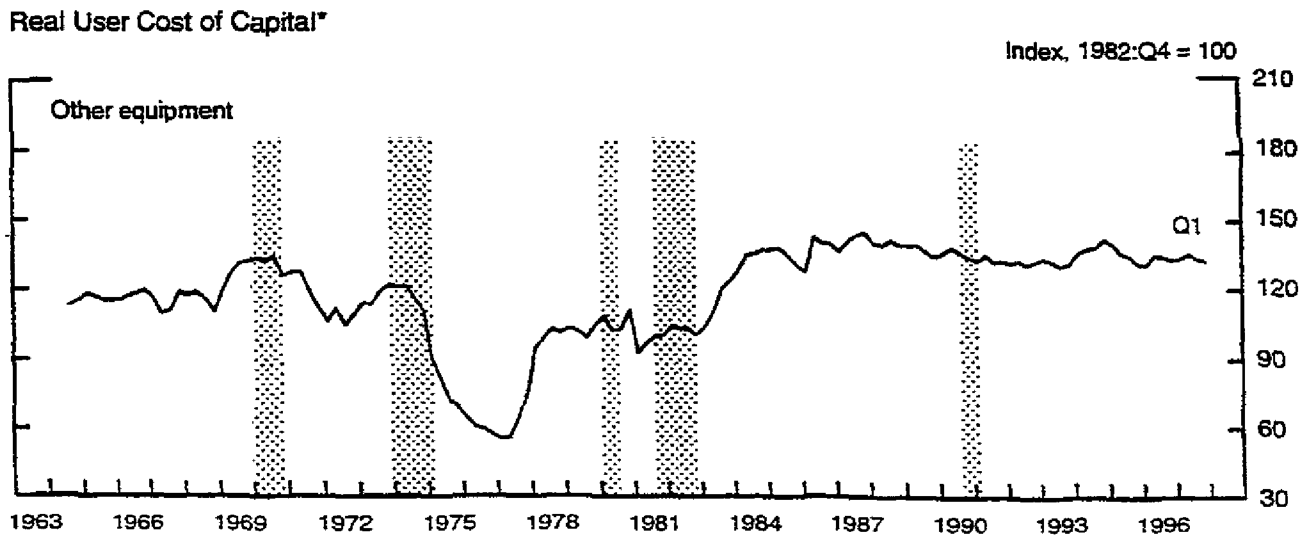
12. Comparisons are made on a same-quarter basis because these Census data are not seasonally adjusted.

Determinants of Equipment Spending



Note. The accelerator is the 8-quarter percent change in business output less the year-earlier 8-quarter percent change
Real PDE is the percent change over the most recent four quarters.





* Staff estimate.

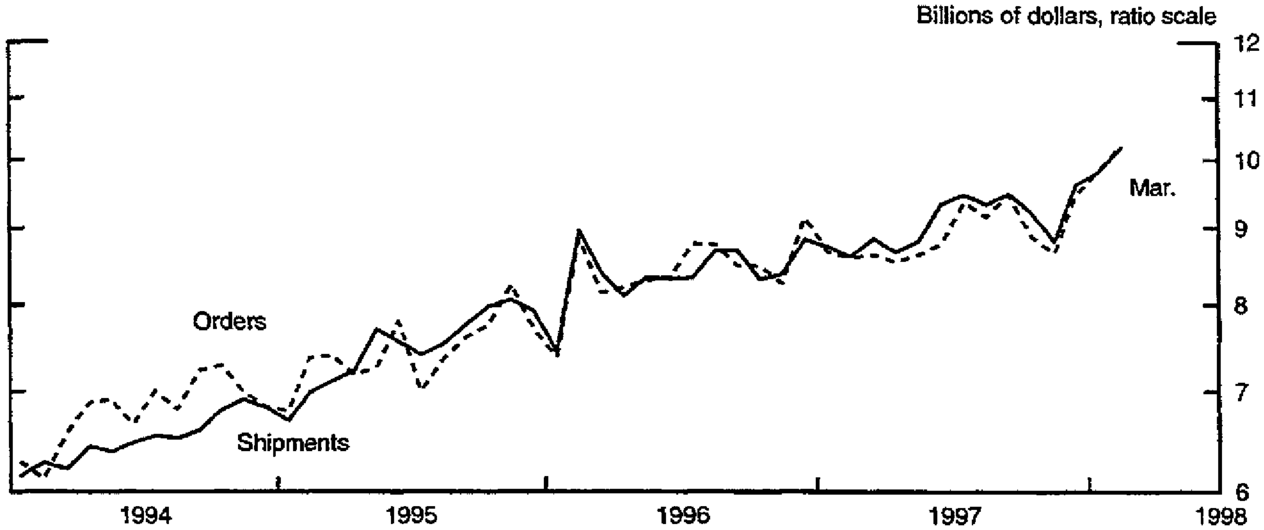
BUSINESS CAPITAL SPENDING INDICATORS
(Percent change from preceding comparable period;
based on seasonally adjusted data, in current dollars)

	1997			1998	1998		
	Q2	Q3	Q4	Q1	Jan.	Feb.	Mar.
Producers' durable equipment							
Shipments of nondefense capital goods	5.5	3.9	-.6	5.3	1.6	1.6	2.2
Excluding aircraft and parts	4.1	4.0	.3	4.1	.0	2.5	2.6
Office and computing	2.3	5.5	-2.2	10.5	1.9	3.6	4.2
Communications equipment	6.2	7.8	-1.3	4.5	.0	5.3	-.4
All other categories	4.3	2.6	1.6	1.6	-.8	1.4	2.8
Shipments of complete aircraft[1]	23.3	6.7	4.5	n.a.	12.9	-1.0	n.a.
Sales of heavy trucks	-1.8	4.7	4.9	3.3	-3.0	2.5	4.8
Orders of nondefense capital goods	-.5	6.5	7.3	-1.9	13.5	-4.2	-.4
Excluding aircraft and parts	.3	7.2	-1.2	4.7	2.7	2.7	.1
Office and computing	.2	7.8	-3.5	13.4	3.7	3.7	4.1
Communications equipment	4.6	-.6	-5.7	21.9	29.9	-6.3	.2
All other categories	-.7	9.1	.7	-2.3	-3.9	5.0	-1.4
Nonresidential structures							
Construction put in place, buildings	-2.0	3.2	-1.1	-.7	1.3	-3.5	-.0
Office	-3.3	8.5	4.6	-2.4	6.7	-10.8	-5.0
Other commercial	-5.8	1.8	-2.6	.2	.3	-1.4	.7
Institutional	4.6	.9	2.8	3.3	1.8	1.7	.8
Industrial	-3.9	3.4	-5.2	-.5	.6	-2.9	2.5
Lodging and miscellaneous	3.5	2.1	-5.3	-5.9	-5.0	-3.6	1.5
Rotary drilling rigs in use[2]	7.6	-.1	-2.6	8.1	6.4	.8	-2.6
Memo:							
Business fixed investment	14.6	19.2	-.8	17.6	n.a.	n.a.	n.a.
Producers' durable equipment	23.0	24.1	-.3	28.8	n.a.	n.a.	n.a.
Office and computing	46.2	47.0	14.4	90.9	n.a.	n.a.	n.a.
Communications equipment	7.9	31.3	-3.8	39.2	n.a.	n.a.	n.a.
Other equipment[3]	19.7	9.9	1.0	12.1	n.a.	n.a.	n.a.
Nonresidential structures	-4.7	6.7	-2.3	-8.9	n.a.	n.a.	n.a.

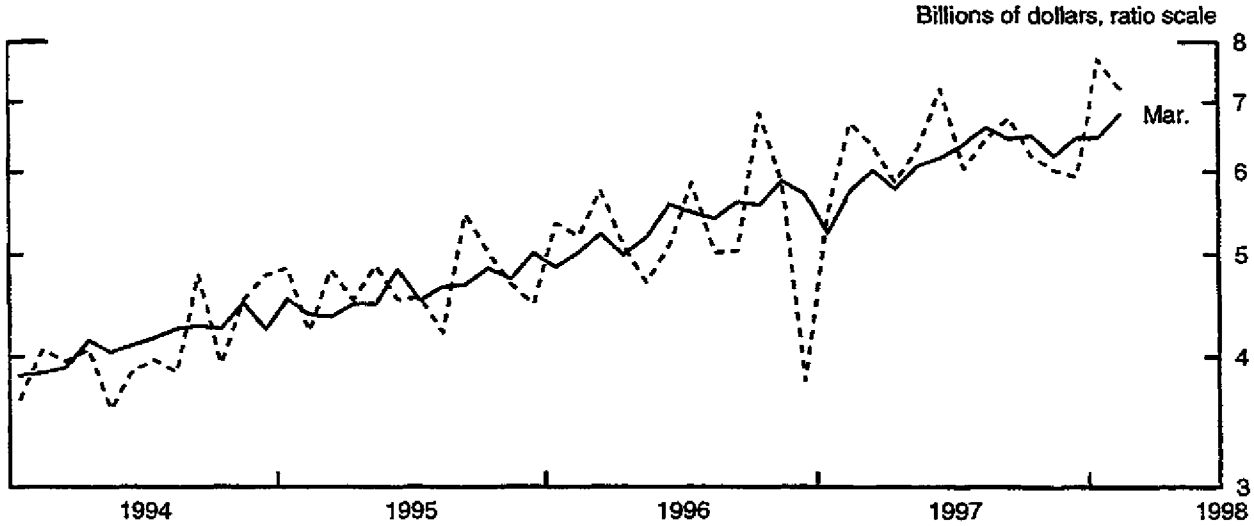
1. From the Current Industrial Report "Civil Aircraft and Aircraft Engines." Monthly data are seasonally adjusted using FRB seasonal factors constrained to BEA quarterly seasonal factors. Quarterly data are seasonally adjusted using BEA seasonal factors.
2. Percent change of number of rigs in use, seasonally adjusted.
3. Producers' durable equipment excluding office and computing, communications, motor vehicles, and aircraft and parts.
n.a. Not available.

Orders and Shipments of Nondefense Capital Goods

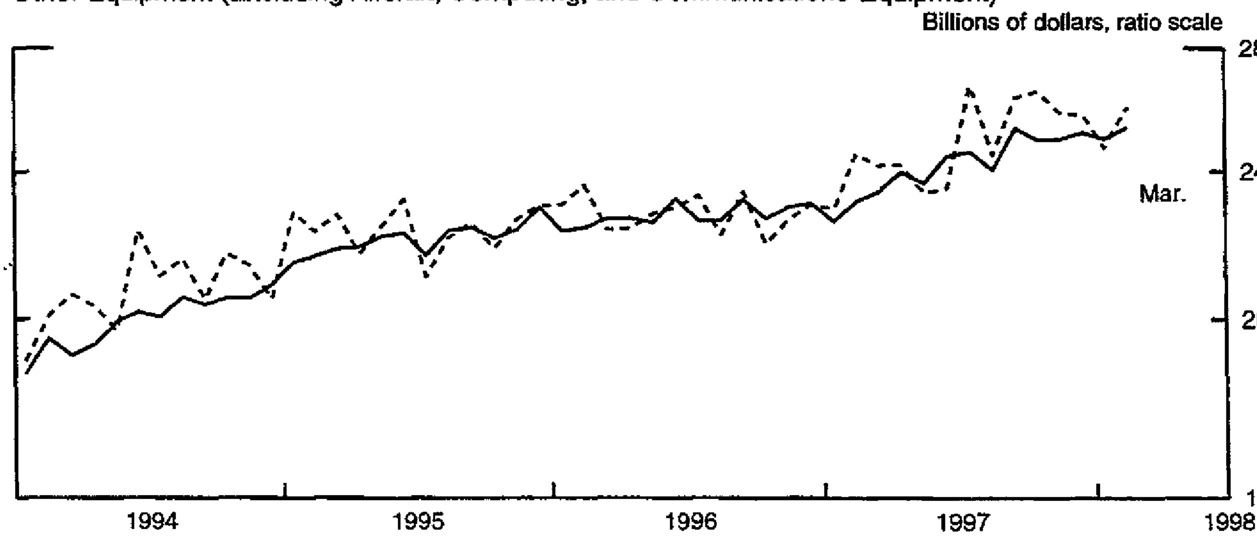
Office and Computing Equipment



Communications Equipment



Other Equipment (Excluding Aircraft, Computing, and Communications Equipment)



by extensive price-cutting, which placed downward pressure on prices throughout the industry.[13] Second, overproduction of high-end servers and a shift in demand toward lower-priced machines in the fourth quarter of last year led to an unexpected increase in these high-end stocks, placing further downward pressure on prices. Finally, Asian currency developments have reduced prices for semiconductors and other imported components. As the effects of these special factors run their course, computer price declines will likely become less steep as the year progresses.

In the transportation sector, business expenditures on motor vehicles rose at a 6-1/2 percent annual rate in the first quarter and appear set for another large increase this spring. Sales of medium and heavy trucks have been trending up over the past year, and the rise in unfilled orders over this period indicates that this strength should continue. Sales of light vehicles in the current quarter should be boosted by the improved incentives discussed earlier; the sales of vehicles that are leased to consumers appear in the national accounts as PDE. Domestic expenditures on aircraft accelerated in the first quarter, and the large backlog of orders suggests that a high level of deliveries will be maintained in the coming quarters.

Outside of computers and transportation equipment, the orders picture suggests that equipment investment will continue to advance at a robust pace. Orders for communications equipment grew 22 percent in the first quarter and have been running well ahead of shipments. Orders for other categories of equipment declined in the first quarter but are still above shipments, implying a significant backlog of unfilled orders that ought to maintain moderate growth in shipments in the near term.

Outlays on nonresidential structures were temporarily boosted in the fourth quarter by the purchase of structures at the Elk Hills Petroleum Reserve; the dropback from this purchase, combined with the construction-put-in-place data, points to a decline in outlays of 10 percent at an annual rate in the first quarter, the fourth decline in the past five quarters.[14] The data on construction

---

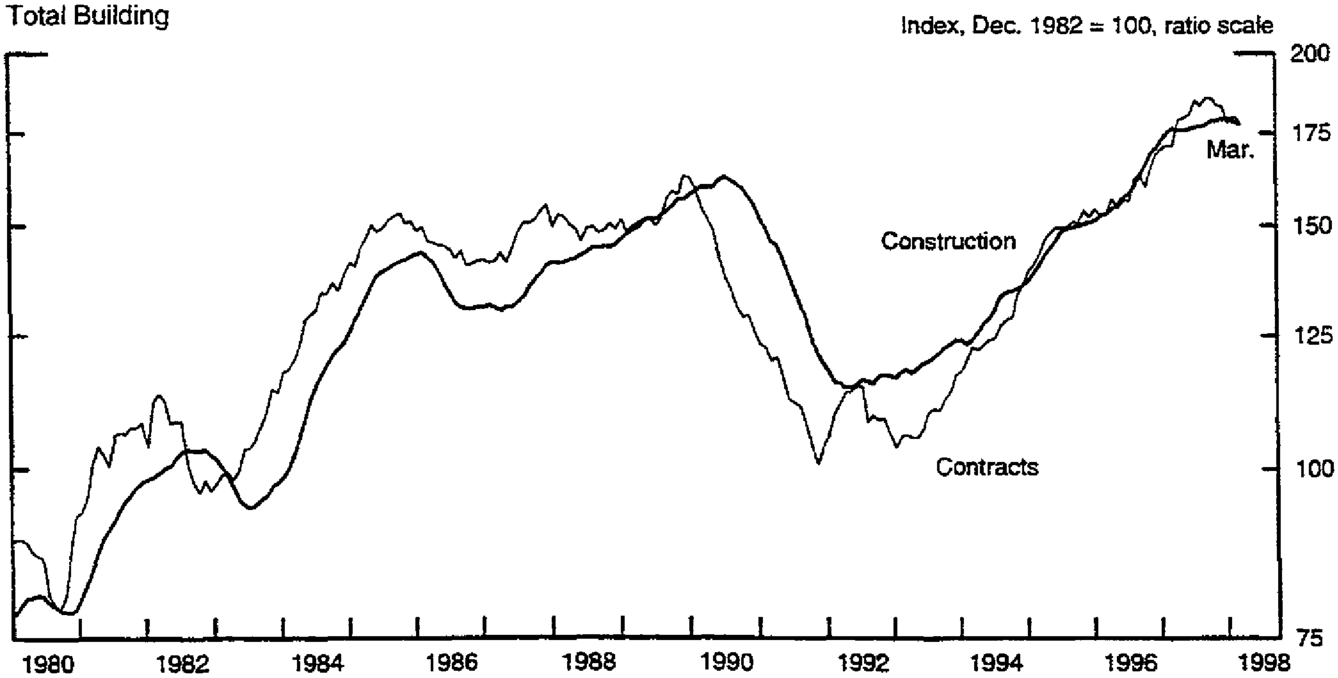
13. The inventory adjustment was most likely not limited to Compaq. The ratio of computer manufacturers' inventories to shipments, which had been flat for most of last year, declined from 1.32 months in November to 1.05 months in March.

14. Purchases of reproducible assets from the government boost private spending and reduce government investment by equal amounts, resulting in no change in GDP.

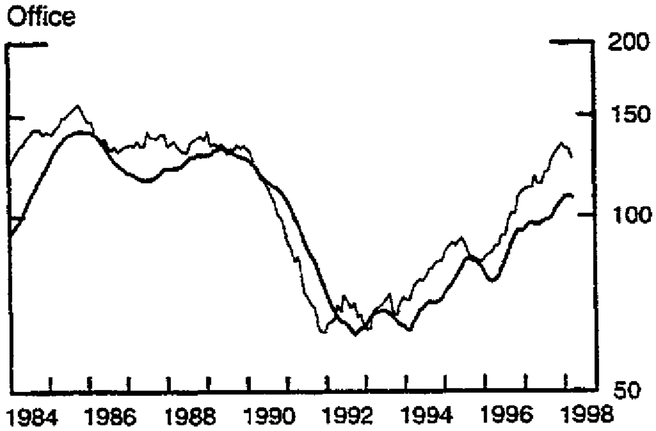
Nonresidential Construction and Contracts

(Six-month moving average)

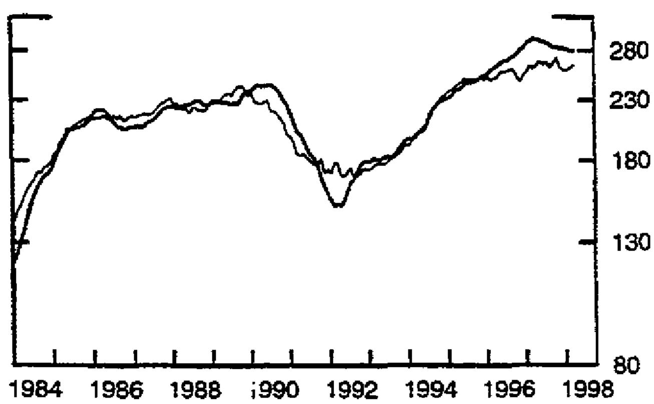
Total Building



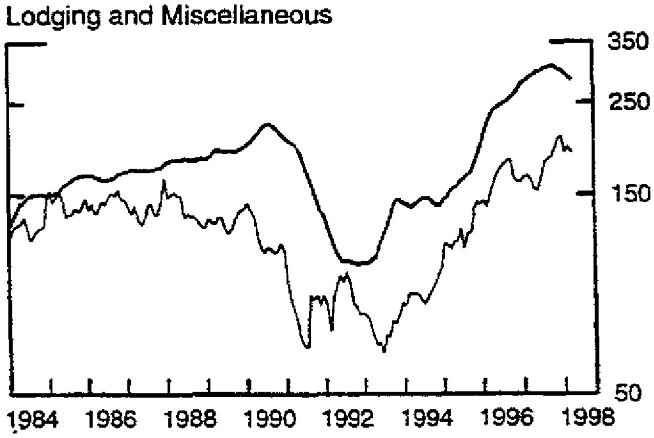
Office



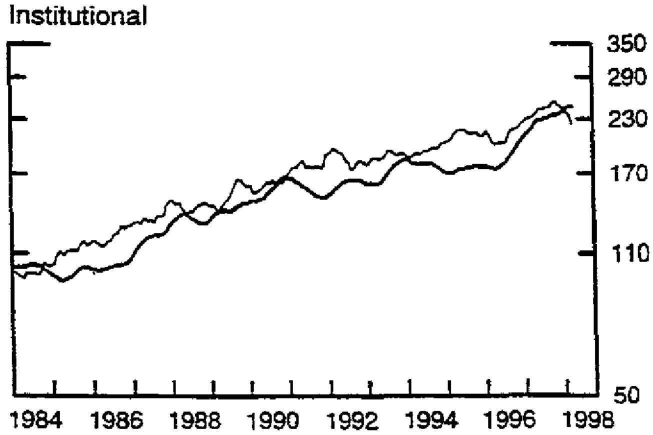
Other Commercial



Lodging and Miscellaneous



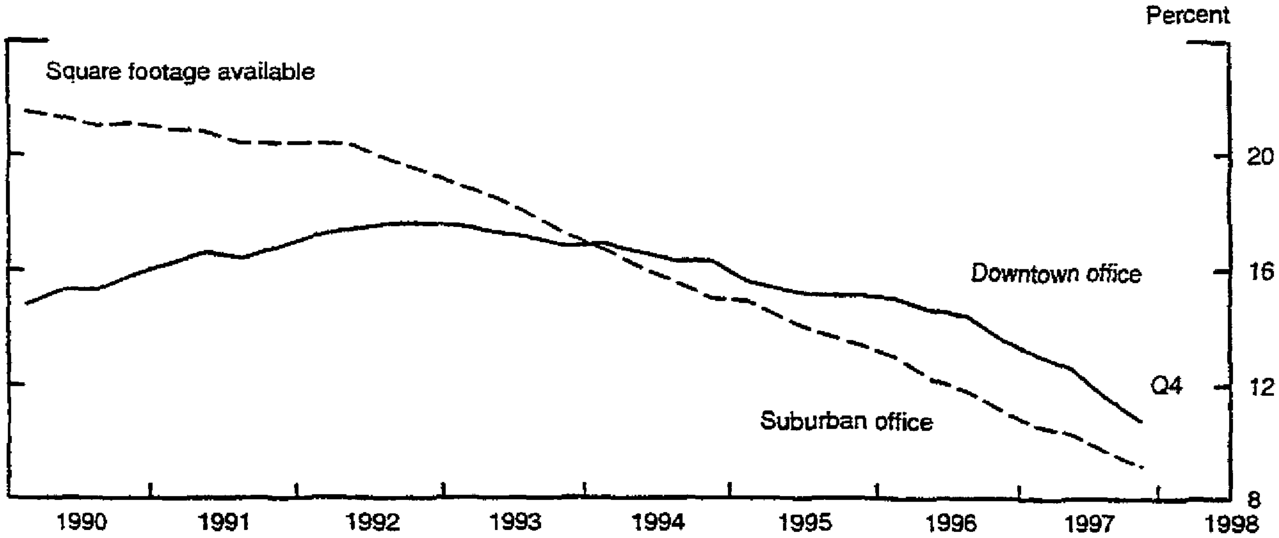
Institutional



Note. For contracts, total includes private only; individual sectors include public and private.

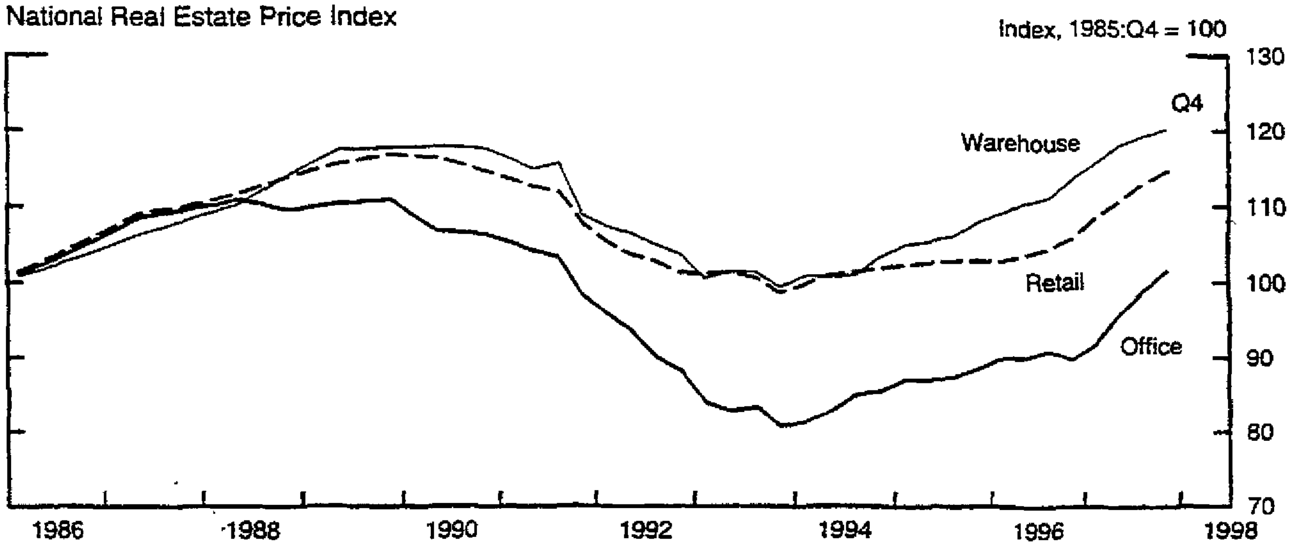
Nonresidential Construction Indicators

Vacancy Rates



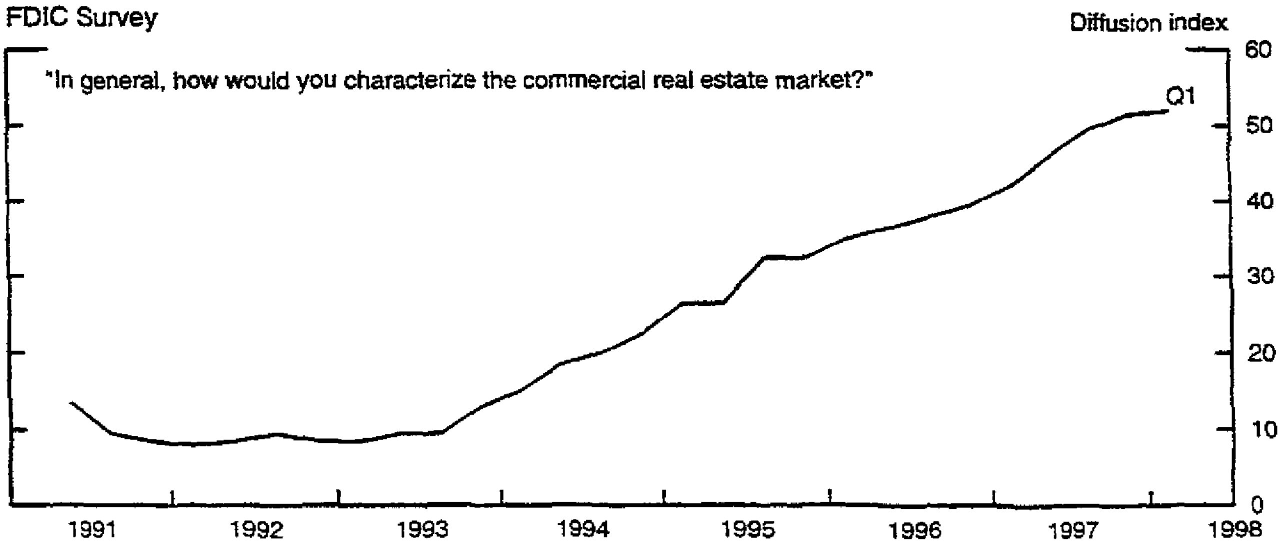
Source. CB Commercial Real Estate.

National Real Estate Price Index



Note. Data are semiannual from 1986 to 1991 and quarterly from 1992 forward.

FDIC Survey



Note. Calculated as [(Percent reporting tight supply - Percent reporting excess supply)/2] + 50.

CHANGES IN MANUFACTURING AND TRADE INVENTORIES
(Billions of dollars at annual rates;
based on seasonally adjusted data)

	1997		1998	1998		
	Q3	Q4	Q1	Jan.	Feb.	Mar.
Book value basis						
Total	41.5	41.9	55.5	17.1	88.6	60.7
Excluding wholesale and retail motor vehicles	35.4	42.3	51.3	25.8	85.5	42.5
Manufacturing	17.3	17.8	20.6	18.4	35.2	8.3
Excluding aircraft	13.3	15.3	18.1	15.1	28.1	11.0
Wholesale	14.5	18.1	15.4	-14.0	43.4	16.6
Excluding motor vehicles	12.9	19.5	11.4	-14.3	38.1	10.4
Retail	9.7	6.0	19.5	12.7	9.9	35.8
Auto dealers	4.5	.9	.2	-9.1	-2.3	12.0
Excluding auto dealers	5.2	5.1	19.2	21.8	12.2	23.7

SELECTED INVENTORY-SALES RATIOS
(Months' supply, based on Census book-value data, seasonally adjusted)

	Cyclical reference points: 1990-91 high	Cyclical reference points: 1995-96 low	Range over preceding 12 months: High	Range over preceding 12 months: Low	March 1998
Manufacturing and trade	1.58	1.38	1.38	1.36	1.37
Less wholesale and retail motor vehicles	1.55	1.34	1.35	1.33	1.34
Manufacturing	1.75	1.36	1.37	1.34	1.35
Primary metals	2.08	1.49	1.65	1.59	1.59
Nonelectrical machinery	2.48	1.80	1.80	1.70	1.66
Electrical machinery	2.08	1.41	1.39	1.29	1.33
Transportation equipment	2.93	1.48	1.61	1.52	1.51
Motor vehicles	.97	.56	.62	.54	.55
Aircraft	5.84	4.15	4.76	4.04	4.14
Nondefense capital goods	3.09	2.31	2.34	2.18	2.13
Textiles	1.71	1.44	1.52	1.45	1.52
Chemicals	1.44	1.25	1.41	1.27	1.42
Petroleum	.94	.75	.86	.79	.85
Home goods & apparel	1.96	1.67	1.74	1.64	1.68
Merchant wholesalers	1.36	1.26	1.30	1.24	1.30
Less motor vehicles	1.31	1.22	1.27	1.22	1.27
Durable goods	1.83	1.55	1.61	1.55	1.60
Nondurable goods	.95	.91	.96	.89	.95
Retail trade	1.61	1.50	1.51	1.47	1.49
Less automotive dealers	1.48	1.43	1.43	1.40	1.42
Automotive dealers	2.22	1.69	1.78	1.68	1.70
General merchandise	2.42	2.20	2.20	2.06	2.06
Apparel	2.53	2.27	2.45	2.31	2.37
GAF	2.42	2.23	2.21	2.07	2.09

contracts suggest little evidence of a pickup in the near term. This weakness continues to be at odds with indicators of demand pressures, particularly in the markets for office and commercial buildings. For instance, although office prices rose 13 percent in 1997 and vacancy rates plunged, real outlays on construction of office buildings fell at an 11 percent annual rate in the first quarter of 1998.

Business Inventories

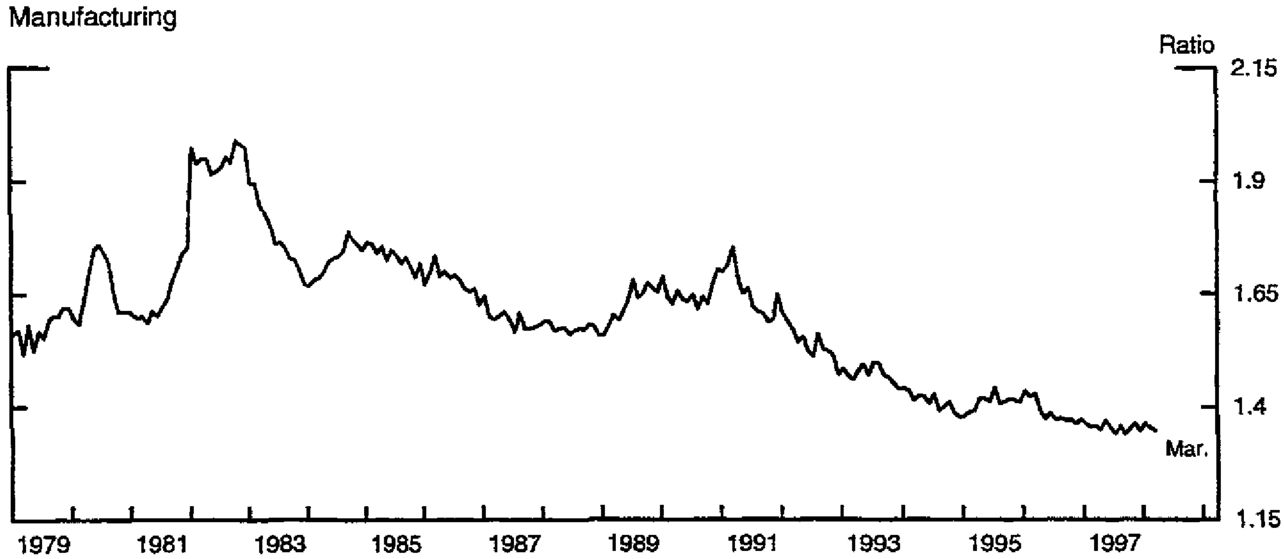
Investment in business inventories excluding motor vehicles was amazingly heavy in the first quarter. Nonetheless, for most manufacturing and trade groupings, book-value inventory-sales ratios in March were within the ranges observed over the past twelve months.

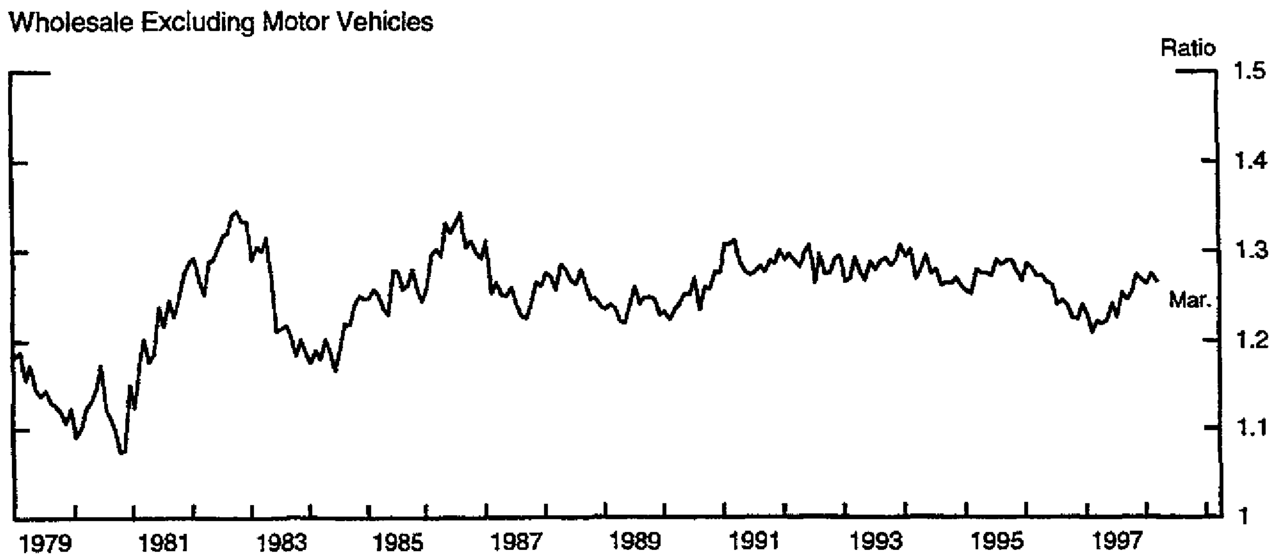
The growth of manufacturers' stocks slowed in March after having accumulated fairly rapidly in the first two months of the quarter. Contributing to the slowdown were liquidations of stocks held by producers of aircraft, primary metals, and industrial machinery. The latter industry includes makers of office and computing equipment, who reported a slight drawdown in book-value stocks in March; with shipments rising strongly, the inventory-shipments ratio in this category, as discussed earlier, fell sharply for the fourth month in a row.

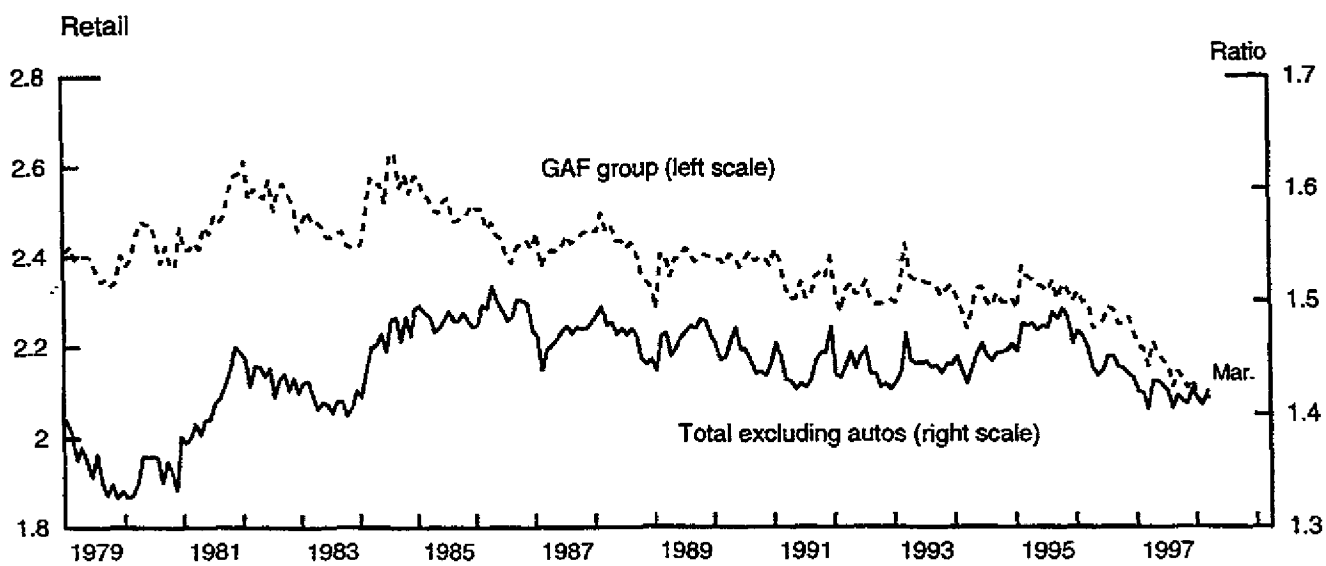
Inventory accumulation was boosted considerably in the first quarter by large increases in a number of sectors that hold petroleum stocks. The unusually warm winter reduced demand for refined products, and low prices provided an incentive for refiners and distributors to accumulate stocks. Despite further large price declines, book-value stocks at petroleum refiners fell at only a $1.5 billion rate in March after having declined $9.5 billion on net in the previous two months; however, the BEA estimates that real stocks held by refiners rose $11 billion (average annual rate) in January and February. Book-value inventory investment by petroleum merchant wholesalers fell $1 billion in the first quarter, but in real terms petroleum stocks held by merchant wholesalers rose in the first quarter. Another sector in which petroleum stocks may have been built up last quarter is the nondurable component of "other nonfarm" inventories, which includes holdings by pipelines and utilities; the BEA estimates that real stocks in this sector rose $9 billion at an annual rate in the first quarter, toward the high end of the range of accumulations in recent periods. In contrast to

Inventory-Sales Ratios, by Major Sector

(Book value)







the pattern seen in these sectors, the BEA's estimate of real nondurable inventories held by nonmerchant wholesalers, a grouping that also includes a large petroleum component, rose only a bit in the first quarter.

Inventories held by merchant wholesalers excluding motor vehicles accumulated at a $10 billion annual rate in March, about in line with sales.[15] Inventories in the "other nondurables" grouping increased markedly, continuing the large up-and-down swings of previous months. In March, the buildup in this volatile sector was driven by increased stocks at alcohol and drug wholesalers. However, in recent months, no single subcategory has consistently driven the large changes in this grouping.

Book-value inventories at non-auto retailers rose at a $23.7 billion annual rate in March; moreover, rather than having declined slightly, February stocks are now estimated to have increased at $12.2 billion annual rate. As a result, at a $19.2 billion annual rate, the average pace of stockbuilding in this sector in the first quarter was nearly four times its fourth-quarter pace. Much of the step-up in inventory investment last quarter occurred at stores selling nondurable goods, but higher rates of accumulation also occurred at furniture stores and dealers selling lumber and building supplies. Still, sales growth was strong last quarter, and inventory-sales ratios for most types of retail establishments were in the middle or at the low end of their recent ranges.[16]

Federal Government

Real consumption and gross investment by the federal government fell nearly 8 percent (annual rate) in the first quarter because of a sharp drop in defense spending. Nondefense purchases rebounded from the fourth-quarter level which had been held down by the sale of equipment and structures at the Elk Hills Petroleum Reserve. Over the past four quarters, real defense spending fell 2 percent, and real nondefense spending was nearly unchanged. Spending restraint and robust growth of receipts appear to have brought the

15. The annual revisions to the wholesale trade sales and inventory data were negligible and had little effect on the outlook.

16. Based on the 1996 Annual Retail Trade Survey, both sales and inventories in the retail sector have been revised up by the Census Bureau. The largest revisions were for 1995 and 1996. Inventories were revised up more than sales for 1995, and inventory-sales ratios rose accordingly. For 1996, revisions to inventories and sales were about matched, and the inventory-sales ratio was revised little.

FEDERAL GOVERNMENT OUTLAYS AND RECEIPTS
(Unified basis; billions of dollars)

	January-March			12 months ending in Mar.		
	1997	1998	Percent change	1997	1998	Percent change
Outlays	401.1	408.7	1.9	1593.1	1629.4	2.3
Deposit insurance	-3.7	-1.1	n.a.	-13.0	-6.2	n.a.
Spectrum auction	0.0	-0.6	n.a.	-3.8	-8.1	n.a.
Other	404.7	410.3	1.4	1609.9	1643.7	2.1
Receipts	349.1	378.5	8.4	1502.2	1648.7	9.8
Deficit (+)	52.0	30.2	n.a.	90.9	-19.3	n.a.
	Adjusted for payment timing shifts[1] and excluding deposit insurance and spectrum auction					
Outlays	412.4	418.1	1.4	1609.9	1643.7	2.1
National defense	65.5	63.8	-2.6	271.4	271.9	0.2
Net interest	60.9	61.1	0.4	243.2	245.5	0.9
Social security	90.6	93.9	3.7	357.5	372.4	4.2
Medicare	46.9	47.5	1.5	183.1	193.6	5.7
Medicaid	23.7	24.6	3.7	95.4	98.4	3.1
Other health	6.7	7.2	7.3	28.0	28.4	1.2
Income security	71.9	73.4	2.1	231.6	231.8	0.1
Other	46.3	46.5	0.4	199.6	201.7	1.0
Receipts	349.1	378.5	8.4	1502.2	1648.7	9.8
Individual income and payroll taxes	289.6	316.0	9.1	1175.9	1292.6	9.9
Withheld + FICA	276.0	297.8	7.9	1020.1	1101.8	8.0
Nonwithheld + SECA	49.2	57.0	15.9	245.8	287.7	17.1
Refunds (-)	35.6	38.8	8.9	90.0	97.0	7.8
Corporate	25.8	24.7	-4.0	175.5	190.3	8.4
Other	33.7	37.8	12.1	150.7	165.9	10.0
Deficit (+)	63.3	39.6	n.a.	107.7	-5.1	n.a.

Note. Components may not sum to totals because of rounding.

1. A shift in payment timing occurs when the first of the month falls on a weekend or holiday. Outlays for defense, Medicare, income security, and "other" have been adjusted to account for this shift.

n.a.--Not applicable

NIPA measures of the federal budget into surplus in the first quarter for the first time since 1969.[17]

Incoming unified budget data have pointed to an even larger surplus for fiscal year 1998 than seemed likely at the time of the last Greenbook. The budget recorded a $19 billion surplus over the twelve months ending in March, and daily data indicate that April receipts were robust. Indeed, the Congressional Budget Office now projects that the fiscal 1998 surplus will be in the range of $43 billion to $63 billion, up from a projected surplus of $8 billion in March. The improvement reflects stronger-than-expected receipts of withheld and employment taxes and nonwithheld taxes, combined with weaker-than-expected outlays.

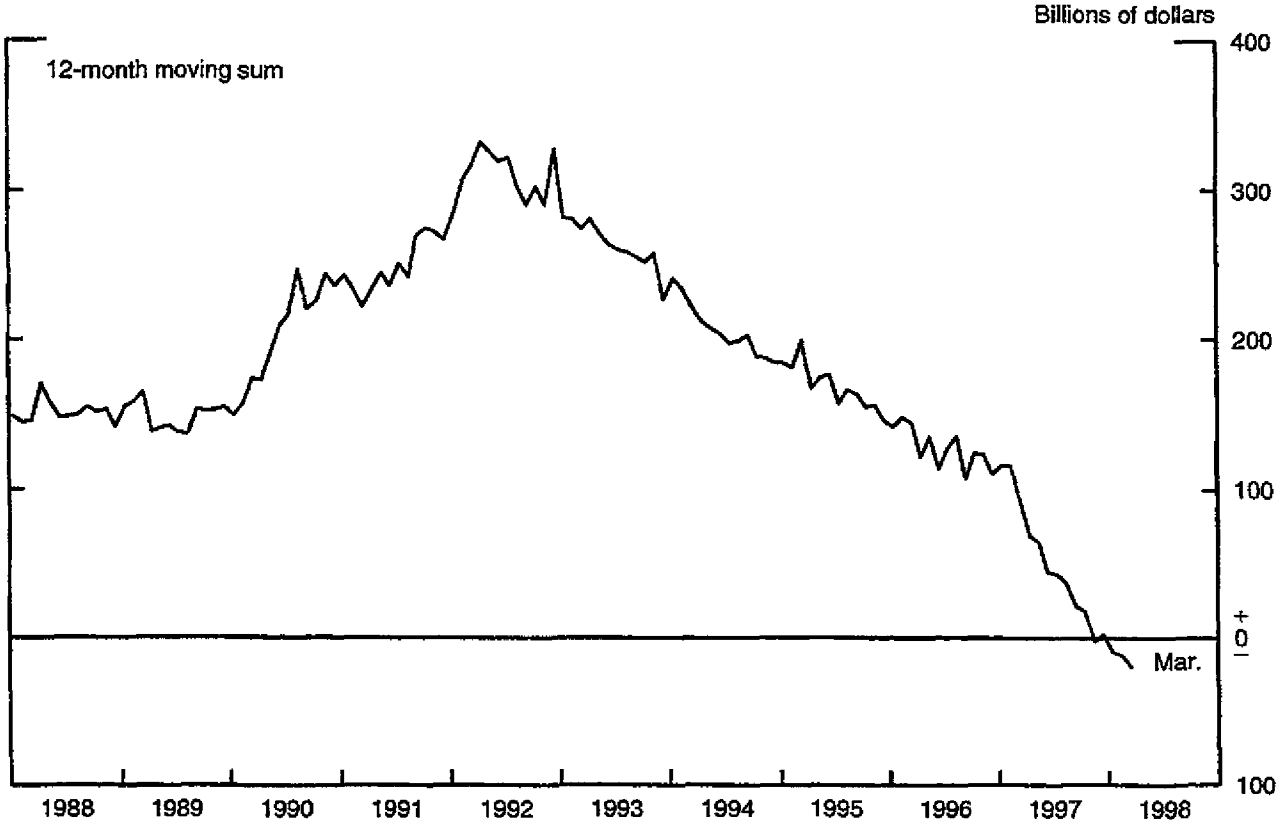
Receipts rose 8 percent in the first quarter compared with a year earlier, led by growth of 9 percent in personal income taxes and social insurance collections. Net corporate income taxes fell, as a small rise in collections was more than offset by increased refunds. The stalling of corporate taxes is consistent with the relatively weak growth seen in S&P 500 profits. First-quarter outlays were only 1-1/2 percent higher than a year earlier, held down by a drop in defense spending and a leveling-off in debt service payments.

Daily Treasury Statements indicate that April tax payments were 10 percent higher than a year earlier. Nonwithheld personal income taxes and social insurance contributions--primarily final payments on 1997 income tax liability--were $20 billion, or 16 percent, higher than last year's heady level. Preliminary calculations incorporating the April data show that the effective personal income tax rate on a liability basis--the ratio of the staff's estimate of personal income tax liability to the NIPA tax base--rose

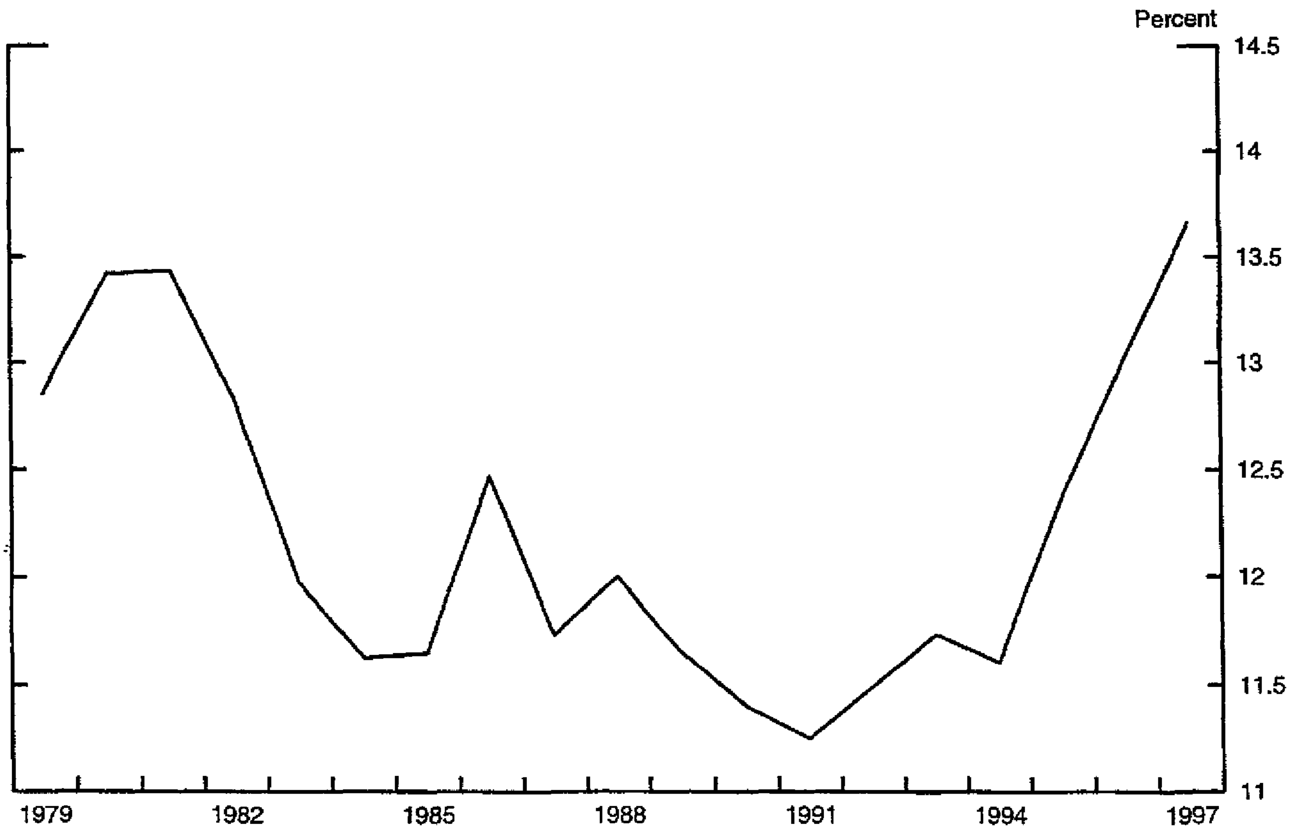
17. Two deficit measures are available in the national accounts. The current surplus measures the difference between receipts and current expenditures (which include consumption of fixed capital and exclude investment). Using the staff estimate of corporate profit accruals for the first quarter and an expected revision to personal taxes, this measure would show a surplus of $41 billion, compared with a deficit of $55 billion a year earlier. A second measure is net lending, or the current surplus excluding capital consumption and including gross investment, which is, in some respects, more comparable to the unified deficit. This measure also was in surplus in the first quarter, because gross investment was approximately equal to capital consumption.

Federal Sector Developments

Unified Deficit



Effective Personal Tax Rate*



*Estimate of tax liability as a percentage of NIPA tax base.

1/2 percentage point in 1997, to 13-1/2 percent (chart).[18] The effective tax rate, computed on a liability basis, has risen 2 percentage points since the 1992-94 period, as a result of an increase in marginal tax rates, increased capital gains realizations, real bracket creep, and a shift in the income distribution. April collections were also boosted by strong withheld personal income tax and social insurance receipts.

A fiscal 1998 supplemental spending bill was enacted at the end of April. The bill provides $3 billion in budget authority for military spending related to Bosnia and Iraq, $2-1/2 billion for natural disaster assistance, and $500 million for veterans' compensation. The bill also included $2-1/2 billion of rescissions of budget authority (which are not expected to affect outlays) for low-income housing reserve funds and for excess contract authority for the Airport Improvement Program. OMB expects that the bill will raise outlays $1 billion in fiscal 1998 and $1-1/2 billion in fiscal 1999. Not much headway has been made on the fiscal 1999 budget. The Senate passed its version of the Budget Resolution in early April, calling for small tax cuts financed by reductions to mandatory spending, but the House has yet to vote on a budget blueprint.

State and Local Government Sector

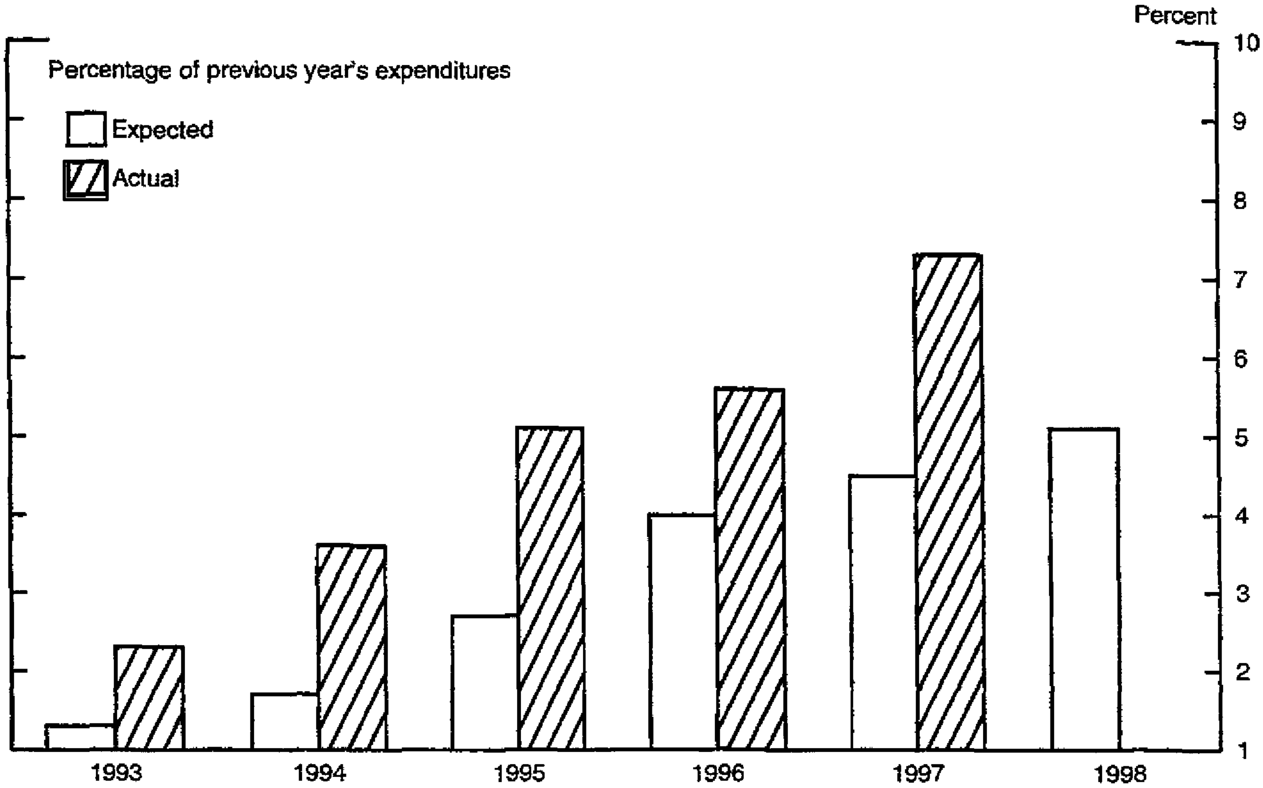
Real consumption and investment outlays by state and local governments now appear to have been little changed in the first quarter. Increases in spending on consumption items were largely offset by a drop in outlays for construction that now looks to have been larger than BEA had assumed.[19] Sizable declines were recorded in all major categories of construction except highway construction, which rose a little. The pattern suggests that the difficulties associated with the attempts to pass legislation reauthorizing transportation programs did not substantially disrupt construction; it now appears that legislation will not be passed for at least several weeks. State and local employment rose 18,000 in April, nearly the same as the average increase in the first quarter.

18. The staff allocates nonwithheld tax payments to different liability years on the basis of Treasury data and historical patterns for the most recent months. Withheld payments are attributed to current year liability and refunds to the previous year.

19. The March construction data were not available at the time of the advance release and turned out to be weaker than BEA had assumed. Moreover, construction spending in January and February was revised down.

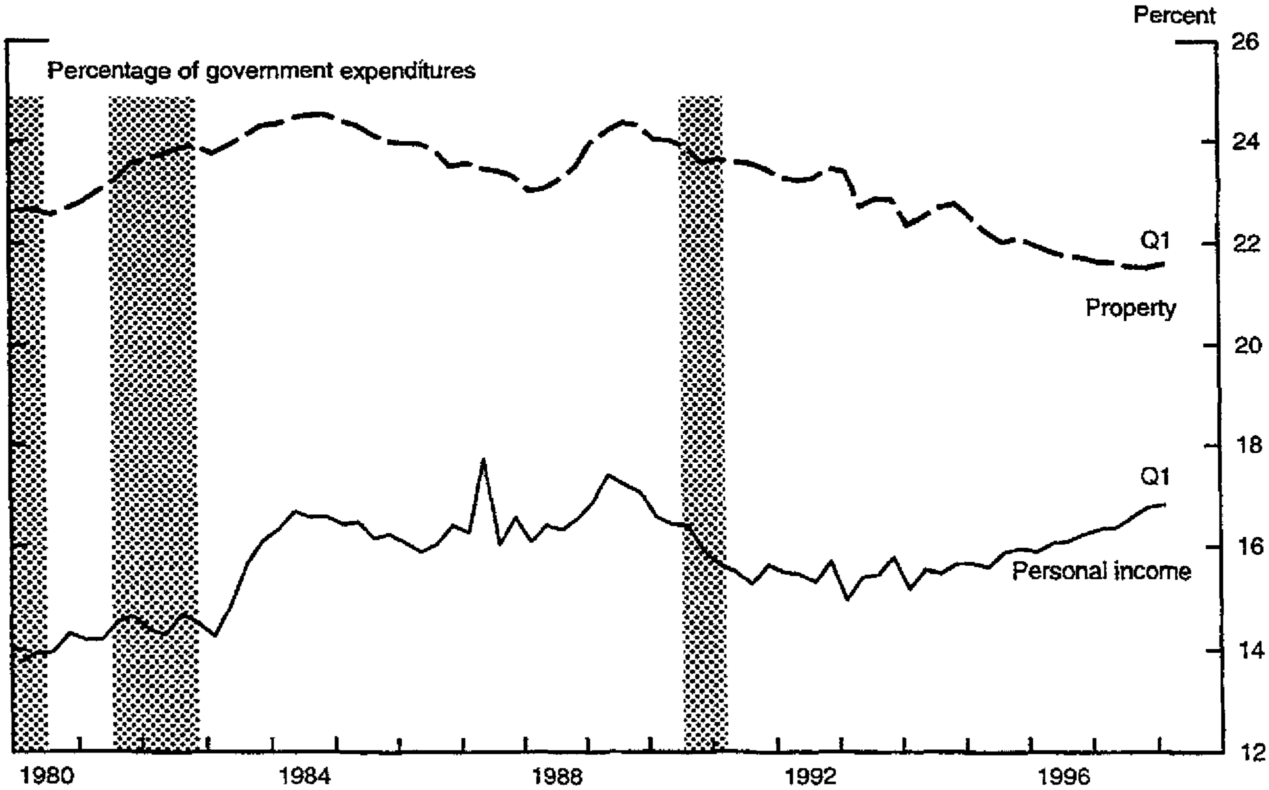
State and Local Sector

State General Fund Balances



Source. National Conference of State Legislatures.

State and Local Taxes



Source. NIPA accounts.

The fiscal health of the state and local sector remains favorable, with state governments faring especially well. All states appear to be finishing fiscal year 1998, which ends on June 30 for most states, with their general fund budgets in balance. Ending balances have risen as a share of expenditures in each of the past five years, consistently outstripping states' expectations (chart, top panel). Although the final tally for 1998 is not yet available, revenues again appear to be coming in above expectations while outlays are close to target. According to the Center for the Study of the States, state tax collections for the first three quarters of the fiscal year (1997:Q3 through 1998:Q1) were, on average, 6 percent above collections for the same period one year earlier. Moreover, although state data are not yet available, extrapolations based on federal nonwithheld income tax payments this spring suggest that states that collect income taxes have received strong payments once again.

Regarding local governments, reports from the National League of Cities and the National Association of Counties indicate that the fiscal positions of these jurisdictions are improving, although they do not appear to be as well off as the states, in part because they rely heavily on property taxes rather than personal income taxes for their revenues. In recent years, overall receipts from property taxes as a share of state and local expenditures have fallen, while income tax revenue has risen (chart, lower panel).

Prices

In April, the CPI increased 0.2 percent, the largest increase in six months. Energy prices edged down after having fallen rapidly in the previous four months, and food prices edged up after having been unchanged in both February and March. Consumer prices excluding food and energy rose 0.3 percent, as tobacco prices jumped and services prices accelerated. Over the twelve months ending in April, the CPI rose only 1.4 percent, down from the 2-1/2 percent rate recorded over the previous twelve-month period. Excluding food and energy, CPI inflation over the past year was 2.1 percent, the smallest twelve-month increase since April 1966.

Consumer energy prices declined only 0.1 percent in April. Gasoline prices fell more slowly than in recent months, as crude oil prices, which had bottomed out in mid-March, began to move up somewhat. Since their recent trough, crude oil prices have risen roughly $2.50 per barrel; the spot price of West Texas intermediate,

CPI AND PPI INFLATION RATES
(Percent change)

	From twelve months earlier		1997	1998	1998	
	Apr. 1997	Apr. 1998	Q4	Q1	Mar.	Apr.
			-Annual rate-		-Monthly rate-	
CPI						
All items (100.0)[1]	2.5	1.4	2.3	.5	.0	.2
Food (15.3)	2.8	2.0	2.1	1.4	.0	.1
Energy (7.0)	.0	-7.4	1.2	-19.9	-1.2	-.1
CPI less food and energy (77.7)	2.7	2.1	2.1	2.4	.1	.3
Commodities (24.1)	1.1	.2	.6	.8	-.1	.1
New vehicles (5.1)	1.2	-.6	-1.5	-.3	.1	.0
Used cars and trucks (1.9)	-2.0	-4.0	-2.8	.4	-.7	.6
Apparel (4.9)	.9	-.2	.4	-1.5	-.2	-.1
Tobacco (0.9)	5.5	8.3	11.0	9.6	-2.6	3.8
Other Commodities (11.3)	.8	.6	.4	1.6	.2	-.1
Services (53.6)	3.3	3.0	3.0	3.1	.2	.4
Shelter (29.4)	3.1	3.3	3.5	3.1	.3	.3
Medical care (4.4)	3.0	3.1	3.1	3.1	.3	.4
Other Services (19.8)	3.8	2.8	2.7	3.2	.1	.4
Finished goods (100.0)[2]	.8	-1.2	.6	-3.9	-.3	.2
Finished consumer foods (23.2)	2.4	-.5	1.8	-2.1	-.4	.4
Finished energy (13.6)	-1.8	-8.7	.3	-22.0	-1.9	-.1
Finished goods less food and energy (63.3)	.7	.2	.5	-.2	.0	.2
Consumer goods (38.0)	1.0	.7	1.4	-.1	.1	.3
Capital equipment (25.3)	.2	-.6	-1.0	-.7	.0	.1
Intermediate materials (100.0)[3]	-.1	-1.6	.3	-4.2	-.5	.0
Intermediate materials less food and energy (81.8)	.2	-.1	.1	-.8	-.1	.0
Crude materials (100.0)[4]	-5.7	-7.3	20.6	-34.4	-1.6	1.0
Crude food materials (42.2)	-2.4	-9.0	2.9	-14.1	.7	.3
Crude energy (36.2)	-12.5	-6.3	64.8	-59.5	-4.3	3.5
Crude materials less food and energy (21.6)	-.8	-5.8	-3.8	-14.6	-1.9	-.9

1. Relative importance weight for CPI, December 1997.
2. Relative importance weight for PPI, December 1997.
3. Relative importance weight for intermediate materials, December 1997.
4. Relative importance weight for crude materials, December 1997.

for example, has averaged nearly $15.50 per barrel thus far in May, up from the low of about $13 per barrel recorded in mid-March. As a result, private survey data suggest that, on a seasonally adjusted basis, the retail price of gasoline turned up in May, the first increase in eight months.

The CPI for food was relatively stable for a third month in April. Grocery store prices were down a tenth for a third month, and the index for food away from home rose 0.2 percent, matching its average for the year to date. Over the twelve months ending in April, food prices were up just 2.0 percent, down from a 2-3/4 percent pace in the year-earlier period. Farm prices in April remained well below the levels of a year earlier, and agricultural futures prices have changed little, on balance, since the week of the March Greenbook. As of May 10, planting of crops was moving ahead at a faster-than-average clip despite weather-related delays in some regions.

The index for consumer prices excluding food and energy increased 0.3 percent in April. Goods prices edged up, reflecting a jump in tobacco prices, but prices of durable goods fell further. Tobacco prices have fluctuated widely in recent months; the April index is now up 4-3/4 percent from December, which is roughly consistent with announced price hikes over this period. The index for non-energy services rose 0.4 percent last month, the largest increase in three years. Owners equivalent rent rose 0.4 percent in April, after having increased 0.2 percent in March; as a result, the six-month increase in owners equivalent rent has picked up to 3-1/2 percent (an annual rate).

Falling import prices have helped hold the rate of change of core CPI commodities to 0.2 percent over the year ending in April, despite a sizable increase in tobacco prices; prices of non-energy services advanced 3.0 percent over that period, a bit less than over the preceding twelve months. Declines in prices of motor vehicles have been an important contributor to the deceleration in prices of core consumer goods. However, the prices of other import-sensitive goods--such as apparel and footwear, toys, and photographic equipment--have also declined. The small deceleration in prices of non-energy services is the result of slower price increases for services other than shelter and medical care, such as air fares and personal care services.

BROAD MEASURES OF INFLATION
(Four-quarter percent change)

	1995 Q1	1996 Q1	1997 Q1	1998 Q1
Product prices				
GDP chain price index	2.7	2.3	2.2	1.4
Nonfarm business chain-type price index[1]	2.8	1.5	2.0	1.0
Expenditure prices				
Gross domestic purchases chain-type price index	2.8	2.2	2.1	0.9
Less food and energy	2.8	2.2	1.8	1.2
PCE chain-type price index	2.9	2.1	2.6	1.0
Less food and energy	3.0	2.1	2.3	1.4
CPI	2.8	2.8	2.9	1.5
Less food and energy	2.9	2.9	2.5	2.3
Median CPI	2.7	3.3	2.8	2.8
Trimmed mean CPI	2.7	2.8	2.7	1.9

1. Excluding housing.

SURVEYS OF (CPI) INFLATION EXPECTATIONS
(Percent)

	Actual inflation[1]	University of Michigan (1-year) Mean[2]	University of Michigan (1-year) Median[3]	Conference Board (1-year)	Professional forecasters (10-year)[4]
1996-Q1	2.7	3.9	2.8	4.1	3.0
Q2	2.8	4.5	3.0	4.3	3.0
Q3	2.9	4.2	3.1	4.3	3.0
Q4	3.2	4.0	3.0	4.2	3.0
1997-Q1	2.9	3.8	2.9	4.2	3.0
Q2	2.3	3.6	2.9	4.0	2.9
Q3	2.2	3.4	2.7	4.0	3.0
Q4	1.9	3.3	2.8	4.1	2.7
1998-Q1	1.5	2.8	2.4	3.8	2.6
Oct.	2.1	3.2	2.8	4.1	
Nov.	1.8	3.4	2.9	4.1	
Dec.	1.7	3.4	2.8	4.0	2.7
1998-Jan.	1.6	2.8	2.3	3.7	
Feb.	1.4	2.6	2.4	4.0	
Mar.	1.4	2.9	2.5	3.8	2.6
Apr.		2.7	2.4	4.0	

1. CPI; percent change from the same period in the preceding year.
2. Average increase for responses to the question: By about what percent do you expect prices (CPI) to go up, on the average, during the next 12 months?
3. Median increase for responses to the question above.
4. Compiled by the Federal Reserve Bank of Philadelphia.

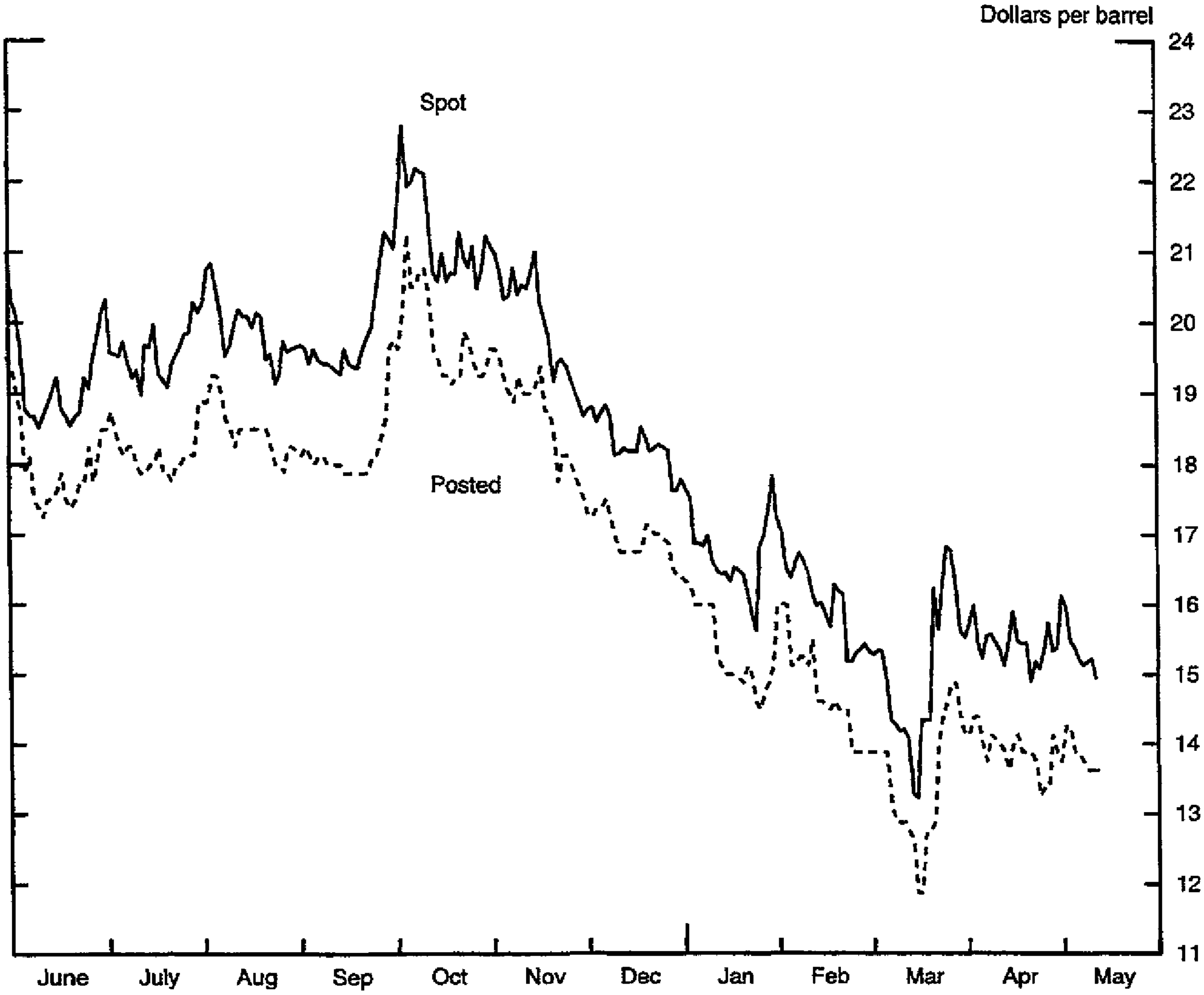
Large declines in energy and non-oil import prices and the deceleration in food prices have also been important contributors to the favorable performance of other broad measures of prices. In the first quarter of this year, the four-quarter changes in chain price indexes for GDP and for PCE excluding food and energy were down 3/4 percent and 1 percent, respectively, from their pace a year earlier. As with the core CPI, the deceleration in the chain price index for PCE excluding food and energy reflects a decline in prices of durable goods and a deceleration in services other than energy and housing.

Short-term inflation expectations held near their first-quarter level in April and remain substantially below year-ago levels. As measured by the Michigan SRC index, mean one-year-ahead inflation expectations edged down to 2.7 percent in April, 1 percentage point below the level recorded a year earlier. The median one-year-ahead expectations were unchanged in April at 2.4 percent, about 1/2 percentage point lower than a year earlier. Longer-term inflation expectations in the Michigan survey--both the mean and the median--edged down in April from their first-quarter average and now lie somewhat below year-ago levels.

Greater import price competition may have also helped hold down the PPI for finished goods, especially for capital equipment. Prices of capital equipment in the PPI fell 3/4 percent at an annual rate in the first quarter, reflecting further declines for motor vehicles and a very large drop in computer prices. In April, prices of capital equipment edged up 0.1 percent, as the prices of motor vehicles purchased by businesses rose 0.4 percent. Overall computer prices declined more slowly in April--2.3 percent--than in the first quarter, despite an even faster rate of decline in personal computer prices. Excluding computers and motor vehicles, capital goods prices were unchanged, on average, last month.

Prices at earlier stages of processing remain subdued. The PPI for intermediate materials other than food and energy was unchanged in April, after declining in the first quarter, and stood about unchanged from its level a year earlier. The PPI for core crude materials fell further in April to a level 5-3/4 percent below a year earlier. Since mid-April, when the PPI was measured, the Journal of Commerce and KR-CRB industrial price indexes have risen a bit on balance.

Daily Spot and Posted Prices of West Texas Intermediate



Note. Posted prices are evaluated as the mean of the range listed in the Wall Street Journal.

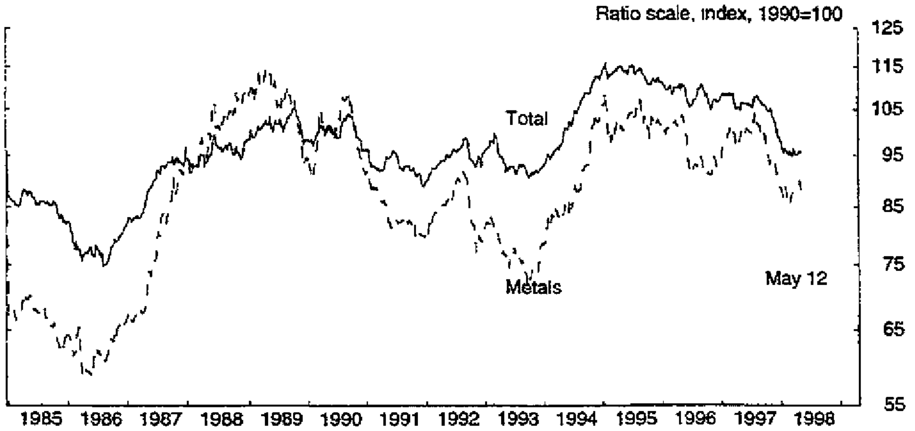
Monthly Average Prices of West Texas Intermediate

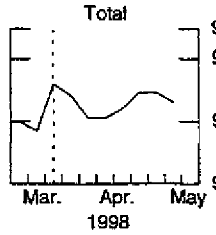
Month	Posted	Spot
June	17.96	19.17
July	18.15	19.63
August	18.51	19.93
September	18.14	19.79
October	19.80	21.26
November	18.83	20.17
December	16.97	18.32
January	15.33	16.71
February	14.78	16.06
March	13.44	15.02
April	13.90	15.44
May [1]	13.85	15.41

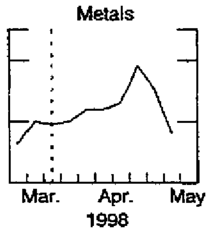
1. Through May 13, 1998.

Commodity Price Measures

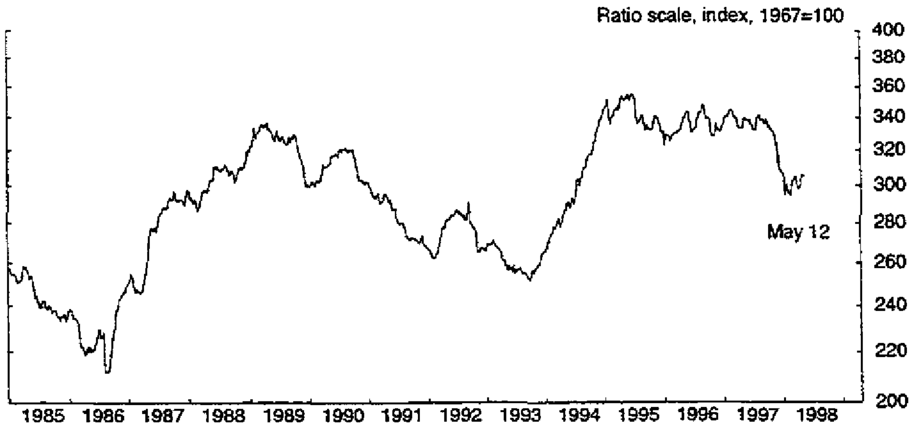
Journal of Commerce Index

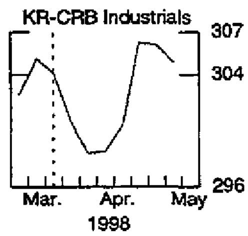




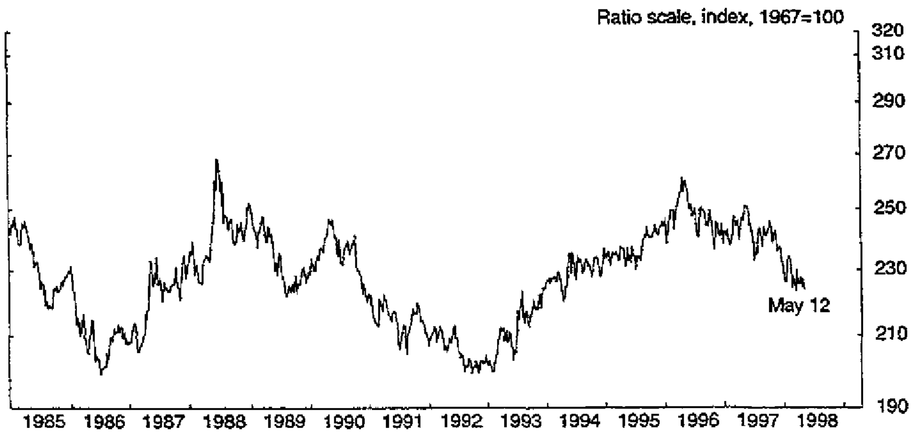


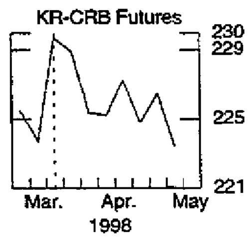
KR-CRB Spot Industrials





KR-CRB Futures





Note. Weekly data, Tuesdays. Vertical lines on small panels indicate week of last Greenbook. The Journal of Commerce index is based almost entirely on industrial commodities, with a small weight given to energy commodities, and the KR-CRB spot price index consists entirely of industrial commodities, excluding energy. The KR-CRB futures index gives about a 60 percent weight to food commodities and splits the remaining weight roughly equally among energy commodities, industrial commodities, and precious metals. Copyright for Journal of Commerce data is held by CIBCR, 1994.

SPOT PRICES OF SELECTED COMMODITIES

	Current price ($)	Percent change[1]: 1996	1997	Dec. 30 to Mar. 24[2]	Mar. 24[2] to May 12	Memo: Year earlier to date
Metals						
Copper (lb.)	.820	-21.3	-24.3	4.9	-3.5	-30.5
Steel scrap (ton)	135.500	-13.1	23.2	-5.6	.0	-2.2
Aluminum, London (lb.)	.618	-8.5	-.6	-4.8	-4.9	-16.7
Precious metals						
Gold (oz.)	299.350	-4.8	-21.4	3.5	-.3	-14.2
Silver (oz.)	5.725	-6.1	28.3	4.0	-10.1	17.8
Forest products						
Lumber (m. bdft.)	280.000	59.2	-29.6	-2.4	-1.8	-27.5
Plywood (m. sqft.)	280.000	-3.2	-4.8	-6.7	.0	-9.7
Petroleum						
Crude oil (barrel)	14.470	29.3	-31.7	-12.1	1.8	-25.6
Gasoline (gal.)	.496	27.2	-25.8	-7.0	6.5	-21.7
Fuel oil (gal.)	.421	18.3	-29.7	-10.7	-4.7	-25.5
Livestock						
Steers (cwt.)	67.000	-1.1	3.0	-10.3	9.8	-2.9
Hogs (cwt.)	41.500	14.9	-36.4	2.9	15.3	-32.0
Broilers (lb.)	.615	12.5	-21.2	11.2	12.0	8.4
U.S. farm crops						
Corn (bu.)	2.340	-24.4	.2	-.2	-8.2	-15.5
Wheat (bu.)	3.260	-12.8	-22.6	-1.0	-6.4	-28.1
Soybeans (bu.)	6.390	-3.7	-1.8	-4.4	-1.0	-26.2
Cotton (lb.)	.648	-8.7	-9.7	5.2	-3.5	-6.4
Other foodstuffs						
Coffee (lb.)	1.420	34.7	25.4	-7.0	-10.4	-49.7
Memo:						
JOC Industrials	95.600	-4.1	-8.6	-1.9	-.6	-10.1
JOC Metals	87.600	-8.3	-5.0	-1.0	-.3	-12.8
KR-CRB Futures	223.380	-.1	-3.2	-.3	-2.8	-11.1
KR-CRB Spot	304.790	.9	-8.4	-.9	.2	-9.9

1. Changes, if not specified, are from the last week of the preceding year to the last week of the period indicated.
2. Week of the March Greenbook.

Labor Costs

The Employment Cost Index for hourly compensation of private industry workers increased at a seasonally adjusted annual rate of 2.7 percent over the three months ending in March after having risen 4.3 percent in the fourth quarter. Over the past twelve months, this measure of hourly compensation rose 3.5 percent, up 1/2 percentage point from its pace in the preceding twelve months.

On a twelve-month-change basis, most industries registered an acceleration in compensation relative to the year-earlier period, with the largest pickup in finance, insurance, and real estate. Compensation in FIRE has been boosted in the past two quarters by sizable nonproduction bonuses and commissions generated, in part, from a wave of mortgage refinancings. Most occupational groups also recorded an acceleration in compensation. The large pickup for workers in service occupations likely reflects the influence of last fall's minimum wage increase. We think that last year's increase of the minimum wage had a larger effect than the 1996 minimum wage hike because a higher percentage of workers were below the new minimum at the time of the latest increase. Gains were also notable for most white collar workers.[20]

The acceleration in compensation costs over the past twelve months resulted primarily from faster growth of wages and salaries, which rose 4.0 percent over the twelve months ended in March, 0.6 percentage point more than the increase over the preceding twelve months. By contrast, benefits rose a modest 2.3 percent over the past twelve months, just 1/4 percentage point above the increase recorded over the year-earlier period. Benefits were boosted by a pickup in the costs of health insurance and supplemental pay (including bonuses and wage differentials for overtime and late shifts). However, pension costs decelerated over the past year because rising stock prices reduced the need for employers to pay into defined benefit plans; costs for state unemployment insurance and workers' compensation fell sharply as well.

Anecdotal reports point to a further pickup in health insurance costs. Many managed care plans are raising premiums in an attempt to recoup the losses they suffered in 1997, and both consumers and providers are seeking changes (for example, fewer restrictions on access to specialists) that may make it more difficult for insurers

---

20. Twelve-month compensation growth edged down for sales workers in March but picked up nearly a percentage point for other white collar workers (such as professionals and managers).

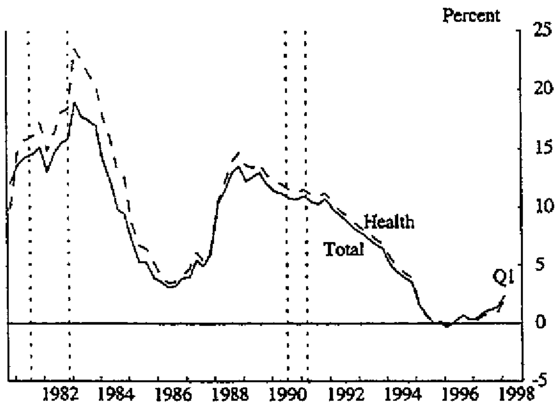
EMPLOYMENT COST INDEX OF HOURLY COMPENSATION
FOR PRIVATE INDUSTRY WORKERS

	1997				1998
	Mar.	June	Sept.	Dec.	Mar.
	-----Quarterly percent change------- (Compound annual rate)				
Total hourly compensation[1]	2.5	3.7	3.4	4.3	2.7
Wages and salaries	3.5	3.8	4.1	4.7	3.4
Benefit costs	0.3	2.6	2.0	3.8	1.1
By industry					
Construction	2.5	3.2	2.8	1.9	2.8
Manufacturing	0.9	3.4	3.0	2.1	3.0
Transportation and public utilities	1.2	2.8	3.1	4.0	3.9
Wholesale trade	6.2	1.5	3.3	2.1	7.6
Retail trade	3.8	2.8	3.8	2.5	5.3
FIRE	8.5	2.5	3.4	12.8	6.7
Services	2.7	3.6	3.9	4.8	1.7
By occupation					
White collar	3.4	3.0	3.6	5.1	3.3
Blue collar	1.2	3.1	3.1	2.8	1.8
Service occupations	3.5	3.8	6.6	2.1	4.3
Memo:					
State and local governments	2.1	1.8	2.4	2.4	3.3
	-----Twelve-month percent change----				
Total hourly compensation	3.0	2.9	3.2	3.4	3.5
Excluding sales workers	2.8	2.9	3.0	3.4	3.4
Wages and salaries	3.4	3.3	3.6	3.9	4.0
Excluding sales workers	3.1	3.3	3.5	3.8	4.0
Benefit costs	2.0	2.0	2.0	2.3	2.3
By industry					
Construction	2.3	2.7	3.0	2.6	2.7
Manufacturing	2.6	2.6	2.5	2.4	2.9
Transportation and public utilities	2.7	2.6	2.8	2.9	3.4
Wholesale trade	4.2	3.5	3.6	3.2	3.6
Retail trade	3.2	3.9	3.9	3.4	3.6
FIRE	3.3	2.5	3.0	6.7	6.3
Services	3.0	3.0	3.2	3.8	3.5
By occupation					
White collar	3.2	3.2	3.1	3.8	3.8
Sales	4.2	3.0	4.3	4.2	4.0
Nonsales	2.9	3.1	3.0	3.7	3.8
Blue collar	2.4	2.5	2.8	2.6	2.7
Service occupations	3.2	3.5	4.5	4.0	4.2
Memo:					
State and local governments	2.5	2.4	2.4	2.3	2.5

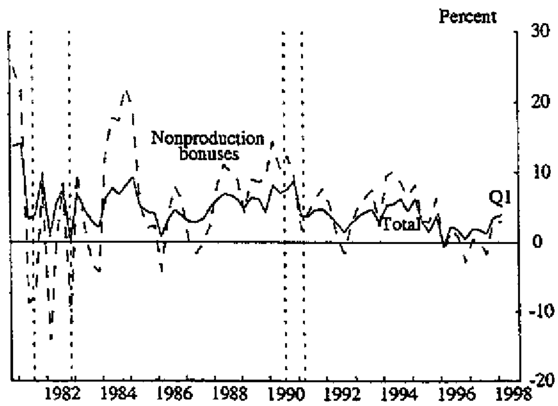
1. Seasonally adjusted by the BLS.

Components of ECI Benefits Costs
(Private industry workers; twelve-month change)

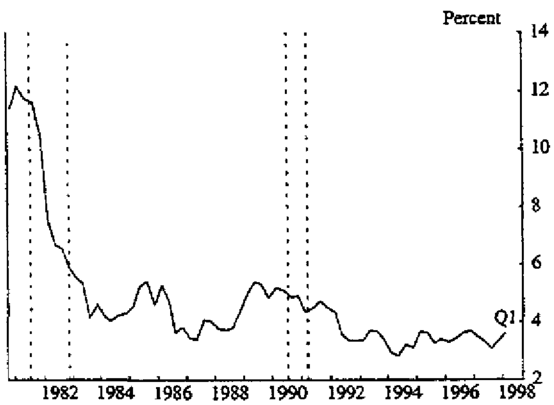
Insurance Costs



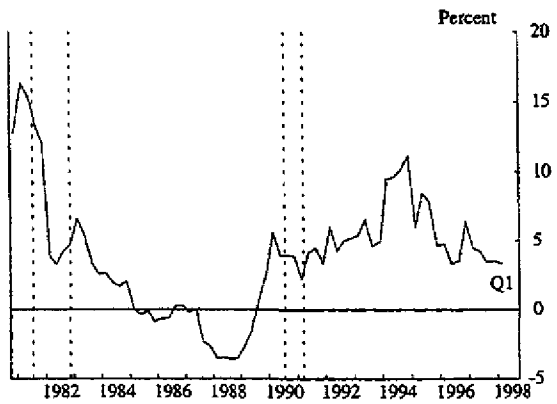
Supplemental Pay



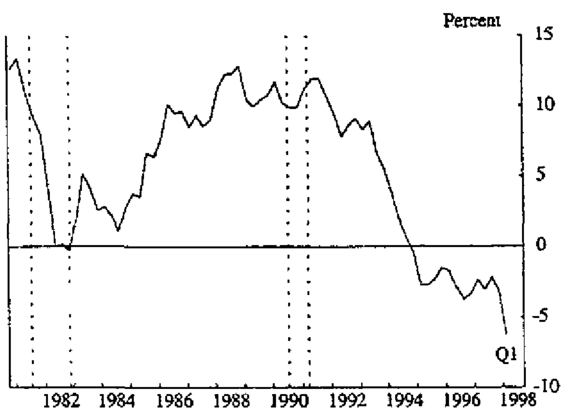
Paid Leave



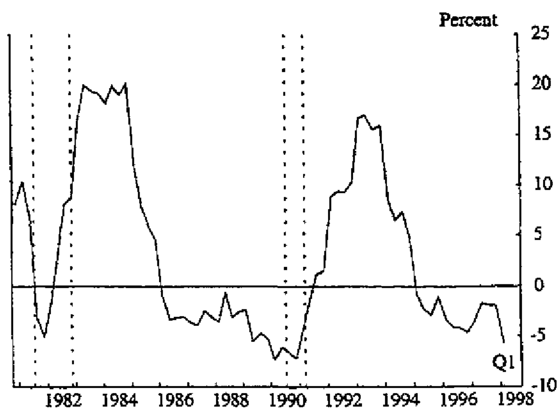
Retirement and Savings



Workers' Compensation Insurance



State Unemployment Insurance



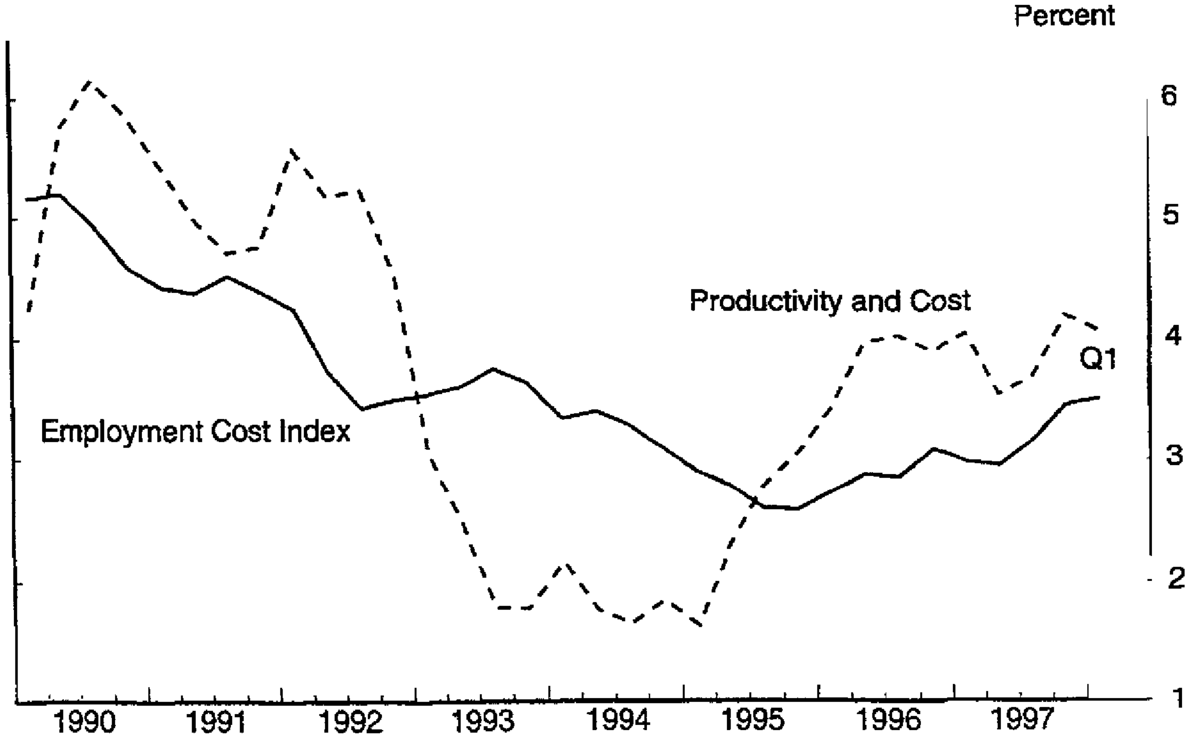
Note. Unpublished ECI benefits detail.

LABOR PRODUCTIVITY AND COSTS
(Percent change; annual rate; based on seasonally adjusted data)

	1996[1]	1997[1]	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1997:Q1 to 1998:Q1
Output per hour							
Total business	1.8	2.2	2.2	3.5	1.6	.8	2.0
Nonfarm business	1.7	2.1	2.3	3.6	1.4	.2	1.9
Manufacturing	5.1	4.8	3.8	8.0	4.3	.5	4.1
Nonfinancial corporations[2]	2.8	2.7	2.4	6.3	.6	n.a.	n.a.
Compensation per hour							
Total business	4.0	4.3	3.1	4.2	5.6	4.2	4.3
Nonfarm business	3.9	4.1	3.2	3.8	5.2	4.1	4.1
Manufacturing	3.0	4.1	2.6	3.4	6.1	2.8	3.7
Nonfinancial corporations[2]	3.8	4.0	3.2	4.3	4.7	n.a.	n.a.
Unit labor costs							
Total business	2.2	2.0	.9	.7	3.9	3.4	2.2
Nonfarm business	2.2	2.0	.9	.2	3.8	3.8	2.2
Manufacturing	-1.9	-.6	-1.1	-4.2	1.8	2.3	-.3
Nonfinancial corporations[2]	1.0	1.3	.8	-1.9	4.1	n.a.	n.a.

1. Changes are from fourth quarter of preceding year to fourth quarter of year shown.
2. The nonfinancial corporate sector includes all corporations doing business in the United States with the exception of banks, stock and commodity brokers, finance and insurance companies; the sector accounts for about two-thirds of business employment.

Measures of Compensation per Hour
(Four-quarter changes)



to restrain costs. Additional upward pressure on premiums appears to be coming from higher spending on prescription drugs and efforts by providers to offset the reductions in Medicare reimbursements. Information about 1999 is very limited, but many insurers are reportedly seeking increases above those agreed to this year. For example, CalPERS, the second largest purchaser of employee health benefits (behind the federal government), will see an average increase of at least 5 percent in HMO premiums, and that figure could be considerably higher if Kaiser, which covers more than one-third of CalPERS HMO members, were to achieve the 12 percent increase it is seeking. In 1998, CalPERS HMO premiums rose about 3 percent after having declined for four years.

Hourly compensation in the nonfarm business sector--reported in the Productivity and Cost report--rose at a 4.1 percent annual rate in the first quarter, down considerably from its rapid fourth-quarter pace.[21] Over the past four quarters, compensation per hour has increased 4.1 percent, little changed from the 4.0 percent rise over the previous four-quarter period. This measure of compensation has continued to rise more rapidly than the ECI, likely reflecting the rise in overtime, a shift toward industries with higher-than-average pay, and perhaps greater job-grade creep in a tight labor market. These factors affect compensation per hour in the nonfarm business sector but should affect the fixed-weighted ECI.

Information on labor costs this quarter are mostly limited to the BLS monthly data on average hourly earnings of production and nonsupervisory workers. In April, average hourly earnings rose 0.3 percent on a published basis; when adjusted for the distortion caused by reporting problems with the workweek, however, they increased 0.5 percent, the fastest pace in six months. On both the published and adjusted basis, the twelve-month change in average hourly earnings was 4.2 percent in April, up 1/2 percentage point from the year-earlier period.

The difficulties in adjusting hours for the Easter holiday this year may also affect average hourly earnings by reducing the amount of overtime worked during the week at establishments with Monday-to-Sunday workweeks. Thus far, the BLS does not believe that an Easter

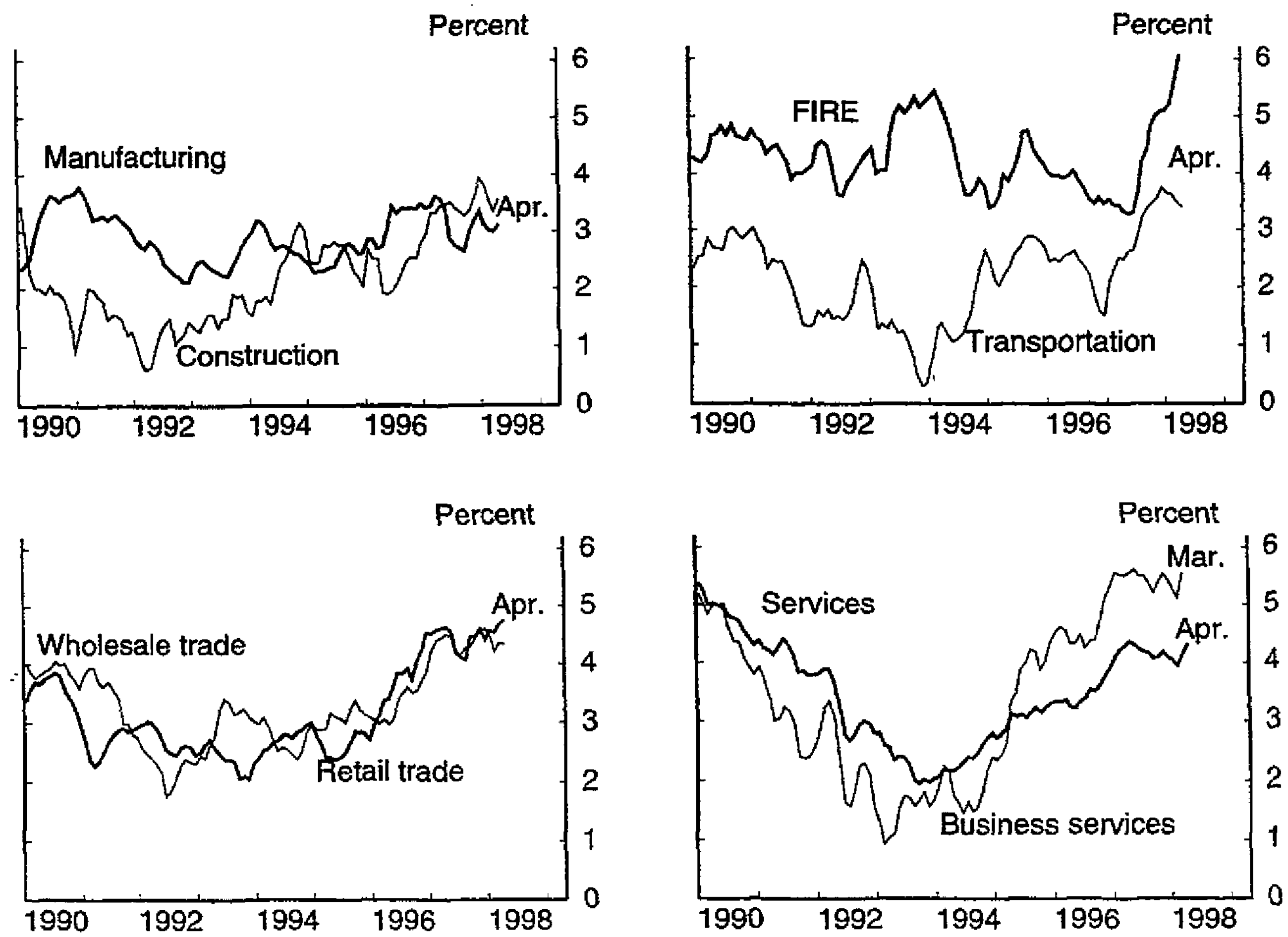
21. This measure of hourly compensation is potentially affected by the length-of-pay-period problem noted earlier. As discussed in the appendix, however, the extent of any bias is difficult to determine, although it is undoubtedly smaller than the bias in productivity.

AVERAGE HOURLY EARNINGS
(Percentage change; based on seasonally adjusted data)

	Twelve-month percent change[1]			Percent change to Apr. 1998		1998	
	Apr. 1996	Apr. 1997	Apr. 1998	Oct. 1997	Jan. 1998	Mar.	Apr.
	-Annual rate-					-Monthly rate-	
Total private nonfarm	3.2	3.7	4.2	4.4	4.9	.3	.3
Adjusted[2]	3.3	3.7	4.2	4.1	4.5	.3	.5
Manufacturing	3.5	2.8	3.2	1.8	2.7	.3	.0
Construction	1.9	3.5	3.7	4.3	6.1	.7	.3
Transportation and public utilities	2.5	2.6	3.2	3.6	.5	-.3	.6
Finance, insurance, and real estate	3.5	2.7	6.6	6.1	9.7	.4	.4
Retail trade	3.5	4.5	5.0	5.5	5.7	.5	.7
Wholesale trade	2.5	4.3	4.4	4.9	6.9	.5	.2
Services	2.9	4.2	4.4	5.6	7.6	.5	.6

1. Uses not seasonally adjusted data.
2. Adjusted for length of pay period.

Average Hourly Earnings
(Smoothed twelve-month changes*)



* Three-month moving average of twelve-month changes.

adjustment is warranted for the average hourly earnings series for this April. Our own view is that the Easter problem may have caused average hourly earnings in all private industries to be understated in April by one or two cents.[22]

22. The problem this year with seasonal adjustment for the Easter holiday was particularly severe in manufacturing, and thus the effect of overtime on average hourly earnings is large in manufacturing. In April, average hourly earnings in manufacturing were flat, but straight-time earnings rose 0.7 percent.

APPENDIX

THE LENGTH-OF-PAY-PERIOD PROBLEM AND LABOR MARKET INDICATORS

Earlier this year, the Bureau of Labor Statistics uncovered a statistical error in its method of estimating hours and earnings of production or nonsupervisory workers from the payroll survey. The problem, which has come to be known as the length-of-pay-period (LP) bias, generates a spurious negative correlation between measured hours or earnings and the number of weekdays in the first half of each month and, to a lesser extent, in the month as a whole. The problem affects payroll series calculated directly from these data (average weekly hours and average hourly earnings) as well as estimates from other BLS programs that use these hours and earnings measures as source data (such as output per hour and compensation per hour in the nonfarm business sector).

As part of the payroll (or establishment) survey, the BLS asks establishments to report the paid hours of production or nonsupervisory employees during the pay period that includes the 12th of the month. For employees paid on a monthly or semimonthly basis, the length of this pay period varies from month to month. For example, the semimonthly pay period that includes the 12th can contain either ten weekdays or eleven weekdays. Under the assumption that establishments report actual hours paid, the BLS makes an adjustment to each establishment's reported hours in order to convert them to a common weekly basis. Put another way, BLS staff standardize the hours reported by establishments to make them match a standard-length month or semimonth.

Last fall, the BLS became aware of a negative correlation between the length of the month or semimonth and changes in the reported levels of average weekly hours and average hourly earnings. This spring, the BLS interviewed a sample of establishments that use monthly or semimonthly pay periods and confirmed that many have been reporting hours as though each month or semimonth were of "typical" length. That is, some firms have been "standardizing" the pay period themselves, so when the BLS performs its standardizing adjustment, it is, in effect, over-adjusting hours for these firms. This problem, which mostly concerns establishments that have semi-monthly pay periods, has led to an overstatement of hours in months with ten-weekday pay periods (which are "standardized" up too much) and an understatement in months with eleven-weekday pay periods (which are "standardized" down too much). The problem appears to have begun in 1989, when the BLS stopped asking establishments to specify the length of the pay period for which they were reporting, and is concentrated in the service-producing sectors of the economy.

A similar problem plagues the measure of average hourly earnings. The BLS computes average hourly earnings by dividing total weekly payroll (of production or nonsupervisory workers) at an establishment by total weekly hours, after adjusting both numbers to reflect a standard-length pay period. Thus, "over-standardization" can affect both payrolls and hours. Hourly earnings are not affected in cases in which the establishment reports both payrolls and hours on an actual length-of-pay-period basis, or in cases in which the establishment reports both payrolls and hours on a standardized length-of-pay-period basis, for which the biases from the over-standardization cancel. However, a significant number of

Effect of Length of Pay Period

		Workweek		Production Worker Hours	
		Published	Experimental	Published	Experimental
1997:	Jan.	34.4	34.6	138.2	138.9
	Feb.	34.8	34.7	140.0	139.5
	Mar.	34.8	34.7	140.2	139.7
	Apr.	34.5	34.6	139.6	139.9
	May.	34.5	34.7	140.0	140.7
	Jun.	34.6	34.6	140.6	140.5
	Jul.	34.4	34.6	140.2	140.9
	Aug.	34.6	34.7	140.8	141.1
	Sep.	34.5	34.6	140.9	141.2
	Oct.	34.5	34.7	141.2	141.9
	Nov.	34.8	34.6	142.9	142.0
	Dec.	34.6	34.6	142.5	142.4
1998:	Jan.	34.8	34.8	143.6	143.5
	Feb.	34.9	34.7	144.5	143.6
	Mar.	34.7	34.5	143.5	142.6
	Apr.	34.4	34.6	142.9	143.6

		NFB Hours Growth		Productivity Growth	
		Published	Experimental	Published	Experimental
1997:	Q1	4.5	3.4	1.1	2.2
	Q2	1.5	2.6	2.3	1.2
	Q3	0.1	0.5	3.6	3.2
	Q4	3.5	2.0	1.4	2.9
1998:	Q1	5.0	3.6	0.2	1.6
1997:Q4/1996:Q4		2.4	2.1	2.1	2.4

establishments standardize payrolls without standardizing hours.[1] Thus, the BLS's over-standardization of payrolls causes average hourly earnings to be overstated in months with ten-weekday pay periods and understated in months with eleven-weekday pay periods. This bias in average hourly earnings is much less severe than is the bias in hours, but it is nonetheless significant.

With the May data (published in June), the BLS will institute procedures to adjust the hours and earnings data to account for these reporting problems and will revise the data back to 1989 accordingly. In the meantime, the BLS has provided the public with an experimental series of corrected figures for <u>average weekly hours</u> and <u>average hourly earnings</u>, which the staff has used to correct other affected data series (table). Unfortunately, the corrected workweeks and earnings are available to only one decimal place, and the associated rounding can make a considerable difference to the corrections made by the staff. Thus, all of the corrected series should be viewed as approximate for the present. In addition, the BLS's correction factors are not yet official and are subject to some uncertainty until the published (and rebenchmarked) series are officially released in June.

Additional complications arise when we use the BLS estimates to correct the data series published in the BLS's Productivity and Costs release. In particular, the data for the nonfarm business (NFB) sector, which is the most prominent example, refer to a broader group of workers than production and nonsupervisory workers on private nonfarm payrolls; they include nonproduction or supervisory employees, self-employed persons, employees of government enterprises, and unpaid family workers. Because the data subject to the LP bias refer to only the narrower group, we must scale down the corrections to hours. This adjustment adds another, albeit small, element of imprecision to the staff's corrections.

Output in the nonfarm business sector is probably not much affected by the LP bias, because it is constructed so as to resemble a product-side measure of output. The estimates for some elements of output are influenced by data on the income side, but we believe that this effect is small. Therefore, corrected output per hour in the nonfarm business sector can be reasonably approximated by dividing output by corrected hours.

We are more uncertain about how to adjust compensation per hour for the LP bias. For historical data (currently data prior to 1997), annual estimates of compensation are derived independently of the data from the payroll survey (from unemployment insurance system records, tax data, and other sources). Thus, the bias in compensation per hour has been the same as the bias in output per hour just discussed. For the more recent period, however, the BEA uses the hours and earnings data from the payroll survey (along with other data) to estimate compensation. Moreover, even after benchmarking, the payroll survey data are used to interpolate the quarterly patterns between the annual benchmarks. BEA staff have routinely made judgmental adjustments to the payroll data to smooth through movements that they viewed as distorted, either by observable special factors, such as particularly bad storms, or because the data themselves appeared unusually volatile. As a result, the BEA's estimates of compensation probably have corrected

1. Few establishments standardize hours while not standardizing payrolls.

somewhat for the LP bias, although there apparently is no explicit correction for the LP bias as such. Unfortunately, we do not know the extent to which the BEA's compensation estimates correct for the LP bias, and thus we have little sense of the degree of distortion remaining in estimates of recent compensation per hour, or in the intra-year movements in estimates of past compensation per hour for earlier years.

DOMESTIC FINANCIAL DEVELOPMENTS

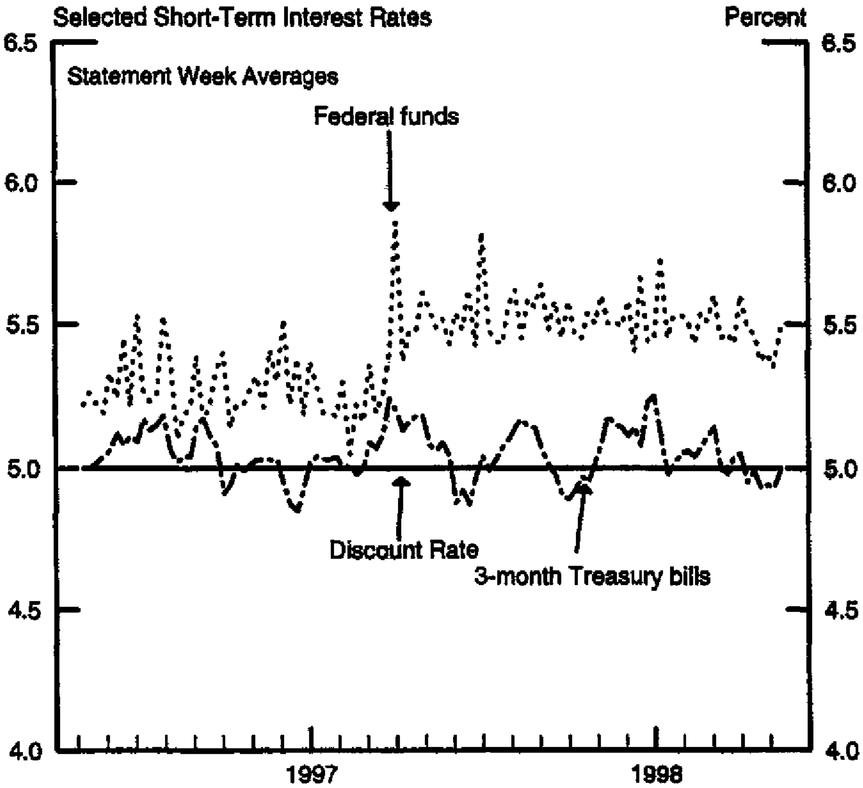
Selected Financial Market Quotations[1]
(Percent except as noted)

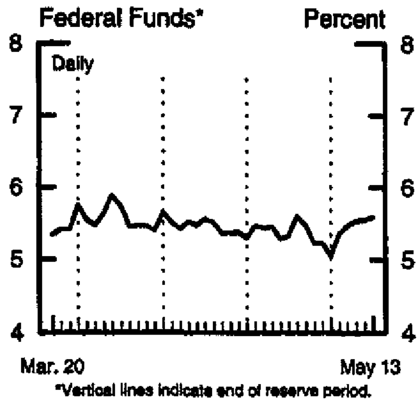
Instrument	1997	1998			Change to May 13, from:		
	Sep. 30	Jan. 2	FOMC * Mar. 31	May 13	Sep. 30	Jan. 2	FOMC * Mar. 31
Short-term rates							
Federal funds							
intended rate [2]	5.50	5.50	5.50	5.50	.00	.00	.00
realized rate [3]	5.51	5.44	5.52	5.49	-.02	.05	-.03
Treasury bills [4]							
3-month	4.93	5.18	5.09	4.99	.06	-.19	-.10
6-month	5.08	5.19	5.04	5.17	.09	-.02	.13
1-year	5.18	5.18	5.16	5.16	-.02	-.02	.00
Commercial paper							
1-month	5.51	5.56	5.54	5.49	-.02	-.07	-.05
3-month	5.48	5.54	5.44	5.48	.00	-.06	.04
Large negotiable CDs [4]							
1-month	5.59	5.64	5.59	5.56	-.03	-.08	-.03
3-month	5.67	5.69	5.60	5.59	-.08	-.10	-.01
6-month	5.72	5.71	5.64	5.67	-.05	-.04	.03
Eurodollar deposits [5]							
1-month	5.56	5.59	5.56	5.50	-.06	-.09	-.06
3-month	5.63	5.69	5.56	5.56	-.07	-.13	.00
Bank prime rate	8.50	8.50	8.50	8.50	.00	.00	.00
Intermediate- and long-term rates							
U.S. Treasury (constant maturity)							
3-year	5.88	5.62	5.69	5.60	-28	-.02	-.09
10-year	6.12	5.67	5.72	5.64	-48	-.03	-.08
30-year	6.41	5.86	5.98	5.95	-.46	.09	-.03
U.S. Treasury 10-year indexed note	3.61	3.70	3.75	3.76	.15	.06	.01
Municipal revenue (Bond Buyer) [6]	5.63	5.41	5.42	5.49	-.14	.08	.07
Corporate-A utility, recently offered	7.44	6.96	7.17	7.17	-.27	.21	.00
High-yield corporate [7]	9.02	9.04	8.86	9.00	-.02	-.04	.14
Home mortgages [8]							
FHLMC 30-yr fixed rate	7.28	7.03	7.08	7.14	-.14	-.70	.06
FHLMC 1-yr adjustable rate	5.51	5.50	5.70	5.65	.14	.15	-.05

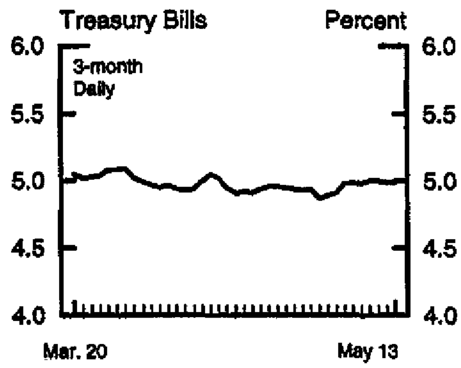
Stock exchange index	Record high		1998			Percentage change to May 13, from:		
	Level	Date	Jan. 2	FOMC * Mar. 31	May 13	Record high	Jan. 2	FOMC * Mar. 31
Dow-Jones Industrial	9211.84	5/13/98	7965.04	8782.12	9211.84	.00	15.65	4.89
S&P 500 Composite	1130.54	4/22/98	975.04	1093.55	1118.86	-1.03	14.75	2.31
NASDAQ (OTC)	1917.61	4/22/98	1581.53	1818.70	1866.18	-2.68	18.00	2.61
Russell 2000	491.41	4/21/98	436.52	476.23	477.48	-2.83	9.38	.26
Wilshire	10782.75	4/22/98	9327.71	10423.24	10622.47	-1.49	13.88	1.91

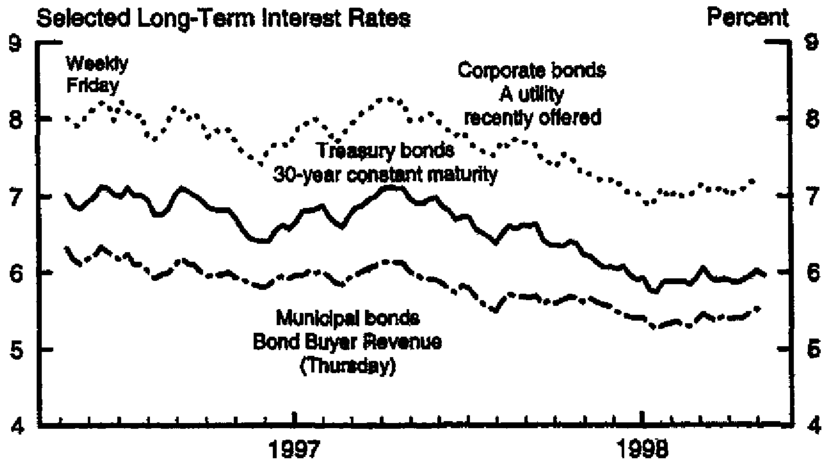
1. One-day quotes except as noted.
2. FOMC's intended rate.
3. Average for two-week reserve maintenance period ending on or before date shown. Most recent observation is average for current maintenance period to date.
4. Secondary market.
5. Bid rates for Eurodollar deposits at 11 a.m. London time.
6. Most recent observation based on one-day Thursday quote and futures market index changes.
7. Merrill Lynch Master II high-yield bond index composite.
8. Quotes for week ending Friday previous to date shown.
* Figures cited are as of the close on March 30, 1998.

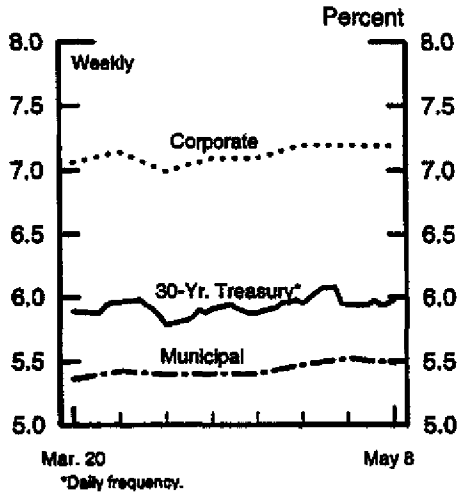
Selected Interest Rates

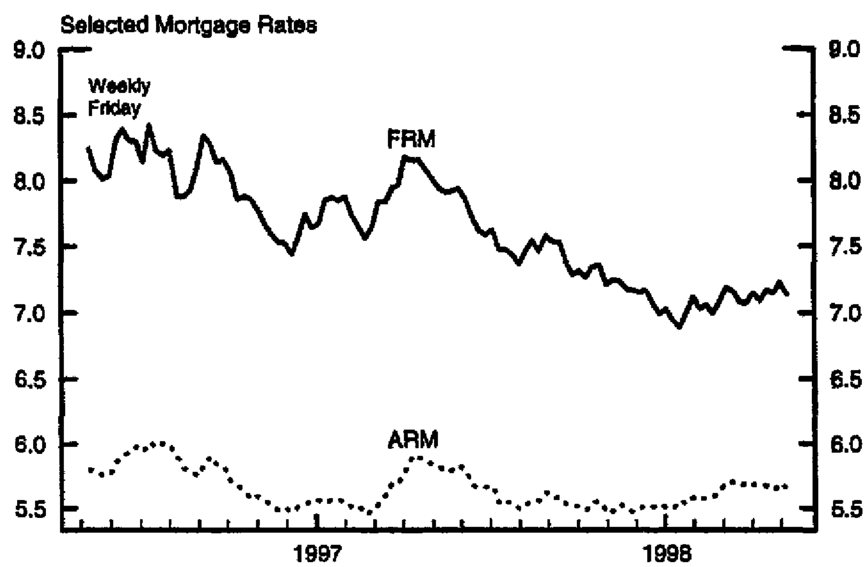


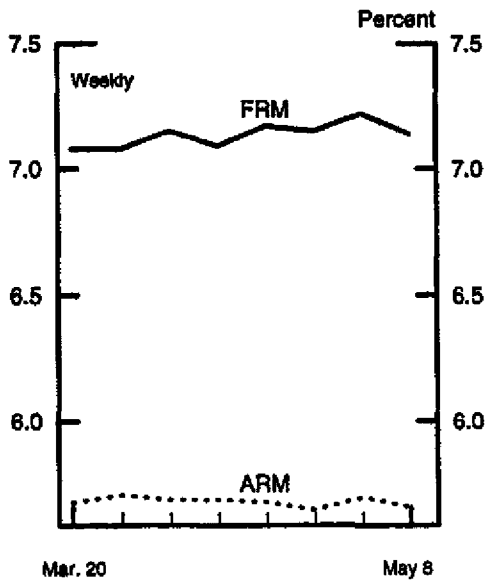












Interest rates were little changed on balance over the intermeeting period. After dropping a bit in early April, rates crept higher in response to public statements by FOMC members expressing concern about the risk of unsustainably rapid economic growth. Rates stepped up a notch near month-end amid press reports that the latest policy directive had tilted toward restraint, but they subsequently receded when incoming data indicated that inflation continued to be subdued even as the economy grew rapidly. Federal funds and Eurodollar futures rates remain relatively flat for contracts through the summer, implying (after allowance for a small term premium) that market participants place only small odds on System tightening at the next few FOMC meetings. Quality spreads on corporate debt have widened a bit but still are quite narrow by historical standards, and major equity price indexes have tacked on gains of 2 percent to 5 percent. The higher stock prices, in the face of slower growth in earnings, have kept price-earnings ratios for these indexes near historical highs.

Private sector borrowing has remained brisk in recent months and has involved some shifting from shorter-term to longer-term debt, particularly by businesses. Gross bond issuance by nonfinancial firms rose to a record level in April from a strong March, while bank loans to businesses weakened and net issuance of commercial paper turned negative over those months. Households have been adding substantially to their total mortgage debt as the housing market has boomed and have been refinancing a sizable portion of their existing mortgages at lower rates. Consumer credit expansion has been relatively light, at least partly because of substitution into mortgage debt in the course of refinancing a mortgage or obtaining a home equity loan. Borrowing by state and local governments has eased off its torrid pace very recently as municipalities have pared their offerings at a time of seasonally low investor demand. Gross issuance of Treasury debt has been trimmed of late, as swollen tax-payment receipts have enabled the Treasury to pay down a hefty amount of marketable debt.

The monetary aggregates continued to grow rapidly in April, boosted by a larger-than-seasonal buildup in household liquid accounts in anticipation of income tax payments. Since the fourth

GROSS ISSUANCE OF SECURITIES BY U.S. CORPORATIONS
(Billions of dollars; monthly rates, not seasonally adjusted)

Type of security	1996	1997	1997 Q4	1998 Q1	1998 Feb.	1998 Mar.	1998 Apr.
All U.S. corporations	58.4	69.7	72.0	95.8	85.4	119.8	89.2
Stocks[1]	10.2	9.8	11.6	12.4	11.2	18.4	11.7
Bonds	48.2	59.9	60.4	83.4	74.3	101.4	77.5
Nonfinancial corporations							
Stocks[1]	6.7	5.0	5.6	6.0	5.7	10.6	5.2
Initial public offerings	2.9	1.8	2.5	1.2	1.8	1.5	1.9
Seasoned offerings	3.8	3.2	3.1	4.8	4.0	9.1	3.3
Bonds	12.5	17.3	17.0	25.7	22.9	24.8	32.4
By rating, sold in U.S.[2]							
Investment grade	6.3	7.4	6.8	13.3	8.8	13.1	12.8
Speculative grade	4.8	8.0	7.8	10.5	11.9	10.0	17.5
Public	2.3	1.5	.9	1.9	1.6	2.9	1.9
Rule 144A	2.5	6.5	6.9	8.6	10.2	7.1	15.6
Financial corporations							
Stocks[1]	3.5	4.8	6.0	6.4	5.4	7.8	6.4
Bonds	35.8	42.6	43.4	57.7	51.3	76.6	45.2
Memo:							
Net issuance of commercial paper, nonfinancial corporations[3]	-.1	1.1	1.1	4.5	5.9	-.7	-8.2
Change in C&I loans at commercial banks[3]	5.4	6.0	5.4	3.6	10.0	-9.1	6.4

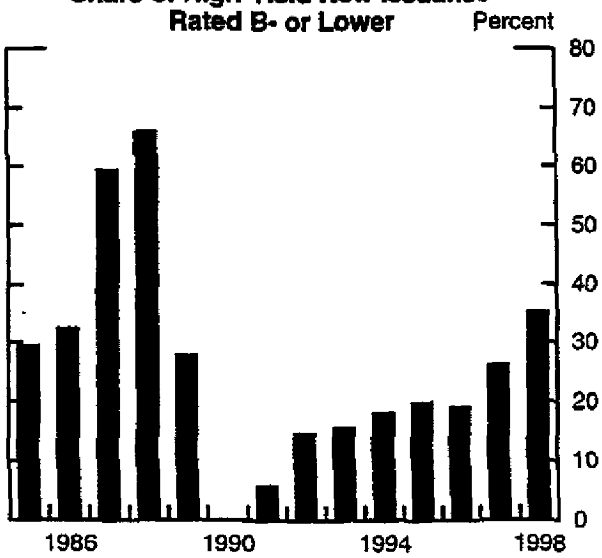
Note. Components may not sum to totals because of rounding. These data include speculative-grade bonds issued privately under Rule 144A. All other private placements are excluded. Total reflects gross proceeds rather than par value of original discount bonds.

1. Excludes equity issues associated with equity-for-equity swaps that have occurred in restructurings.

2. Bonds categorized according to Moody's bond ratings, or to Standard & Poor's if unrated by Moody's. Excludes mortgage-backed and asset-backed bonds.

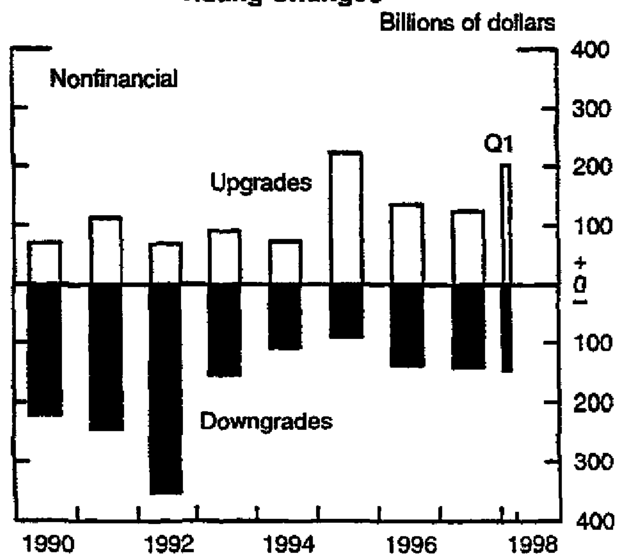
3. End-of-period basis. Seasonally adjusted.

Share of High Yield New Issuance Rated B- or Lower



Note. 1998 estimate through April.
Source. Merrill Lynch, Securities Data Company.

Rating Changes



Note. 1998:Q1 observation at an annual rate.
Source. Moody's Investors Service.

quarter of last year, M2 has grown at a rate of 8-1/4 percent, well above the upper bound of its target range. In May, however, with the tax payment dates having passed, M2 balances are apparently running off.

Business Finance

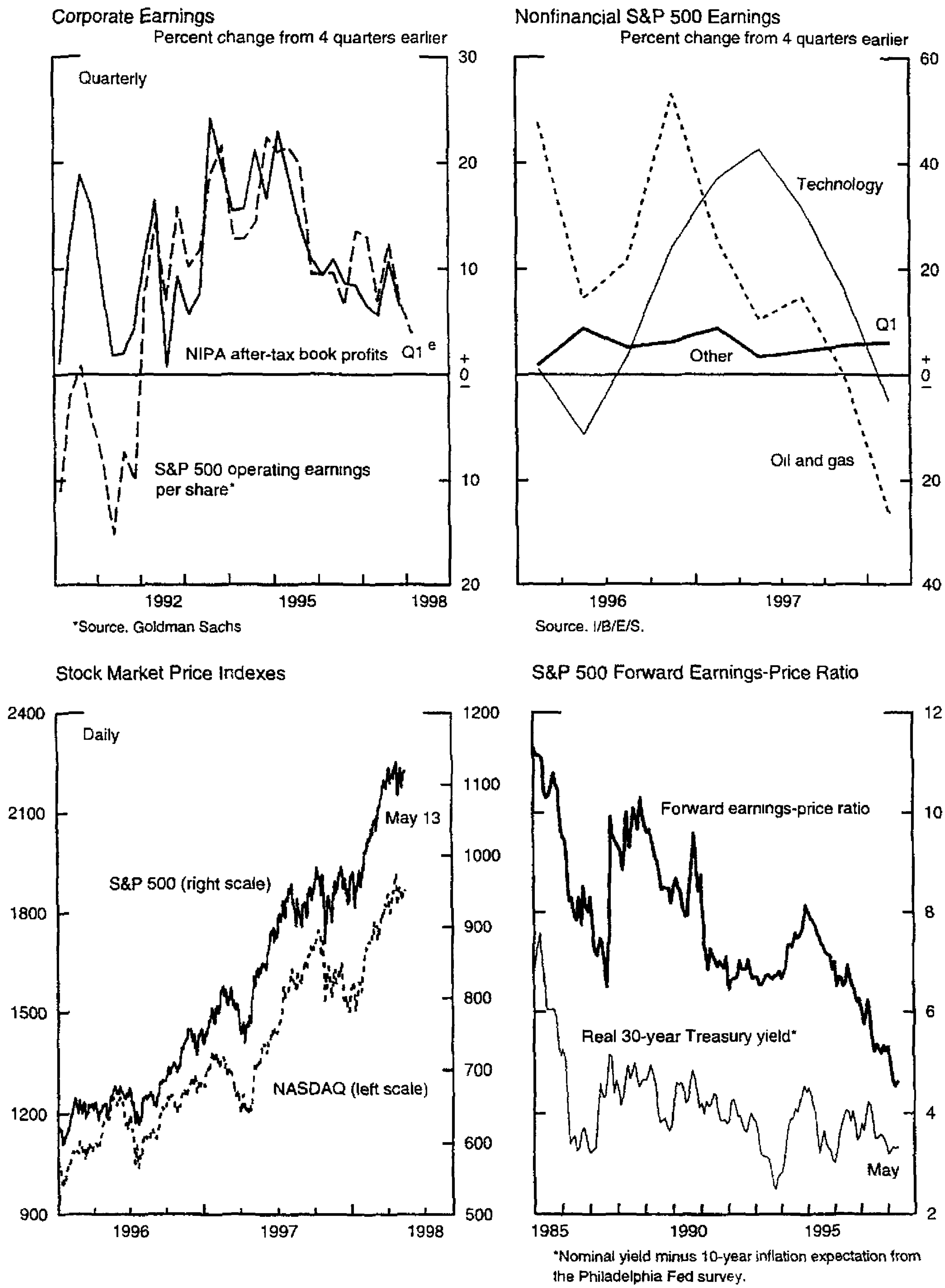
Gross issuance of nonfinancial corporate bonds surged in April on the heels of robust growth in March, in large part reflecting a desire to lock in low funding costs. A large portion of the proceeds from investment-grade offerings have been used to retire shorter-term liabilities, including both bank loans and commercial paper. Indeed, following a slight runoff in March, nonfinancial commercial paper outstanding dropped more than $8 billion in April. Gross offerings of speculative-grade bonds climbed to a record high in April, but a substantial portion of the funds has been used to retire outstanding debt with higher interest rates. On balance, total net borrowing by businesses over the past two months has moderated from the elevated pace of early this year to one closer to that of 1997 as a whole.

The most recent spate of junk bond issuance involved several companies with very low bond ratings that entered the market for the first time. As a result, the percentage of total junk bond proceeds raised through issues rated B- or lower has jumped to 35 percent for the current year to date (chart, lower left), establishing a bond market tone reminiscent of the go-go days of the late 1980s.[1] Indeed, if the recent pace persists, this year's dollar volume of proceeds from lower-rated junk issuance will surpass 1988's $20 billion record by midyear. Perhaps because of pressure from the recent flood of offerings, junk spreads recently widened about 10 basis points, but they are still close to historical lows.

Recent information on corporate credit quality has been mixed. Missed payments by two large retailers helped boost junk bond defaults in the first quarter; nonetheless, the default rate on junk

1. The chart likely understates the importance of very low rated companies tapping the junk bond market during the current wave of issuance. Since 1990, about two-thirds of high-yield debt issued has represented senior debt of the issuer. In contrast, subordinated debt accounted for the majority of high-yield debt in the 1985-89 period, suggesting that the share of the lowest-rated issues on a "senior equivalent" basis during those years would be considerably lower than represented in the chart. Indeed, a Wall Street firm that calculates high-yield debt issuance on a "senior equivalent" basis puts the share of the lowest-rated issues for the first quarter of 1998 at a record high.

Corporate Earnings and Stock Market Prices



debt remains quite low by historical standards. In addition, business failures slowed in the first quarter after picking up some during the second half of 1997. Rating changes in the first quarter resulted in a small net upgrade in the nonfinancial sector (chart, lower right). However, looking forward, the amount of nonfinancial debt on Moody's Watchlist for a possible downgrade slightly exceeds that on review for an upgrade.[2] Expected default rates, based on the distribution of outstanding debt by rating and default probabilities across the rating classes, moved up during the first quarter as the share of outstanding debt at the bottom end of the credit-quality spectrum increased.

Gross equity issuance by nonfinancial firms surged in March but retreated to a more modest $5-1/4 billion total in April. Seasoned offerings have been bolstered in these months by companies issuing equity to help pay for cash-financed acquisitions. IPO activity remained fairly light in March and April. Although investors have bid prices sharply higher for a few Internet and computer software companies, they have otherwise remained relatively cautious about new offerings.

Despite strong gross issuance of equities, net issuance has continued to be quite negative and, based on recent announcements, will remain so for a time. About $27 billion in equity was retired in merger and acquisition transactions completed during the first quarter, and this pace was roughly maintained in April. Since the beginning of the year, more than half of the equity retirement occurred through merger and acquisition deals of less than $1 billion, and lists of pending mergers suggest that this pattern will persist. Corporations also continued to announce sizable share repurchase programs.

With most first-quarter earnings reports now in, the four-quarter growth rate in S&P 500 earnings per share appears to have slowed to around 4 percent, from 7 percent in the fourth quarter (chart, upper left). Profits in the nonfinancial sector were nearly flat year-over-year. In contrast, the growth of financial sector profits picked up in the first quarter, to about 15 percent, driven by spectacular gains in the securities industry.

2. On the financial side, debt of nearly $220 billion associated with two mammoth mergers--Citicorp with Travelers Group and BankAmerica with Nationsbank--was put on watch with positive implications.

Consumer Credit

	1996	1997	1997 Q3	1997 Q4	1998 Q1[p]	1998 Jan	1998 Feb	1998 Mar[p]
Credit outstanding, end of period								
Growth rates (percent, SAAR)								
Total	7.8	4.3	4.0	2.2	3.6	3.8	6.0	1.0
(Previous)	*(7.8)*	*(4.4)*	*(4.2)*	*(2.5)*		*(4.5)*	*(6.9)*	
Auto	7.7	5.4	5.4	8.2	6.0	5.9	3.7	8.4
Revolving	12.7	6.3	7.9	3.4	4.8	4.7	8.4	1.3
Other	0.5	-0.7	-4.7	-8.0	-2.1	-0.9	4.7	-10.1
Levels (billions of dollars, SA)								
Total	1179.9	1230.7	1223.8	1230.7	1241.7	1234.6	1240.7	1241.7
Auto	392.4	413.5	405.2	413.5	419.7	415.5	416.8	419.7
Revolving	499.2	530.8	526.4	530.8	537.2	532.9	536.6	537.2
Other	288.3	286.4	292.3	286.4	284.9	286.2	287.3	284.9
Interest rates[1] (annual percentage rate)								
Commercial banks								
New cars (48 mo.)[2]	9.0	9.0	9.0	9.0	8.9	n.a.	8.9	n.a.
Personal (24 mo.)[2]	13.5	13.9	13.8	14.5	14.0	n.a.	14.0	n.a.
Credit cards[3]	15.6	15.8	15.8	15.7	15.7	n.a.	15.7	n.a.
Auto finance companies[4]								
New cars	9.8	7.1	6.3	6.7	6.3	6.1	7.0	5.9
Used cars	13.5	13.3	13.4	13.2	12.8	12.8	12.9	12.8

1. Annual data are averages of quarterly data for commercial banks and of monthly data for finance companies.
2. Average of most common rate charged for specified type and maturity during the first week of the middle month of each quarter.
3. Stated APR averaged across all credit card accounts at all reporting banks during the period.
4. Average rate for all loans of each type, regardless of maturity, made during the period.
p Preliminary. n.a. Not available.

The deceleration in the profits of nonfinancial firms was more than accounted for by a plunge in the profits of oil and gas companies (chart, upper right), together with an erosion of earnings in the technology sector that has stemmed partly from the financial turmoil in Asia. In contrast, profits for nonfinancial firms outside these two sectors--companies that account for about three-fourths of the profits of nonfinancial firms in the S&P 500--stayed on a steady 5 percent to 7 percent growth path. Profits at some of these firms--particularly airlines--have probably benefited from the lower fuel costs depressing energy sector profits; in fact, the decline in fuel costs may have boosted first-quarter earnings growth of the "other nonfinancial" sector roughly 1 percentage point. Assuming that oil prices remain at their current levels, this beneficial effect (on four-quarter comparisons) likely will extend into the second quarter. After that, however, the boost to profits is expected to dissipate and then to at least partly reverse as the cost savings of cheaper fuels are passed on to consumers.

Reflecting the propensity of both analysts and investors to view the recent weakness in profits as transitory and to view the economic outlook as favorable to earnings, equity prices moved up to record highs during the intermeeting period before dropping back a bit (chart, lower left). Most major equity indexes rose 2 percent to 5 percent over the period, bringing year-to-date gains to between 15 percent and 20 percent, although the Russell 2000--an index of small-cap firms--has gained only about 10 percent year-to-date.

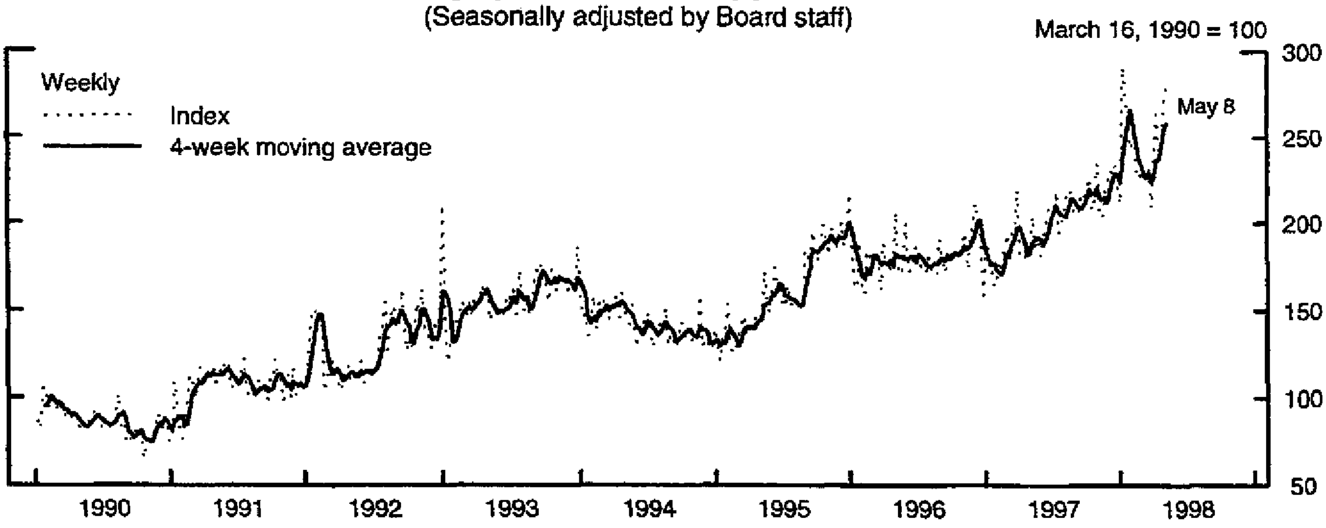
These recent price gains, together with the current flattening of earnings, has pushed many valuation measures further beyond historical experience. The forward-earnings yield on the S&P 500 --equal to expected earnings in the year ahead divided by current price--has fallen below 4-1/2 percent (chart, lower right). At the same time, the real long-term bond yield, measured as the difference between the nominal thirty-year yield minus the Philadelphia Fed's measure of long-term inflation expectations, has remained about unchanged at 3-1/2 percent.

Household Sector Finance

Total household debt appears to have posted another sizable gain in the first quarter, reflecting the robust expansion in consumer spending and housing activity. The growth of household debt was again driven by strong mortgage borrowing, as consumer credit increased only 3-1/2 percent at an annual rate in the first

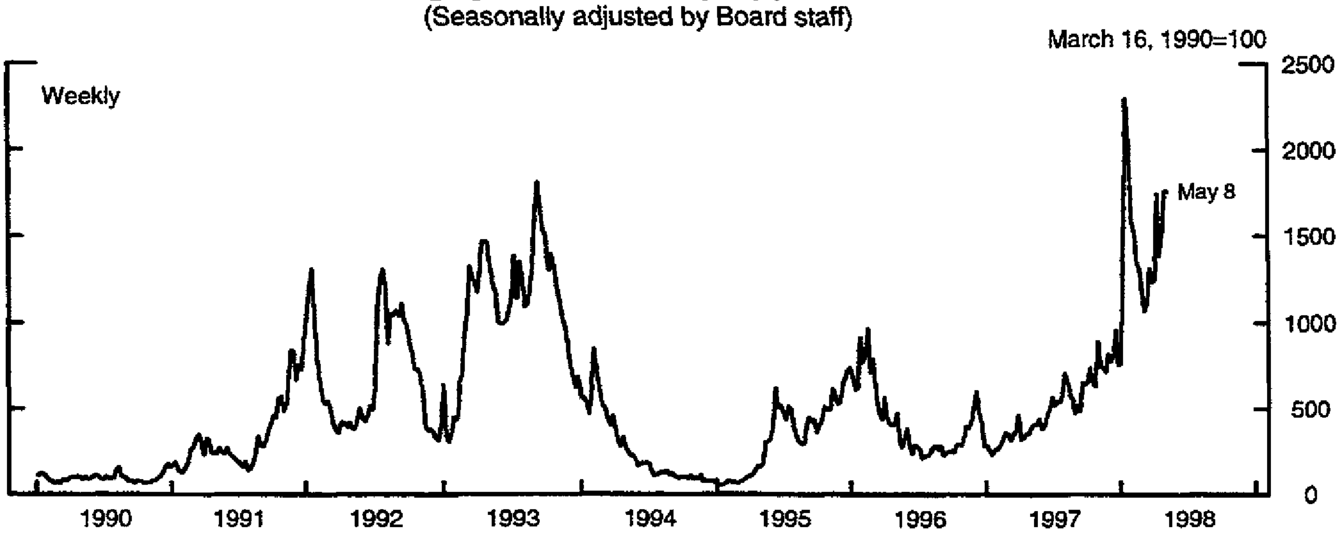
MBA Mortgage Purchase Application Index

(Seasonally adjusted by Board staff)



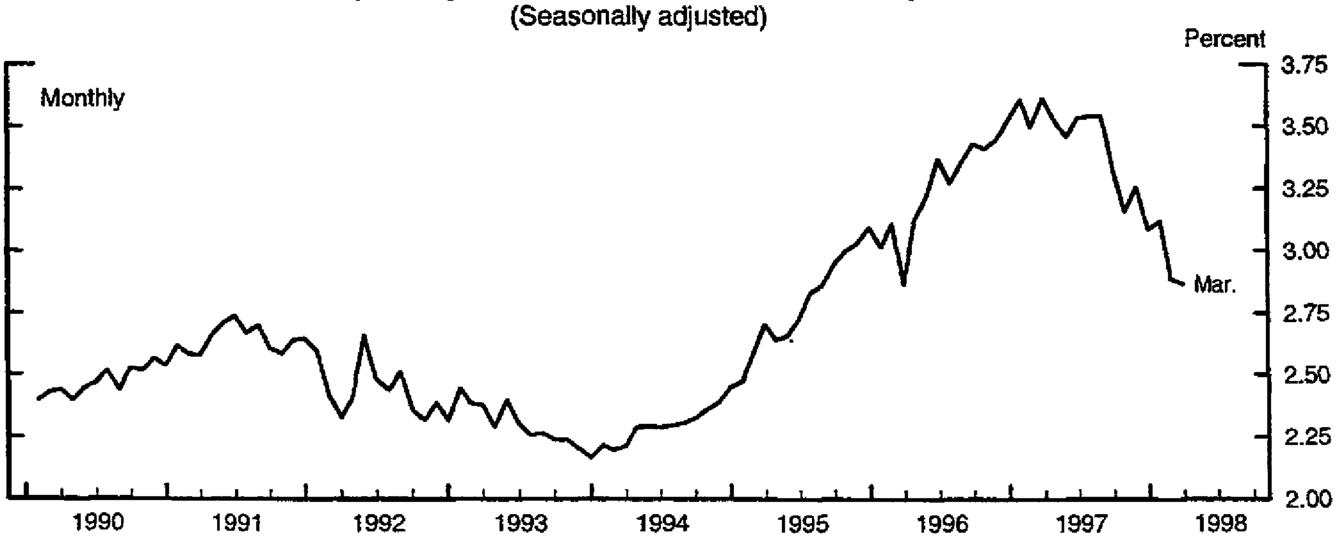
MBA Mortgage Refinancing Application Index

(Seasonally adjusted by Board staff)



Delinquency Rate at Auto Finance Companies

(Seasonally adjusted)



quarter (table). The growth of consumer credit likely has been stunted to some extent by paydowns associated with this year's increased mortgage refinancings.

Low mortgage rates and strong home sales continue to fuel household mortgage borrowing. Complete data for the first quarter are not yet available, but the figures for commercial banks and mortgage pools are indicative of robust growth. Available indicators for April point to a continuation of this trend; for instance, the mortgage purchase application index from the Mortgage Bankers Association remains at an elevated level (chart). The MBA index of mortgage refinancing applications is also high, although below the peak reached in January (chart).

The few recent indicators of household credit quality have been favorable. The auto loan delinquency rate at the captive auto finance companies declined in February and March and is at its lowest level in two years (chart). Also, the delinquency rate on credit card receivables backing securities rated by Moody's fell in March from the year-earlier period for the fourth consecutive month (not shown).

Households continue to invest heavily in stock and bond mutual funds. The Investment Company Institute reports that net sales of long-term mutual funds in March totaled nearly $32 billion, with both stock and bond funds selling briskly (table). Staff estimates based on weekly ICI data suggest that equity fund sales remained strong in April, but that net flows into bond funds moderated some, quite possibly because of redemptions associated with income tax payments. Sales of international equity funds have bounced back in recent months after falling off sharply in the October-January period; however, equity funds focused on Asia had small net outflows in March and April. Preliminary data, provided by the ICI on a confidential basis, indicate that mutual fund inflows were very strong in the first week of May. Household balance sheets continue to be strengthened by rising equity prices, which boosted the ratio of household net worth to income to a new high in the first quarter (chart).

Federal Sector Finance

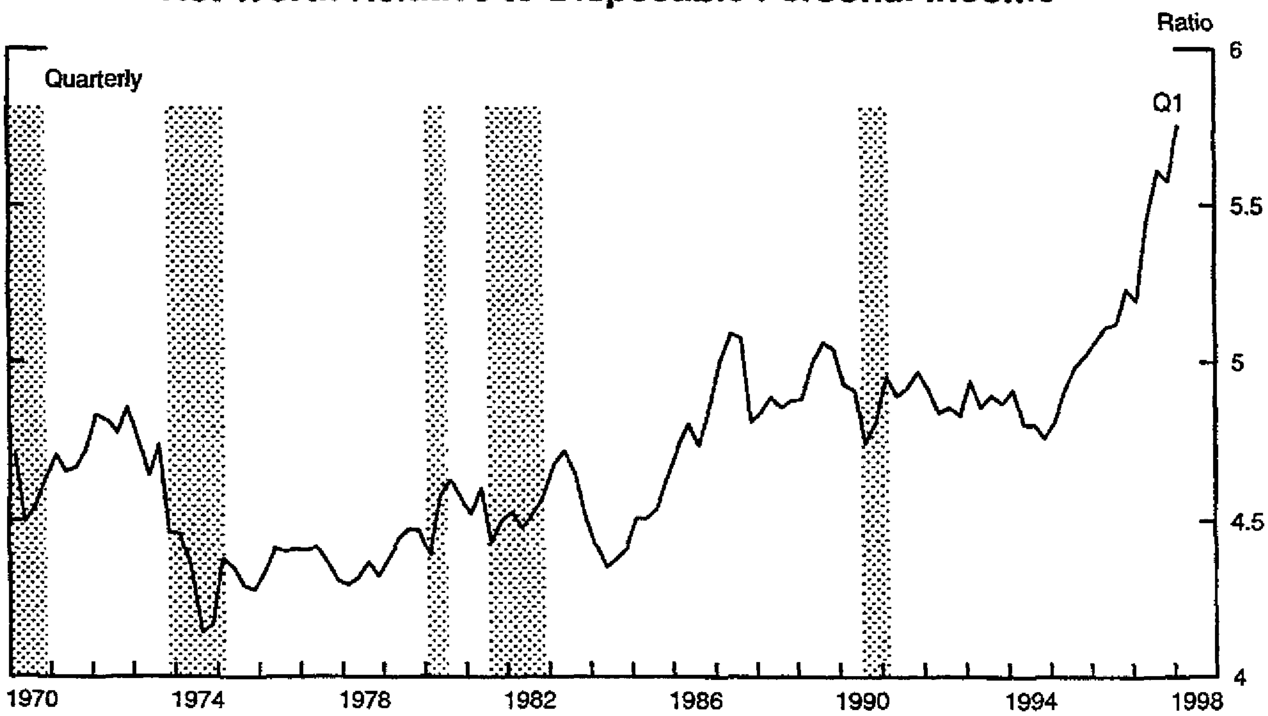
Strong inflows of federal tax receipts this spring have led the Treasury to further pare its weekly bill auctions, from $14-1/2 billion in February to $13-1/2 billion in March and to

Net Sales of Selected Long-Term Mutual Funds
(Excluding Reinvested Distributions)
(Billions of dollars; quarterly and annual data at monthly rate)

	1996	1997	1997 Q3	1997 Q4	1998 Q1	1998 Mar.	1998 Apr.[e]	Memo: Mar. Assets
Total Long-Term Funds	**19.3**	**22.7**	**26.9**	**24.1**	**30.2**	**31.6**	**28.6**	**3,845**
Equity Funds	**18.0**	**19.0**	**21.8**	**17.8**	**20.6**	**23.2**	**23.0**	**2,736**
Domestic	14.1	15.8	18.3	17.9	18.9	20.8	20.4	2,337
Growth	8.3	7.9	10.6	9.8	8.7	9.2	9.5	1,244
Income	5.8	7.9	7.7	8.0	10.2	11.6	11.0	1,093
International	4.0	3.1	3.5	-0.1	1.6	2.4	2.5	400
Hybrid Funds	**1.0**	**1.4**	**1.5**	**1.3**	**2.4**	**2.0**	**1.6**	**349**
Bond Funds	**0.2**	**2.4**	**3.7**	**5.1**	**7.3**	**6.4**	**4.0**	**759**
Taxable	0.7	2.3	3.0	4.3	6.2	5.5	4.2	482
Global	-0.2	-0.1	-0.1	-0.1	0.0	0.3	-0.1	26
High-yield	1.0	1.4	1.6	1.7	2.5	2.2	1.6	118
Government	-1.1	-0.8	-0.8	0.2	0.4	-0.2	-0.4	131
Other	1.0	1.8	2.3	2.5	3.3	3.3	3.0	206
Municipals	-0.5	0.1	0.7	0.8	1.2	0.9	-0.1	277

Source. Investment Company Institute (ICI).
e Staff estimates.

Net Worth Relative to Disposable Personal Income



Note: Data for 1998:Q1 are staff estimates.

$13 billion in April. The decline in bills auctioned in recent years has curtailed liquidity in this market, threatened the benchmark status of these instruments, and lengthened the average maturity of Treasury debt. Going forward, the Treasury plans to reduce coupon issuance and step up bill sales to curb these trends: After this quarter, it will stop issuing three-year notes and will reduce the frequency of five-year note auctions to quarterly from monthly. Bill auctions are expected to rise back to the $14 billion to $15 billion range after the second quarter, reversing a long string of net paydowns. The Treasury also plans to slash the amount of cash management bills outstanding by about $50 billion in the second quarter.

In April, the Treasury held its first auction of thirty-year index-linked bonds, raising about $8 billion at a yield of 3.74 percent. With a bid-to-cover ratio of 2.6, this auction was viewed as less successful than the initial auctions of five- and ten-year Treasury Inflation Protected Securities (TIPS), for which bids ran at least three times the amount sold. The Treasury plans to sell an additional $8 billion of thirty-year indexed bonds in July as a reopening of this issue. TIPS yields have tended to rise in recent months, and the TIPS yield curve has a pronounced downward slope, with the thirty-year bond yielding about 25 basis points less than the five-year note. This inversion may reflect, in part, the combined effect of high and rising real short-term rates and expectations that they will eventually decline.

Foreign holdings of marketable U.S. Treasuries evidently have plateaued after having risen substantially since early 1995. Foreign official holdings fell over recent weeks, primarily as a result of the sale of about $15 billion of bills by the Bank of Japan to finance its mid-April intervention in support of the yen.

Government-sponsored enterprises continued to issue large amounts of debt over the intermeeting period, capitalizing on the slightly lower market yields and the favorable financing environment resulting from the cutback in Treasury auctions. Freddie Mac completed the largest U.S. corporate debt sale ever--a $5 billion issue of its new Reference Notes series. These notes are intended to take advantage of the reduction in Treasury issuance to establish GSE securities as benchmarks for corporate issuance and to realize the yield advantages of the additional liquidity that is associated with such status. Fannie Mae has been issuing in volume as well and

TREASURY FINANCING
(Billions of dollars)

Item	1997 Q3	1997 Q4	1998 Q1	1998 Feb.	1998 Mar.	1998 Apr.[e]
Total surplus / deficit(-)	-10.9	-39.7	-30.2	-41.7	-13.8	--
Means of financing deficit						
Net borrowing and repayments (-)	10.6	33.7	25.9	30.6	20.1	-59.8
Nonmarketable	4.1	15.8	16.8	5.0	9.6	8.0
Marketable	6.5	17.9	9.0	25.5	10.5	-67.8
Bills	-2.2	14.4	4.5	16.3	14.9	-62.0
Coupons	8.7	3.5	4.6	9.2	-4.4	-5.7
Decrease in cash balance	7.6	11.7	4.3	24.0	-11.4	-60.4
Other[1]	-7.4	-5.7	0.0	-12.8	5.0	--
Memo: Cash balance, end of period	43.6	31.9	27.6	16.3	27.6	88.0

Note. Details may not sum to totals because of rounding.
1. Direct loan financing, accrued items, checks issued less checks paid, and other transactions.
e estimated

NET CASH BORROWING OF GOVERNMENT-SPONSORED ENTERPRISES
(Billions of dollars)

Agency	1997 Q4	1998 Q1	1998 Jan.	1998 Feb.	1998 Mar.
FHLBs	18.7	4.0	-2.5	0.6	5.9
FHLMC	9.2	24.1	12.7	2.2	9.2
FNMA	11.8	11.3	0.8	3.1	7.5
Farm Credit Banks	1.9	-1.2	-2.2	-0.1	1.1
SLMA	-2.8	-1.4	1.7	0.2	-3.3

Note. Excludes mortgage pass-through securities issued by FNMA and FHLMC.

has announced that it plans to sell $100 billion of debt over the year compared with $80 billion issued in 1997. Despite heavier issuance, spreads between non-callable agency-issued securities and Treasuries have remained largely unchanged, currently ranging from 17 to 35 basis points. The GSEs are mainly using these newly raised funds to expand their portfolio holdings. Fannie Mae's net mortgage portfolio increased $11 billion in the first quarter, and Freddie Mac's portfolio expanded $22 billion. Both reported record earnings for the first quarter.

State and Local Government Finance

Issuance of municipal debt slowed in April to $21-1/2 billion from a near-record $29 billion in March. Issuers, typically faced with weakened investor demand during the tax-payment season, were hesitant to come to market in April. New capital raised was about $13 billion, well below the March figure (although substantially more than last April). As in the first quarter, the largest issuance for new capital was in the education, health, and transportation categories. With the rates on tax-exempt securities backing up 10 to 12 basis points in April, refundings also declined from the very rapid March pace. Indicative of the market's difficulty in absorbing new issues during the tax season, long-term yields relative to Treasuries have risen a bit despite the drop in issuance. Credit quality continued to improve across all sectors over the first four months of the year, with the number of upgrades outpacing the number of downgrades by a ratio of around six to one.

Monetary Aggregates and Bank Credit

The monetary aggregates expanded briskly in April before slowing most recently. M2 grew at a 9 percent rate last month, about 1-1/4 percentage points faster than its first-quarter pace. A buildup in household liquid accounts in apparent preparation for income tax payments boosted M2 growth well beyond the amount allowed for by seasonal factors. Indications are that M2 contracted in early May, presumably as tax payments cleared deposit accounts.

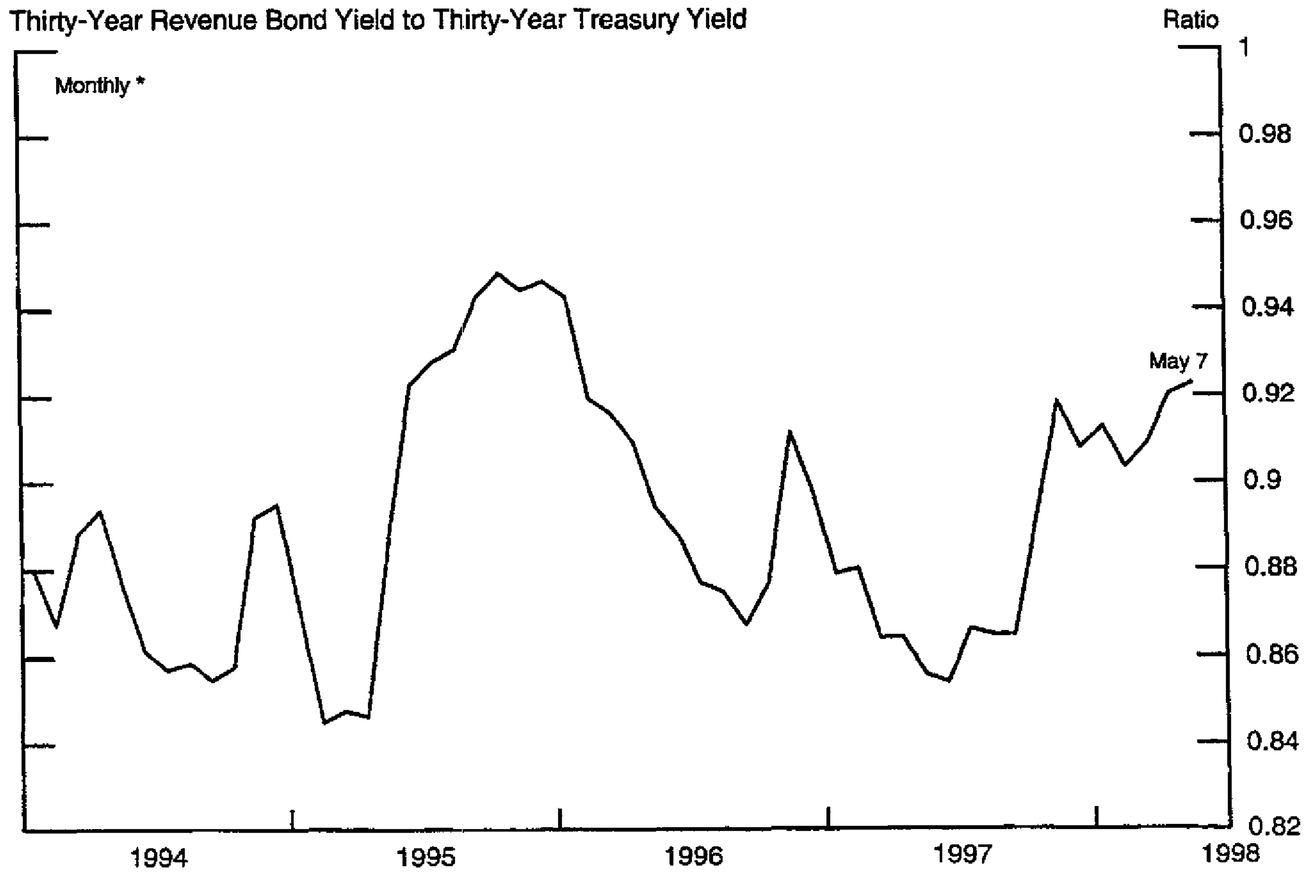
M3 grew slightly faster than M2 in April. Most of the increase in M3's non-M2 components was accounted for by a 52 percent (SAAR) surge in institutional money market mutual funds. The surge, which was most pronounced just before the deadline for corporate tax payments, was partly offset by a 10 percent runoff in large time deposits.

GROSS OFFERINGS OF MUNICIPAL SECURITIES
(Billions of dollars; monthly rates, not seasonally adjusted)

				1997	1998			
	1995	1996	1997	Q4	Q1	Feb.	Mar.	Apr.
Total tax-exempt	15.4	17.9	21.5	24.0	23.3	22.3	28.9	21.5
Long-term	12.1	14.3	17.9	21.1	22.0	21.3	27.9	20.3
Refundings[1]	3.6	4.9	6.6	8.0	9.5	8.8	12.7	7.7
New capital	8.5	9.4	11.3	13.1	12.5	12.5	15.1	12.6
Short-term	3.3	3.6	3.6	2.9	1.3	1.0	1.1	1.3
Total taxable	0.7	0.8	1.1	0.9	1.3	0.7	2.2	0.8

Note. Includes issues for public and private purposes.
1. All issues that include any refunding bonds.

Tax-Exempt to Taxable Yield Ratio



*Average of weekly data. Last value is average of weeks to date.

MONETARY AGGREGATES
(Based on seasonally adjusted data)

Aggregate or component	1997	1997 Q4	1998 Q1	1998 Feb.	1998 Mar.	1998 Apr. (p)	1997:Q4 to Apr. 98 (p)	Level (bil. $) Apr. 98 (p)
Aggregate	Percentage change (annual rate)[1]							
1. M1	-1.2	.9	3.0	3.1	5.1	-1.8	2.3	1079.4
2. M2[2]	5.6	6.9	7.9	9.5	8.2	9.6	8.5	4159.6
3. M3	8.8	10.2	11.3	8.9	14.1	10.2	11.4	5583.3
Selected Components								
4. Currency	7.5	8.7	8.0	9.8	3.9	3.9	6.8	433.8
5. Demand deposits	-2.0	-3.7	-1.8	-2.4	-2.4	-12.0	-4.0	387.2
6. Other checkable deposits	-12.2	-4.7	2.4	1.5	19.6	4.8	5.2	250.5
7. M2 minus M1[3]	8.3	9.1	9.7	11.8	9.3	13.6	10.7	3080.2
8. Savings deposits	9.9	12.2	12.0	13.3	11.9	23.5	14.6	1470.0
9. Small time deposits	1.9	.7	.2	-1.0	-2.6	-4.0	-1.1	960.3
10. Retail money market funds	16.0	16.0	19.6	28.7	21.6	18.0	20.6	649.9
11. M3 minus M2[4]	20.0	20.8	21.8	6.9	31.4	11.9	20.5	1423.7
12. Large time deposits, net[5]	18.1	12.7	20.3	27.0	31.2	-9.2	16.4	610.9
13. Institution-only money market mutual funds	21.0	22.0	18.9	12.3	22.5	51.7	26.3	408.8
14. RPs	17.0	38.3	32.3	-26.4	87.6	-4.2	28.8	256.4
15. Eurodollars	30.4	23.4	17.7	-30.6	-33.8	23.2	8.4	147.7
Memo								
16. Sweep-adjusted M1[6]	6.1	7.1	6.5	6.4	7.9	4.9	6.4	1353.2
17. Monetary base	5.9	7.9	6.9	3.5	4.1	2.4	5.4	486.9
18. Household M2[7]	6.5	7.5	9.2	12.5	9.9	9.9	9.8	3769.3
	Average monthly change (billions of dollars)[8]							
Memo								
Selected managed liabilities at commercial banks:								
19. Large time deposits, gross	11.2	8.4	8.5	13.1	17.6	-4.2	...	711.7
20. Net due to related foreign institutions	-3.4	-3.8	7.2	-7.9	-22.1	-30.2	...	171.1
21. U.S. government deposits at commercial banks	.2	.8	-.4	-6.3	6.4	4.7	...	26.6

1. For the years shown, fourth quarter-to-fourth quarter percent change. For the quarters shown, based on quarterly averages.
2. Sum of seasonally adjusted M1, retail money market funds, savings deposits, and small time deposits.
3. Sum of retail money funds, savings deposits, and small time deposits, each seasonally adjusted separately.
4. Sum of large time deposits, institutional money funds, RP liabilities of depository institutions, and Eurodollars held by U.S. addressees, each seasonally adjusted separately.
5. Net of holdings of depository institutions, money market mutual funds, U.S. government, and foreign banks and official institutions.
6. Sweep figures used to adjust these series are the estimated national total of transaction account balances initially swept into MMDAs owing to the introduction of new sweep programs, on the basis of monthly averages of daily data.
7. M2 less demand deposits.
8. For the years shown, "average monthly change" is the fourth quarter-to-fourth quarter dollar change, divided by 12. For the quarters shown, it is the quarter-to-quarter dollar change, divided by 3.

p--Preliminary.

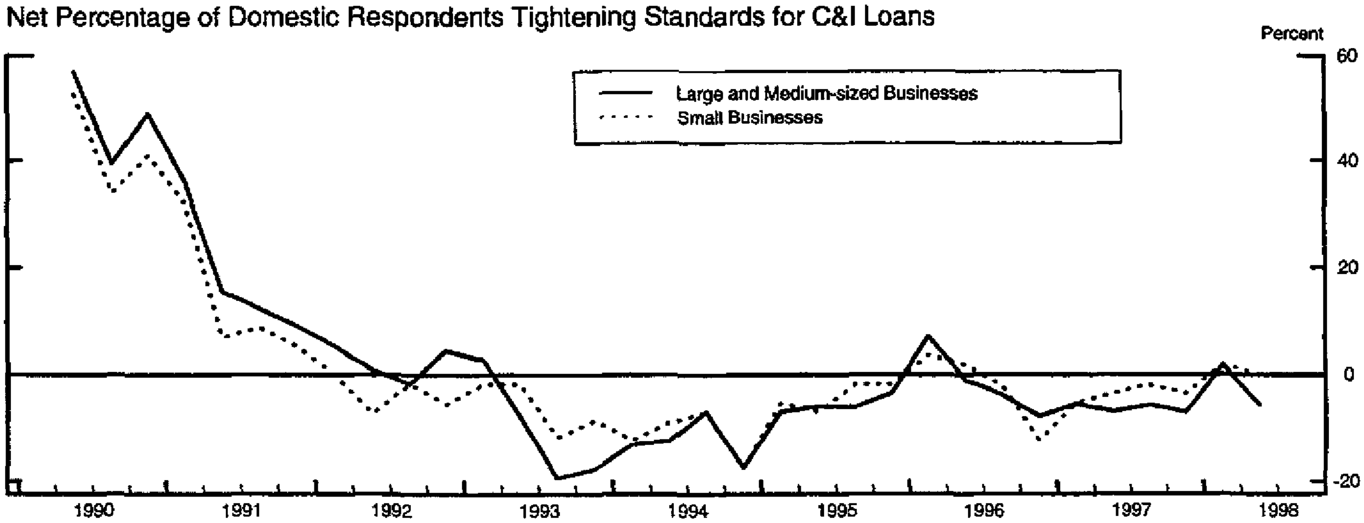
Commercial Bank Credit
(Percent change; seasonally adjusted annual rate)

Type of credit	1997	1997 Q4	1998 Q1	1998 Feb	1998 Mar	1998 Apr	Level, Apr 1998 (billions of $)
1. Bank credit: Reported	8.8	8.0	11.8	8.9	12.0	-3.8	4,205.0
2. Adjusted[1]	8.4	8.5	11.2	9.7	13.0	-2.6	4,112.2
3. Securities: Reported	10.3	13.4	17.0	4.8	19.5	-21.7	1,106.6
4. Adjusted[1]	8.5	16.1	15.1	7.8	24.3	-18.6	1,013.8
5. U.S. government	6.2	11.6	15.5	12.0	18.1	-26.0	761.9
6. Other[2]	20.6	17.6	20.6	-11.1	22.5	-12.1	344.7
7. Loans[3]	8.3	6.1	9.9	10.4	9.2	2.7	3,098.4
8. Business	8.9	8.4	9.9	10.0	1.2	-0.7	869.5
9. Real estate	9.0	6.2	7.3	13.3	12.2	7.1	1,266.6
10. Home equity	16.2	11.8	6.6	6.1	-3.6	1.2	99.1
11. Other	8.5	5.8	7.3	14.0	13.6	7.6	1,167.5
12. Consumer: Reported	-1.5	-7.1	-3.4	-3.3	-2.1	-12.7	496.6
13. Adjusted[4]	4.2	5.3	3.8	1.3	1.2	-2.3	715.6
14. Other[5]	19.4	18.1	33.9	18.4	28.8	14.1	465.7

Note. Adjusted for breaks caused by reclassifications. Monthly levels are pro rata averages of weekly (Wednesday) levels. Quarterly levels (not shown) are simple averages of monthly levels. Annual levels (not shown) are levels for the fourth quarter. Growth rates shown are percentage changes in consecutive levels, annualized but not compounded.

1. Adjusted to remove effects of mark-to-market accounting rules (FIN 39 and FASB 115).
2. Includes securities of corporations, state and local governments, and foreign governments and any trading account assets that are not U.S. government securities.
3. Excludes interbank loans.
4. Includes an estimate of outstanding loans securitized by commercial banks.
5. Includes security loans, loans to farmers, state and local governments, and all others not elsewhere classified. Also includes lease financing receivables.

Net Percentage of Domestic Respondents Tightening Standards for C&I Loans



Source. Senior Loan Officer Opinion Survey.

The weakness in these deposits was linked to a decline in credit provided by commercial banks in April. Bank credit, adjusted for mark-to-market rules, fell at a 2-1/2 percent rate, a sharp turnaround from the double-digit monthly gains posted since the beginning of the year. Adjusted securities holdings fell at nearly a 19 percent rate in April following several months of very rapid growth. Declines were evident in both trading and investment accounts and were driven by large sales of mortgage-backed securities.

Loan growth also slowed markedly last month, registering only a 2-3/4 percent rise. The slowing was particularly pronounced for real estate credit and consumer loans. Even after adjusting consumer loans for a sizable amount of securitizations, weakness was still evident in that category, most likely reflecting households' continued substitution of real estate credit for consumer loans. The reduced growth in real estate lending by banks owed partly to increased securitization of home mortgages by some large institutions in April; underlying originations of primary mortgages apparently remained strong. The relatively small increase in home equity loans (and the March decline) reflects in part the folding of second mortgages into refinanced first liens.

Business loans, which slowed sharply in March, declined a little in April. The movement of business loans from balance sheets to collateralized loan obligations (CLOs) contributed to some of the softening in business loans over March and April. In addition, as noted, corporations have continued to use the proceeds of bond offerings to pay down bank loans and other forms of debt. Business loans made by foreign banks--for whom CLO issuance was particularly pronounced--plummeted at a 31 percent annual rate last month, whereas domestic institutions recorded moderate increases.

The May Senior Loan Officer Opinion Survey found that a handful of domestic banks, on net, had eased business lending standards since the January survey (chart) and that a larger number had been providing more favorable terms, suggesting a more accommodative posture than in January.[3] About 40 percent of the domestic respondents, on net, had narrowed yield spreads for large firms, and

3. The FDIC's semiannual report on underwriting practices indicated that a few more banks had loosened standards than had tightened them over the six months ending March 31, but that the vast majority had made no change in lending standards at all. This finding is consistent with the marginal easing shown by the loan officer opinion surveys for that period.

about a quarter reported narrower spreads for small businesses. By contrast, about a quarter of the branches and agencies of foreign banks reported tighter standards on commercial and industrial loans. About a third, on net, reported increasing costs of credit lines, and somewhat smaller proportions reported widening spreads and cutting loan sizes. These institutions--primarily arms of Japanese banks--attributed their tightening mainly to a weakening of their parents' capital positions.

APPENDIX

THE MAY SENIOR LOAN OFFICER OPINION SURVEY ON BANK LENDING PRACTICES

The May 1998 Senior Loan Officer Opinion Survey on Bank Lending Practices, primarily covering changes over the past three months, posed the usual questions bearing on the supply of and demand for bank loans to businesses and households.[1] Additional questions targeted the recent growth in bank securities holdings, residential mortgage loans, and loans to real estate investment trusts (REITS); banks' handling of possible risks related to the year-2000 preparedness of their customers; and the effects of the economic problems in Asia on the provision of trade credit to firms in the affected economies.

A few of the domestic respondents reported easing standards on loans to businesses, and a large percentage cut their spreads on such loans. These results are similar to those reported last year: in January, lending standards were about unchanged, on net, and fewer banks reported easing loan terms. The May survey shows foreign branches and agencies continuing to pull back from business lending, with many--mainly those of Japanese banks--reporting tighter standards and terms. Lending to REITS was reported to have expanded rapidly over the past year, reflecting heavy demand. A number of domestic and foreign respondents reported increased requests for trade finance from firms in emerging economies in Asia affected by the financial problems in the region, but many of the banks that had provided such finance in the past indicated that they were less willing to do so now.

The survey showed small mixed changes in standards and terms on loans to households. A few banks tightened standards and terms on credit card loans, but the number doing so was smaller than in past surveys. The fraction of banks tightening standards on other consumer loans also declined, and terms on such loans were about unchanged, on net. A few banks reported eased standards for residential mortgage loans in May, following no net change in the January survey. Household credit demands appear to have increased, especially in the case of mortgage loans.

Responses to a special question suggested that the recent rapid growth in securities reflected banks' efforts to increase leverage in order to boost returns on equity. Other special questions indicated that banks have not generally cut back on lending to customers because of possible year-2000 problems, although many are now including year-2000 related covenants in some loan contracts.

Lending to Businesses

The number of U.S. banks reporting easier standards and terms for business borrowers on the latest survey remained in the range seen over the past several quarters. A few banks, on net, reported having eased standards for large and middle market firms, while only one bank reported having done so for small businesses. About

1. This summary of the survey results is based on responses from fifty-four of the fifty-eight domestic banks and all twenty-three of the branches and agencies of foreign banks in the panel.

40 percent of the respondents, on net, narrowed yield spreads for larger firms, a considerably higher share than in the January survey. As in January, about a quarter reported narrower spreads for small businesses. Smaller fractions eased other terms, such as the size and cost of credit lines, loan covenants, and collateralization requirements.

Many branches and agencies--primarily those of Japanese banks--reported curtailing their business lending. About a quarter of the foreign respondents reported tighter standards on commercial and industrial loans. Large fractions tightened loan terms: about a third boosted the costs of credit lines, about a quarter widened spreads over base rates, and 20 percent cut the maximum sizes of credit lines. Smaller fractions tightened other loan terms. Those tightening standards and terms indicated that their primary reason for doing so was a weakening of their parent bank's current or expected capital position.

The fraction of respondents reporting strengthening demand for business loans has trended higher since mid-1996. In the latest survey, about 30 percent of the domestic banks noted increased demand for business loans from larger firms, and 20 percent from small businesses. About 20 percent of the branches and agencies reported a pickup in demand as well. Consistent with the last couple of surveys, the increased demand was attributed to higher borrowing for mergers and acquisitions, plant and equipment investment, and inventory financing, in that order.

A few of the domestic respondents reported eased standards for commercial real estate loans; there was little change in standards at the branches and agencies. As in January, substantial fractions of both the domestic and foreign respondents reported increased demand for these loans.

The reported easing of lending standards for business and commercial real estate loans on recent surveys is consistent with the findings of the March 1998 FDIC Report on Underwriting Practices, which summarizes trends in bank underwriting standards between October 1997 and March 1998 based on questionnaires filled out by FDIC examiners following bank examinations.[2] Relative to the previous six-month period, the fraction of banks at which the examiners noted specific risky practices in the underwriting of business and commercial real estate loans generally increased by a few percentage points. Nonetheless, the examiners reported an increase of only 1 percentage point, to 11 percent, in the fraction of banks that employed underwriting practices of above average risk.

The May Senior Loan Officer survey included special questions that showed loans to REITS had grown very rapidly at many of the respondent banks. Indeed, the volume of such loans, which can be either secured or unsecured, nearly doubled at the respondent banks over the past year. The most rapid growth was at large domestic banks and the branches and agencies of foreign banks. The respondents indicated that this growth reflected primarily the need

2. The FDIC points out in their report that comparisons of the results of their examiner survey across time may not be valid because banks are not selected for examination on a random basis. The bulk of FDIC-insured institutions are considerably smaller than the banks on the Senior Loan Officer survey panel.

to finance increased direct holdings of properties by REITS and, to a somewhat lesser extent, a pickup in merger and acquisition activity involving REITS.

Another set of special questions found that about a quarter of the domestic respondents and a somewhat smaller share of the branches and agencies were receiving more requests for loans to finance imports or exports (or for other forms of trade finance) from firms located in East Asian emerging economies affected by the economic problems in the region. However, more than 80 percent of both the domestic and foreign respondents that had provided such trade financing before the outbreak of the Asian economic problems last year indicated that they were now either somewhat or considerably less willing to provide such loans, and a few respondents are now unwilling to make such loans.

Lending to Households

Fewer banks reported changes in consumer loan standards and terms than on recent surveys, suggesting that more banks have completed desired adjustments to take account of the deterioration in consumer loan quality that became evident a couple of years ago. On net, two banks expressed greater willingness to make consumer installment loans, five banks tightened standards on credit card loans, and three banks tightened standards on other consumer loans. Most banks reported no changes in credit card terms, although about 10 percent cut the size of credit lines on new or existing accounts. Terms on other consumer loans, which had eased at a few banks on the last few surveys, were about unchanged in May. The demand for consumer loans of all types increased at more than 10 percent of the respondents, on net.

Standards applied to mortgage applications were also about unchanged, with just three banks easing them. Nearly two-thirds of the banks reported increased demand for these loans. Even though this question specifically refers to mortgages to purchase homes, the large number of respondents indicating increased demand may reflect, in part, the brisk pace of refinancing activity. Indeed, the banks attributed the recent rise in residential mortgage loans on banks' books to both increased home sales and higher refinancing activity. They noted that refinancing has boosted mortgage loans held by banks both because some households take "cash outs" to pay down other debts or make new purchases and because the refinancing of securitized mortgage loans moves the loans back onto bank books, at least temporarily.

Securities Growth

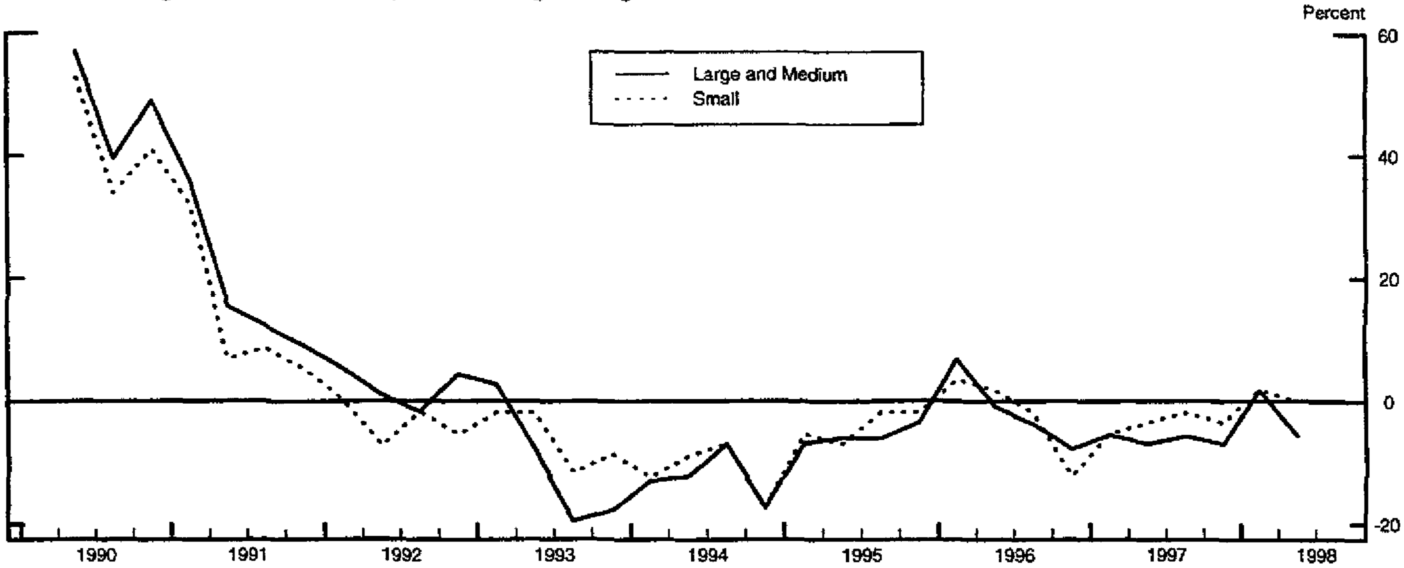
Responses to a special question about the reasons for the rapid growth in securities holdings late in 1997 and early this year indicated that U.S. banks were purchasing securities in order to leverage up their capital and boost returns on equity. Until recently, many bank holding companies repurchased shares to pay out excess capital. However, with stock prices high, this alternative may not be attractive now. In addition, the respondents pointed to the fact that U.S. bank holding companies that engage in pooling-of-interest mergers are not allowed to repurchase shares for a time. For banks in these holding companies, strong earnings may generate more capital than the firm needs for its operations, and securities purchases may be viewed as a low-cost way to put the excess capital to work. In addition to higher desired leverage, a number of the foreign branches and agencies reported that the trend in financial markets toward the securitization of new classes of assets was presenting banks with attractive securities to purchase.

Year 2000 Risks

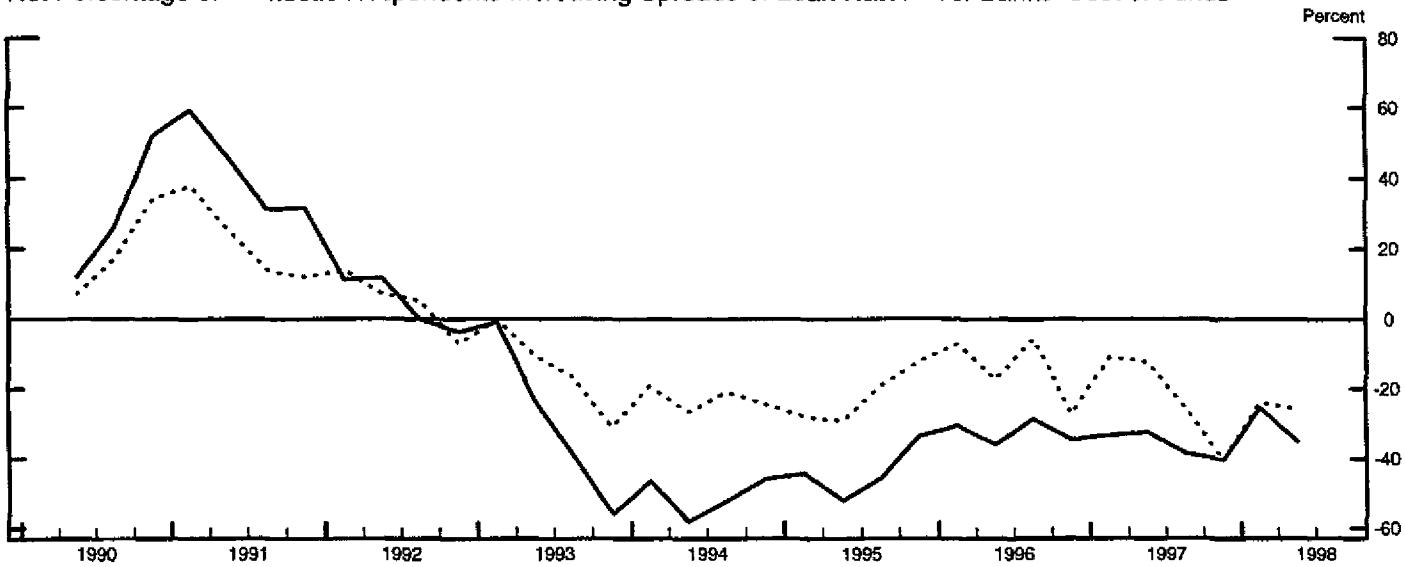
Additional special questions asked respondents about the management of risks resulting from possible year-2000 problems of their customers. Both the domestic and foreign respondents had generally included year-2000 preparedness in their underwriting and loan review standards. However, the responses suggest that U.S. banks are somewhat further along in the process of assessing such risks: Most U.S. banks had evaluated more than 5 percent of their material business customers for year-2000 compliance, while only about half of the branches and agencies had done so. Nonetheless, even among the domestic respondents, only a fairly small number had evaluated a large fraction of their customers. While few of the respondents reported rejecting loan applicants because of year-2000 compliance problems, more than a third currently impose year-2000-related covenants either almost all of the time or some of the time.

Measures of Supply and Demand for C&I Loans, by Size of Firm Seeking Loans

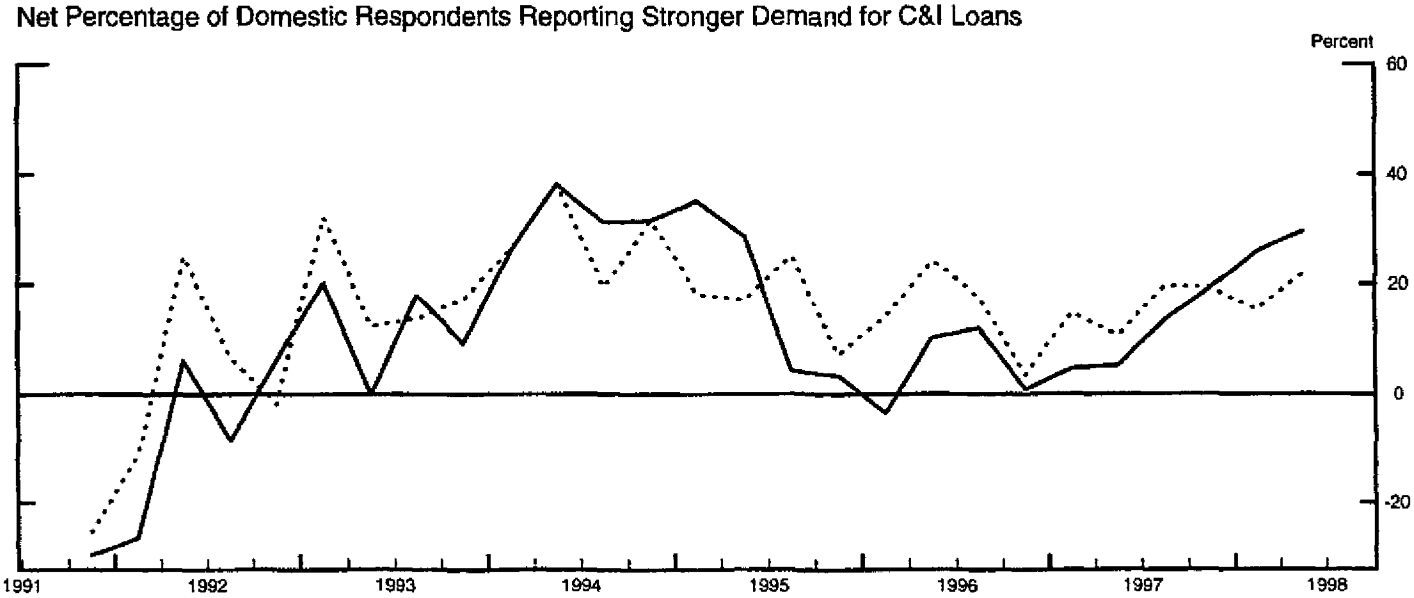
Net Percentage of Domestic Respondents Tightening Standards for C&I Loans



Net Percentage of Domestic Respondents Increasing Spreads of Loan Rates over Banks' Cost of Funds

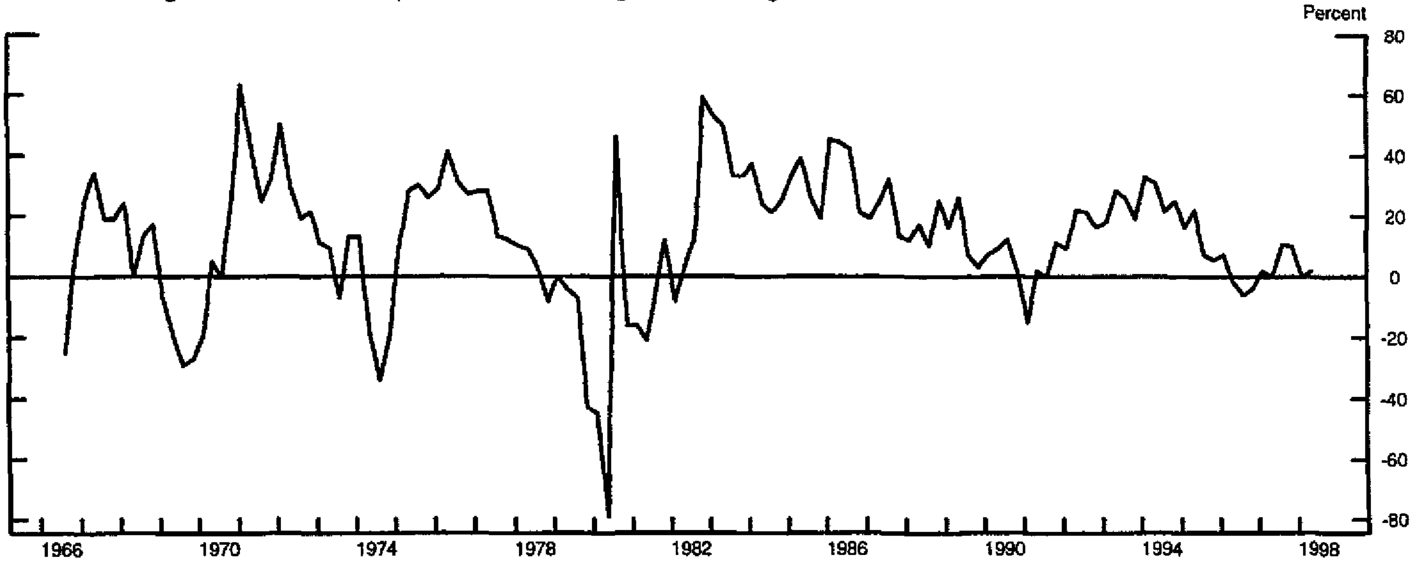


Net Percentage of Domestic Respondents Reporting Stronger Demand for C&I Loans

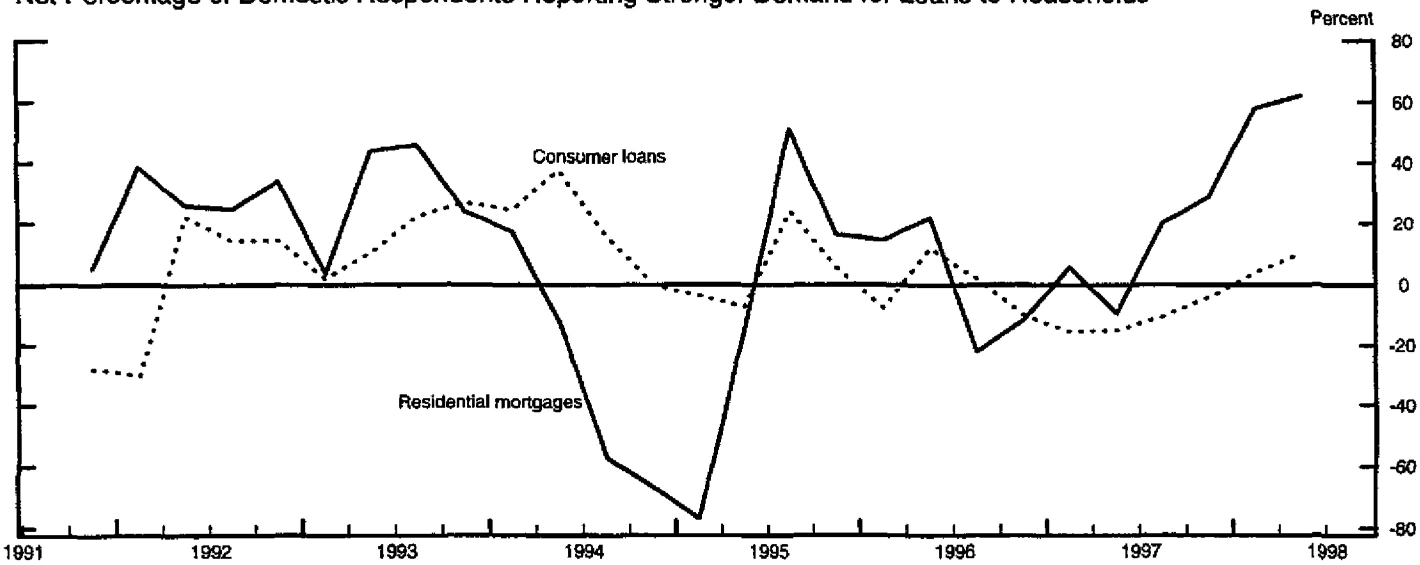


Measures of Supply and Demand for Loans to Households

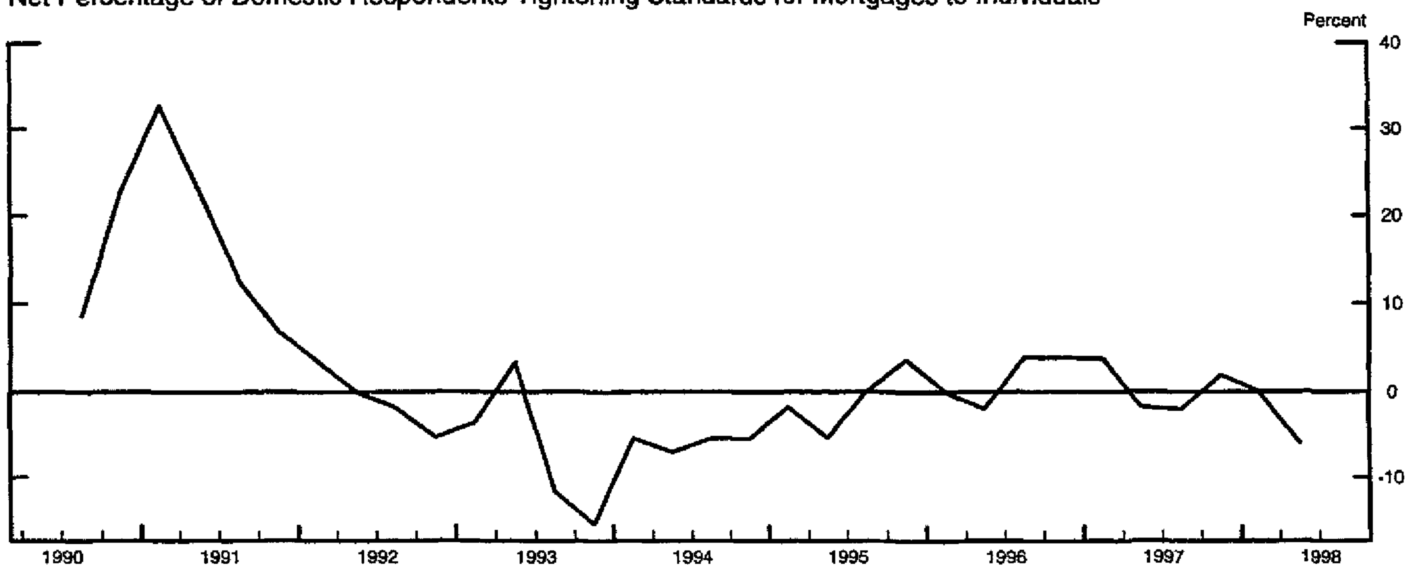
Net Percentage of Domestic Respondents Indicating More Willingness to Make Consumer Installment Loans



Net Percentage of Domestic Respondents Reporting Stronger Demand for Loans to Households



Net Percentage of Domestic Respondents Tightening Standards for Mortgages to Individuals



INTERNATIONAL DEVELOPMENTS

U.S. International Trade in Goods and Services

In February, the U.S. trade deficit in goods and services widened to $12.1 billion, as exports declined more than imports. The deficit for January-February combined was substantially larger than for any quarter of 1997. Trade data for March will be released on May 20.

NET TRADE IN GOODS & SERVICES
(Billions of dollars, seasonally adjusted)

		Annual rates			Monthly rates		
	1997	1997		1998	1997	1998	
		Q3	Q4	Q1e/	Dec	Jan	Feb
Real NIPA 1/							
Net exports of G&S	-146.5	-164.1	-159.1	-199.7	...	...	...
Nominal BOP							
Net exports of G&S	-113.7	-119.6	-115.1	-142.4	-10.9	-11.6	-12.1
Goods, net	-199.0	-208.0	-199.8	-221.4	-17.7	-18.3	-18.6
Services, net	85.3	88.4	84.6	79.0	6.8	6.7	6.5

1. In billions of chained (1992) dollars.
e. BOP data are two months at an annual rate.
Source. U.S. Dept. of Commerce, Bureaus of Economic Analysis and Census.

In January-February, exports of goods and services were 2-1/2 percent less than in the fourth quarter and were lower than in any quarter since the first quarter of last year. The decline in January-February was primarily in the value of machinery, agricultural products, and industrial supplies. Much of the declines in exports were to countries in Asia (especially Korea).

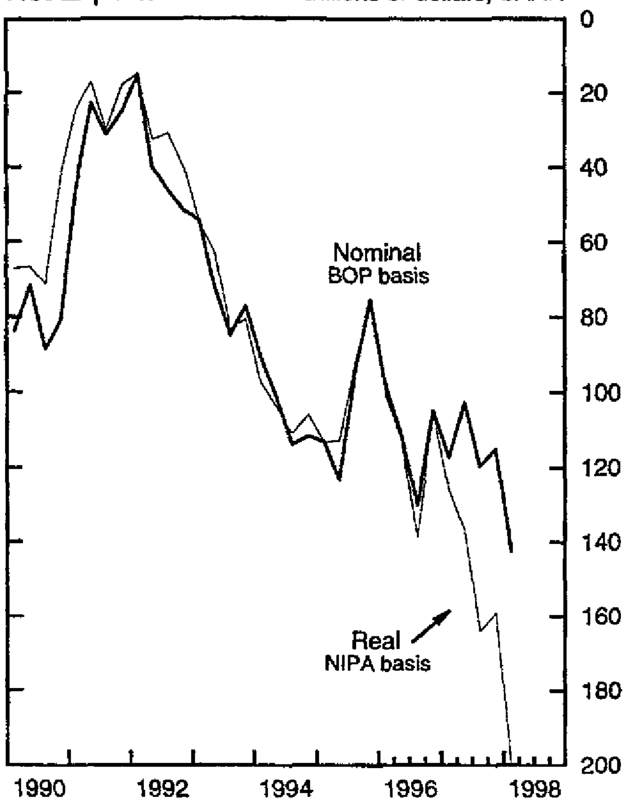
Imports of goods and services in January-February were 1/4 percent higher than in the fourth quarter. Increases in the value of imported automotive products and service payments more than offset declines in oil and capital goods. Service payments were boosted by a one-time payment for acquisition of broadcast rights for the 1998 Winter Olympic Games. The decline in oil imports was due entirely to a $3 per barrel fall in oil import prices during January-February; the quantity of imported oil edged up.

Oil Imports and Prices

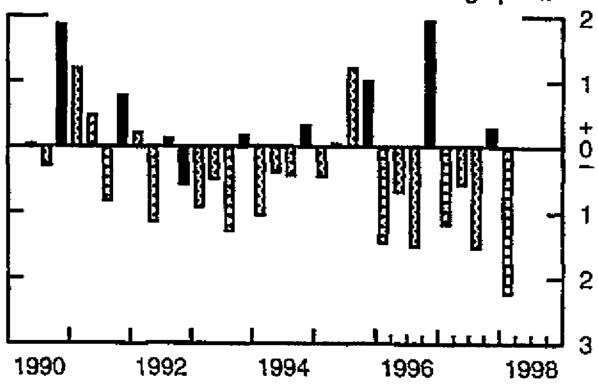
After very strong oil imports in the second and third quarters of last year (driven by extremely robust consumption), the quantity of oil imported declined 2-1/2 percent in the fourth quarter and

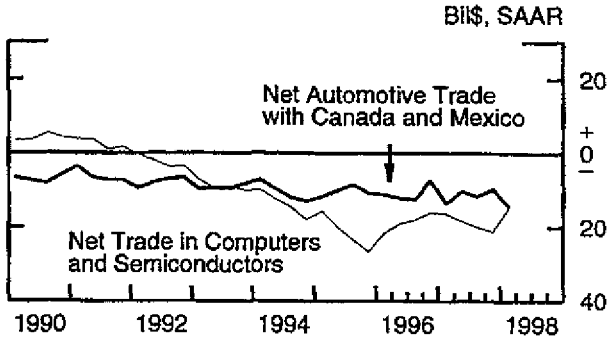
U.S. International Trade in Goods and Services

Net Exports

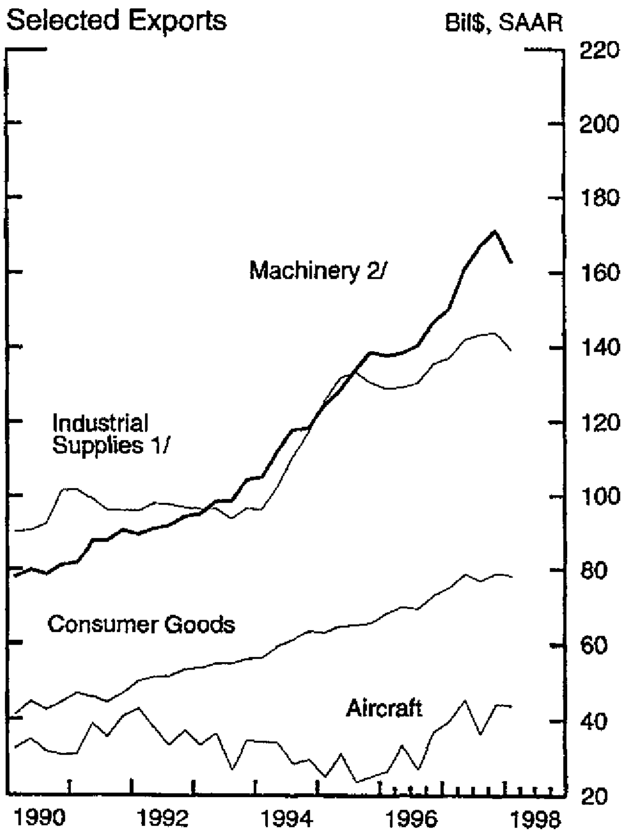


Contribution of Net Exports to Real GDP Growth



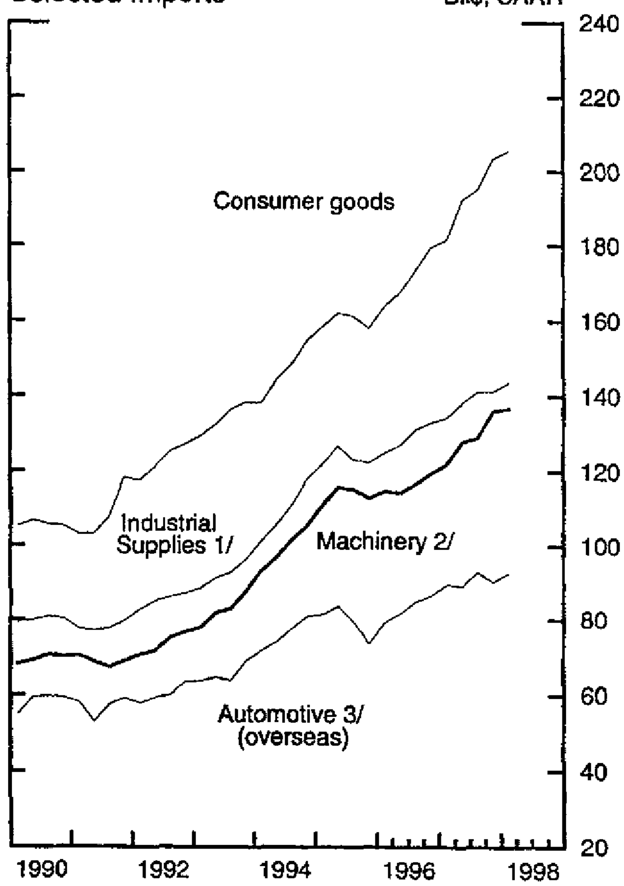


Selected Exports



1/ Excludes agriculture and gold.
2/ Excludes computers and semiconductors.

Selected Imports



1/ Excludes oil and gold.
2/ Excludes computers and semiconductors.
3/ Excludes Canada and Mexico.

U.S. EXPORTS AND IMPORTS OF GOODS AND SERVICES
(Billions of dollars, SAAR, BOP basis)

	Levels				Amount Change 1/			
	1997	1998	1998		1997	1998	1998	
	Q4	Q1e/	Jan	Feb	Q4	Q1e/	Jan	Feb
Exports of G&S	952.3	927.9	931.7	924.1	13.7	-24.4	-20.5	-7.6
Goods exports	697.3	673.8	680.2	667.3	16.3	-23.5	-20.7	-12.9
Agricultural	61.5	55.8	55.9	55.6	3.3	-5.7	-3.4	-0.3
Gold	3.4	5.5	7.2	3.8	-0.0	2.1	3.2	-3.4
Other goods	632.4	612.5	617.1	607.8	13.1	-19.9	-20.5	-9.2
Aircraft & pts	44.3	43.6	42.6	44.7	8.0	-0.6	-20.3	2.0
Computers	48.6	45.5	45.7	45.3	-3.8	-3.1	0.1	-0.4
Semiconductors	38.9	38.4	38.7	38.2	-1.4	-0.5	-0.8	-0.5
Other cap gds	174.0	165.5	165.1	165.8	5.0	-8.6	-7.2	0.7
Automotive	76.8	75.9	77.5	74.4	3.9	-0.9	6.9	-3.1
to Canada	40.8	39.2	37.5	40.9	2.2	-1.6	-2.2	3.4
to Mexico	13.3	12.8	11.5	14.0	2.0	-0.6	1.0	2.5
to ROW	22.6	24.0	28.5	19.5	-0.3	1.3	8.1	-9.0
Ind supplies	143.9	138.9	140.3	137.6	0.6	-4.9	-2.4	-2.7
Consumer goods	78.9	78.1	79.4	76.8	2.0	-0.8	2.4	-2.5
All other	27.2	26.5	27.9	25.1	-1.2	-0.7	-1.5	-2.8
Services exports	255.0	254.1	251.5	256.8	-2.6	-0.9	0.2	5.4
Imports of G&S	1067.4	1070.3	1071.1	1069.4	9.2	2.8	-11.9	-1.7
Goods imports	897.1	895.1	900.2	890.1	8.0	-1.9	-13.2	-10.1
Petroleum	69.1	57.0	59.5	54.5	-1.2	-12.1	-3.7	-5.0
Gold	3.8	6.0	7.7	4.3	0.8	2.2	2.3	-3.5
Other goods	824.2	832.1	832.9	831.3	8.4	7.9	-11.8	-1.6
Aircraft & pts	18.6	15.8	15.7	15.9	-0.4	-2.8	-5.7	0.2
Computers	71.0	70.8	72.2	69.3	-2.7	-0.2	0.9	-2.9
Semiconductors	37.8	35.7	35.1	36.4	-1.1	-2.1	-1.8	1.3
Other cap gds	138.1	139.1	138.2	139.9	7.2	1.0	-3.2	1.7
Automotive	140.7	146.0	142.7	149.2	-2.3	5.2	-4.0	6.5
from Canada	50.5	53.5	52.5	54.5	0.2	3.0	-4.4	1.9
from Mexico	27.7	24.7	24.8	24.5	2.1	-3.0	0.4	-0.4
from ROW	62.5	67.8	65.4	70.3	-4.7	5.3	0.0	4.9
Ind supplies	141.2	143.5	144.9	142.2	0.1	2.3	1.8	-2.7
Consumer goods	203.1	205.4	207.7	203.0	7.9	2.3	-0.7	-4.7
Foods	40.2	41.0	40.3	41.7	-0.4	0.8	-2.0	1.4
All other	33.5	34.9	36.1	33.7	0.3	1.4	2.9	-2.3
Services imports	170.4	175.2	171.0	179.3	1.2	4.8	1.4	8.4
Memo:								
Oil qty (mb/d)	10.69	10.76	10.86	10.67	-0.26	0.07	0.54	-0.19
Oil price ($/bbl)	17.67	14.50	15.01	13.98	0.11	-3.18	-1.77	-1.03

1. Change from previous quarter or month. e. Average of two months.
Source. U.S. Dept. of Commerce, Bureaus of Economic Analysis and Census.

remained at about the fourth-quarter level in January-February. These relatively lower import levels were driven mostly by lower consumption as a result of favorable winter weather. Preliminary Department of Energy statistics indicate that oil imports were flat again in March but rose sharply in April. The sharp rise in imports during April was due to a large accumulation of stocks.

For the first quarter, the price of oil imports dropped by the greatest percent since the first quarter of 1991. Prices declined from November through March as the market reacted to increased production from Saudi Arabia, Kuwait, and the United Arab Emirates, to weak demand in Asia, to relatively warm weather in the northern hemisphere, and to the resumption of oil production for export by Iraq. In April, the price of imported oil increased, as impending production cuts by both OPEC and non-OPEC producers were agreed and market prices rose. The spot price of WTI in May has remained near its April average level of $15.44.

Prices of Non-oil Imports and Exports

Prices of non-oil imports fell about 5 percent (at an annual rate) during the first quarter. This was a somewhat sharper decline than in the fourth quarter of 1997. A substantial drop in prices of imported non-oil industrial supplies in the first quarter contributed importantly to the faster decline in prices of non-oil imports. Non-oil import prices edged down further in April, with declines in all major trade categories except imported foods.

Prices of exports also fell about 5 percent in the first quarter. The decline was attributable mostly to lower prices for agricultural products (primarily oilseeds and grains), nonagricultural industrial supplies, computers, and semiconductors. Export prices declined slightly in April. There were declines in all major trade categories except automotive vehicles.

U.S. International Financial Transactions

Net private foreign purchases of U.S. securities remained strong in February and March, bringing the total for the first quarter to $76 billion--near the level of last year's fourth quarter. (See line 4 of the Summary Table of U.S. International Transactions.) Although the total changed little between the quarters, there was a significant shift away from U.S. Treasuries into other types of securities.

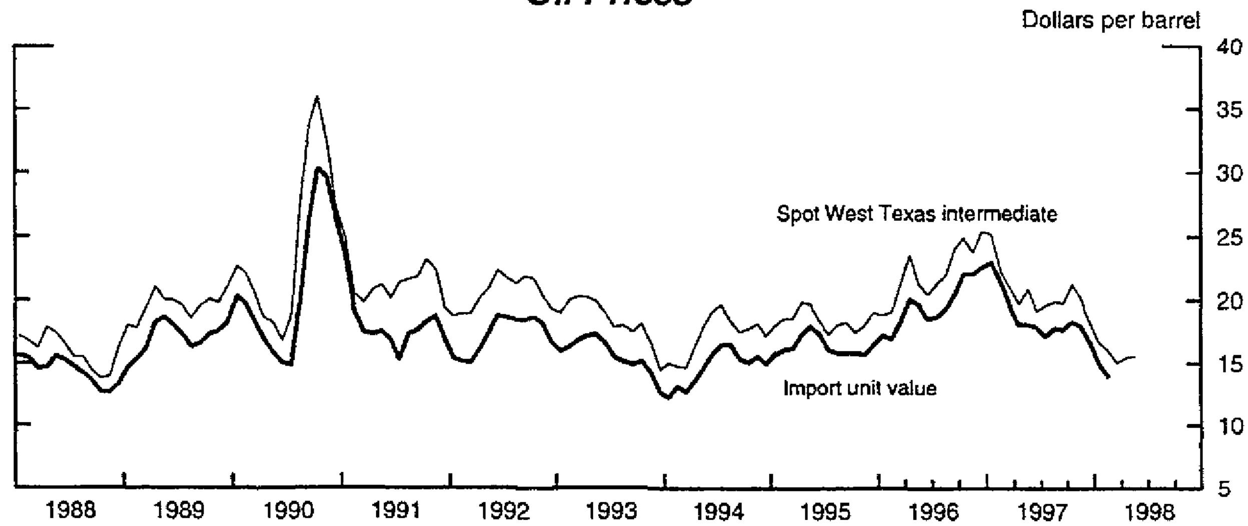
PRICES OF U.S. IMPORTS AND EXPORTS
(Percentage change from previous period)

	Annual rates			Monthly rates		
	1997		1998	1998		
	Q3	Q4	Q1	Feb	Mar	Apr
	-----------BLS prices (1995=100)-----------					
Merchandise imports	-1.5	-2.0	-11.5	-0.8	-1.0	-0.1
Oil	-2.8	7.1	-61.6	-6.5	-9.1	2.5
Non-oil	-1.5	-2.7	-5.2	-0.4	-0.2	-0.3
Core goods*	-0.3	-0.8	-4.1	-0.3	-0.4	0.0
Foods, feeds, bev.	-5.3	-4.5	-5.1	-1.0	-0.1	0.0
Ind supp ex oil	1.6	-1.4	-11.2	-0.8	-0.3	-0.1
Computers	-14.5	-17.7	-16.8	-1.8	-1.4	-1.3
Semiconductors	-5.3	-15.3	-13.9	-1.0	-0.3	-0.6
Cap. goods ex comp & semi	-1.1	-2.1	-3.1	-0.3	0.0	-0.4
Automotive products	1.9	1.3	-0.1	0.0	0.1	-0.1
Consumer goods	-0.8	-0.8	-1.2	0.1	-0.5	-0.4
Merchandise exports	-1.1	-2.9	-5.0	-0.3	-0.3	-0.3
Agricultural	-10.8	-6.4	-15.7	-1.5	-0.6	-1.3
Nonagricultural	-0.1	-2.4	-3.5	-0.1	-0.3	-0.3
Core goods*	1.1	-1.0	-3.3	-0.3	-0.2	-0.3
Ind supp ex ag	0.7	-5.2	-8.9	-0.2	-1.0	-0.3
Computers	-7.9	-7.6	-10.5	-0.5	-1.0	-0.9
Semiconductors	-8.7	-14.4	-5.1	-0.2	-0.2	-0.8
Cap. goods ex comp & semi	0.5	-0.5	0.5	0.0	0.2	-0.2
Automotive products	0.4	0.1	0.1	0.0	0.0	0.0
Consumer goods	1.7	1.2	-0.5	0.0	0.0	-0.3
	---Prices in the NIPA accounts (1992=100)--					
Chain-weight						
Imports of gds & serv.	-3.0	-2.1	-11.1	...	...	...
Non-oil merchandise	-2.3	-3.4	-6.9	...	...	...
Core goods*	0.2	-0.7	-3.5	...	...	...
Exports of gds & serv.	-2.0	-2.1	-4.8	...	...	...
Nonag merchandise	-2.3	-3.2	-5.6	...	...	...
Core goods*	0.9	-0.8	-2.4	...	...	...

*/ Excludes computers and semiconductors.

5-11-98

Oil Prices



Foreign purchases of corporate and agency bonds increased by $20 billion between the fourth quarter of last year and the first quarter of this year (line 4.b). The increase was evenly split between corporates and government agency bonds. Fannie Mae and Freddie Mac both issued heavily in the first quarter in efforts to establish global benchmark note programs. The rise in foreign purchases of U.S. corporate bonds mirrors the general step up in domestic and foreign issuance by U.S. corporations. Foreign purchases of U.S. equities also rose throughout the first quarter (line 4.c). In terms of major countries and regions, only Japanese residents recorded significant net sales of U.S. equities ($3 billion) in the quarter.

In contrast, private foreigners sold almost $14 billion in U.S. Treasuries in March, yielding small net sales for the quarter as a whole (line 4.a). This compares with net purchases of over $35 billion in the fourth quarter. Net purchases in the United Kingdom slowed considerably, but most of the swing from the fourth to the first quarter is attributable to the Netherlands Antilles, which swung from net purchases of $11 billion to net sales of $15 billion. Japanese residents sold over $7 billion in the first quarter, about the same as in the prior quarter.

U.S. residents' purchases of foreign securities slowed considerably in the first quarter as a small pickup in equity purchases was more than offset by large net bond sales in March (lines 5a and 5b). Within equities, the pickup from the fourth to first quarter was more than entirely accounted for by a swing in sentiment toward Japan--from sales of $4 billion to purchases of $3 billion. In contrast, U.S. residents on net sold about $2 billion in European equities in the first quarter, following small net purchases in the fourth. Within bonds, there was a considerable slowing in purchases in Europe and a swing from net sales to net purchases in Japan.

Foreign official reserve assets in the United States rose almost $10 billion in March, following very modest increases earlier this year (line 1). Asian economies account for most of the March increase, especially Japan, China, Hong Kong, and Thailand. The increase in Thailand's reserves reflects an IMF disbursement. OPEC reserves in the United States also increased in March, while

SUMMARY OF U.S. INTERNATIONAL TRANSACTIONS
(Billions of dollars, not seasonally adjusted except as noted)

	1996	1997	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1998 Feb	1998 Mar
Official capital								
1. Change in foreign official assets in U.S. (increase, +)	127.7	18.4	-4.9	22.4	-26.7	11.2	-.3	9.7
a. G-10 countries	36.6	1.8	4.6	2.1	-12.6	3.9	4.0	3.4
b. OPEC countries	15.4	11.8	2.6	3.5	-1.3	-.6	.2	2.4
c. All other countries	75.7	4.7	-12.1	16.8	-12.8	7.9	-4.5	3.8
2. Change in U.S. official reserve assets (decrease, +)	6.7	-1.0	-.2	-.7	-4.5	-.4	-.3	-.1
Private capital								
Banks								
3. Change in net foreign positions of banking offices in the U.S.[1]	-50.1	34.5	15.5	-1.0	46.1	-5.1	15.7	-9.8
Securities[2]								
4. Foreign net purchases of U.S. securities (+)	287.2	346.1	97.4	96.4	72.9	76.2	38.1	18.1
a. Treasury securities[3]	155.6	147.3	42.8	35.6	35.4	-1.2	11.7	-13.8
b. Corporate and other bonds[4]	118.9	131.0	33.2	37.1	27.0	47.3	16.5	19.1
c. Corporate stocks	12.7	67.8	21.5	23.7	10.4	30.1	9.9	12.8
5. U.S. net purchases (-) of foreign securities	-110.6	-87.5	-22.8	-40.3	-7.5	-4.4	-3.9	3.1
a. Bonds	-51.4	-47.2	-9.2	-24.6	-8.3	-2.1	-2.8	4.4
b. Stocks	-59.3	-40.2	-13.6	-15.8	.8	-2.3	-1.1	-1.4
Other flows (quarterly data, s.a.)								
6. U.S. direct investment (-) abroad	-87.8	-119.4	-37.0	-22.8	-32.9	n.a	n.a	n.a
7. Foreign direct investment in U.S.	77.0	107.9	26.7	25.9	24.6	n.a	n.a	n.a
8. Foreign holdings of U.S. currency	17.3	24.8	4.8	6.6	9.9	n.a	n.a	n.a
9. Other (inflow, +)[5]	-72.3	-60.3	-27.7	-13.9	3.4	n.a	n.a	n.a
U.S. current account balance (s.a.)	-148.2	-166.4	-37.8	-43.1	-45.6	n.a	n.a	n.a
Statistical discrepancy (s.a.)	-46.9	-97.1	-14.0	-29.5	-39.6	n.a	n.a	n.a

Note. The sum of official capital, private capital, the current account balance, and the statistical discrepancy is zero. Details may not sum to totals because of rounding.

1. Changes in dollar-denominated positions of all depository institutions and bank holding companies plus certain transactions between broker-dealers and unaffiliated foreigners (particularly borrowing and lending under repurchase agreements). Includes changes in custody liabilities other than U.S. Treasury bills.
2. Includes commissions on securities transactions and therefore does not match exactly the data on U.S. international transactions published by the Department of Commerce.
3. Includes Treasury bills.
4. Includes U.S. goverment agency bonds.
5. Transactions by nonbanking concerns and other banking and official transactions not shown elsewhere plus amounts resulting from adjustments made by the Department of Commerce and revisions in lines 1 through 5 since publication of the quarterly data in the Survey of Current Business.

n.a. Not available. * Less than $50 million.

reserves of European countries, especially Spain, declined. Partial data for April from FRBNY indicate a small net increase in official holdings--a large decline in Japanese reserves, associated with foreign exchange intervention, was offset by a modest increase in Hong Kong's reserves and a huge increase in Brazil's. Brazil's total foreign exchange reserves rose by more than $20 billion in the first four months of this year and much of this increase is now reflected in its holdings at FRBNY.

There were modest net capital outflows recorded through private banking transactions in the first quarter (line 3). U.S. banks reduced their net liabilities to affiliated foreigners significantly and increased their claims on unaffiliated foreigners. Offsetting much of these outflows was an increase in borrowing by U.S. banks and securities dealers from private nonbanks abroad. Much of this latter borrowing was associated with RP transactions and likely reflects, in part, the financing of the large foreign sales of Treasuries in March.

Recorded international banking flows for the first quarter can be quite volatile as they reflect end-of-month data for both the end of the calendar year and the Japanese fiscal year. However, monthly average data for net interbank claims on affiliated foreign offices indicate that the reduced reliance on funds from foreign affiliates persisted into April (line 1 of the International Banking Data table).

INTERNATIONAL BANKING DATA[1]
(Billions of dollars)

	1994 Dec.	1995 Dec.	1996 Dec.	1997 Dec.	1998 Jan.	Feb.	Mar.	Apr.
1. Net claims of U.S. banking offices (excluding IBFs) on own foreign offices and IBFs	-224.0	-260.0	-231.2	-195.8	-230.5	-225.6	-201.0	-171.3
a. U.S.-chartered banks	-70.1	-86.1	-66.4	-69.8	-83.7	-82.5	-76.1	-72.5
b. Foreign-chartered banks	-153.9	-173.9	-164.8	-126.0	-146.8	-143.0	-124.9	-98.8
2. Credit extended to U.S. nonbank residents								
a. By foreign branches of U.S. banks	23.1	26.5	31.9	34.4	35.4	36.4	35.2	35.6
b. By Caribbean offices of foreign-chartered banks	78.4	86.3	79.4	90.1	n.a	n.a	n.a	n.a
3. Eurodollar holdings of U.S. nonbank residents								
a. At all U.S.-chartered banks and foreign- chartered banks in Canada and the United Kingdom	86.3	94.6	119.5	156.0	162.6	156.4	147.7	147.9
b. At the Caribbean offices of foreign-chartered banks	86.0	92.3	122.2	115.0	n.a	n.a	n.a	n.a
MEMO: Data as recorded in the U.S. international transactions accounts								
4. Credit extended to U.S. nonbank residents	178.1	212.8	239.0	287.2	n.a.	n.a.	n.a	n.a
5. Eurodeposits of U.S. nonbank residents	242.0	275.8	336.7	415.2	n.a.	n.a.	n.a	n.a

1. Data on lines 1 through 3 are from Federal Reserve sources and sometimes differ in timing from the banking data incorporated in the U.S. international transactions accounts.

Lines 1a, 1b, and 2a are averages of daily data reported on the FR 2950 and FR2951.

Lines 2b and 3b are end-of-period data reported quarterly on the FFIEC 002s.

Line 3a is an average of daily data (FR 2050) supplemented by the FR 2502 and end-of-quarter data supplied by the Bank of Canada and the Bank of England. There is a break in the series in April 1994.

Lines 4 and 5 are end-of-period data estimated by BEA on the basis of data provided by the BIS, the Bank of England, and the FR 2502 and FFIEC 002s. They include some foreign-currency denominated deposits and loans. Source: SCB

Foreign Exchange Markets

Since the March FOMC meeting, the trade-weighted foreign exchange value of the dollar, measured against the 16 currencies in our narrow index (see Appendix), is little changed on balance. Movements in the index meld a depreciation of almost 4 percent against the mark and related currencies and respective appreciations of more than 3 percent and 1-1/4 percent against sterling and the yen.

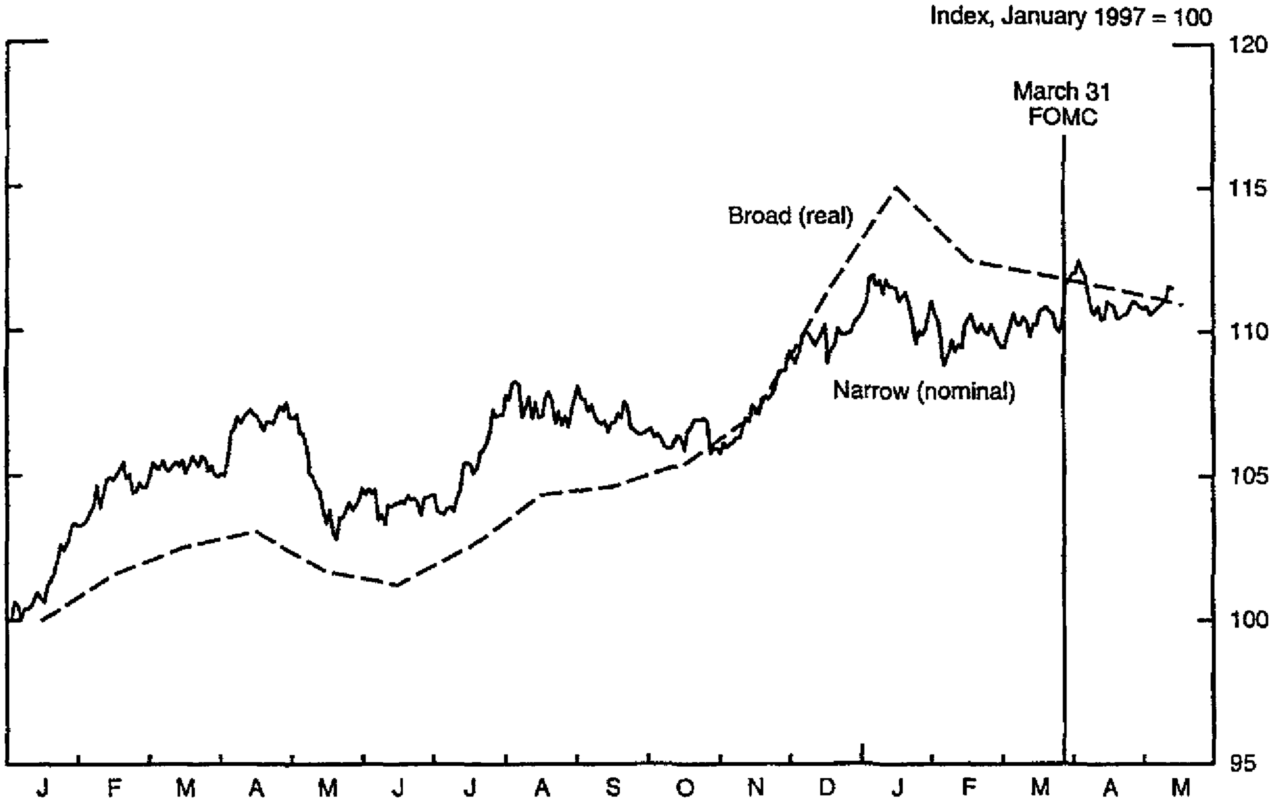
Over most of the intermeeting period, the dollar steadily depreciated against the mark. Early in the period, signs of robust German economic activity and the rejection of petitions seeking to block German participation in EMU contributed to the mark's rise. The dollar/mark rate changed little following the long-anticipated selection of 11 countries to participate in Stage III of the monetary union on May 1-2. The mark continued to firm on the prospect of a smooth introduction of the euro and signs of continued increases in economic activity in the 11 countries slated to enter EMU. Although Bundesbank officials later voiced the opinion that German rate hikes were not immediately necessary, the dollar recouped only a small portion of its declines vis-a-vis the mark.

Despite an increase in the Canadian 3-month interest rate of roughly 25 basis points, the U.S. dollar has appreciated almost 2 percent against the Canadian dollar over the intermeeting period. This week's assessment in the Bank of Canada's semi-annual monetary policy report that Canadian monetary conditions were appropriate contrasted with market participants' perceptions of easy conditions and contributed to the Canadian dollar's weakness.

Against the yen, the dollar has gained on continued indications of weak economic activity in Japan. Throughout April, market participants remained generally unimpressed as the details of the ¥16 trillion fiscal stimulus package announced in late March became available. Long-term Japanese yields declined steadily, with the bellwether yield falling almost 30 basis points on balance. On April 9-10, Japanese authorities sold dollars for yen on a massive scale,

. The effects of the intervention were short-lived and relatively small -- the dollar immediately

Dollar Exchange Rate Indices



Interest Rates in Major Industrial Countries

	Three-month rates			Ten-year bond yields		
	March 30	May 14	Change	March 30	May 14	Change
Canada	4.91	5.17	0.26	5.40	5.45	0.05
Japan	0.65	0.55	-0.10	1.66	1.38	-0.28
Germany	3.48	3.56	0.08	4.92	4.99	0.07
United Kingdom	7.47	7.37	-0.10	5.95	5.92	-0.03
France	3.36	3.50	0.14	4.93	5.05	0.12
Italy	5.25	4.94	-0.31	5.12	5.23	0.11
Switzerland	1.31	1.53	0.22	2.83	3.03	0.20
Australia	5.00	4.98	-0.02	5.84	5.67	-0.17
Weighted-average foreign	3.52	3.56	0.04	4.22	4.18	-0.04
United States	5.60	5.58[p]	-0.02	5.67	5.66[p]	-0.01

Note. Change is in percentage points. [p] Preliminary.

depreciated 3 percent but recouped these losses within 10 days. The dollar's recovery was boosted by the G-7 communique that noted the excessive depreciation of the yen but made no mention of a coordinated policy response. Japanese share prices have also responded to the poor economic performance, falling almost 6 percent from their levels near the end of the fiscal year on March 30. These declines leave Japanese equity prices up only about 1/4 percent from the end of 1997.

Over the intermeeting period, market participants have marked down the odds of a further tightening of monetary policy in the United Kingdom. Both short-term and long-term interest rates have fallen. The shift in sentiment has come on data releases consistent with a slowing in output growth and an easing of price pressures in the United Kingdom. Sterling weakened on later-confirmed press reports that between the March and April meetings of the Monetary Policy Committee the balance of members voting for no change in interest rates shifted from 4-4 to 5-3.

Elsewhere in Europe, on May 4 the central bank of Denmark raised its discount and repo rates by 50 basis points in order to support the crown. The increase came as a surprise to market participants. On the same day, the central bank of Spain cut its repo rate by a less-than-expected 25 basis points,

Equity prices in most industrial countries have continued to rise. Since the March FOMC meeting, the largest price increases have been recorded in Europe, led by a more than 6 percent gain in French share prices. Stock indices for Belgium, Sweden, Germany, and the United Kingdom have all increased 3-1/2 percent or more during the intermeeting period. Since the turn of the year, increases in European share prices range from 46 percent in Italy to 18 percent in the United Kingdom. Canadian share prices have risen almost 2 percent over the past seven weeks and have posted a 15 percent increase year to date.

Asian financial markets have come under pressure again after two months of relative calm. In early April, Indonesian and IMF officials reached an agreement that accelerated reform measures and allowed for a resumption of IMF disbursements on May 4. Since then, social unrest in Indonesia has intensified, partly in response to an increase in fuel prices, and the rupiah has declined 21 percent against the dollar. Late in the period, Bank Indonesia raised interest rates across the maturity spectrum between 4 and 12 percentage points in reaction to the weakness in the rupiah. In Korea, labor unrest has weighed on the wŏn. In the last several days, Yankee bond yield spreads over U.S. Treasuries have risen noticeably for Indonesia and Korea, although those for Thailand and Malaysia show very little change. Brady bond stripped yield spreads over U.S. Treasuries have moved up somewhat for Russia, Brazil and to a lesser extent for Mexico. Over the intermeeting period, equity prices in Indonesia, Korea, Malaysia, Singapore, and Thailand have fallen more than 20 percent. Share prices in Hong Kong are down almost 17 percent. In the past week, interest rates in Hong Kong have risen roughly 2 percentage points, reflecting concern over developments in Indonesia and anxiety that slowing economic activity in Hong Kong may lead to speculative pressure on the Hong Kong dollar.

. The Desk did not intervene in the foreign exchange market for U.S. accounts during the period.

Developments in Foreign Industrial Countries

Real GDP growth in the foreign G-7 countries appears to have remained sluggish in the first quarter, due primarily to continued weakness in Japan. Growth in the United Kingdom also appears to be slowing from the rapid pace of the last two years. In contrast, available indicators suggest that the major continental European economies are gathering steam, with improving domestic demand helping to offset the impact of Asia on foreign trade. In Canada as well, robust growth in domestic demand has continued to buoy the economy.

Inflation remains quite subdued in most of the major foreign industrial countries, reflecting recent declines in oil prices as well as continued moderate wage growth. Inflation is less than 1½ percent in France, Germany, and Canada and is under 2 percent in Italy. After netting out the effects of tax increases, inflation remains near zero in Japan. In the United Kingdom, however, consumer price inflation remains slightly above the government's target of 2½ percent.

The heads of state or government and the finance ministers from the European Union met in Brussels during the first weekend in May and formally selected eleven countries to launch the third stage of monetary union on January 1, 1999. The President and other members of the board of the new European Central bank were also selected. Markets generally reacted favorably to these developments despite a last-minute compromise under which Wim Dusienberg, the first President, is expected to step down halfway through his term in favor of Jean-Claude Trichet, the current head of the Bank of France.

Individual country notes. In **Japan**, economic indicators suggest that the economy contracted during the first quarter. Industrial production was down sharply, and the unemployment rate surged to a new all-time high of 3.9 percent in March, with the ratio of job offers to applicants at its lowest level since 1983. Consumer demand was also sluggish during the first quarter, with household expenditures up only slightly from their very weak fourth-quarter level. New car registrations in April were down 7 percent from a year earlier--the month the consumption tax was increased--and down 20 percent from two years earlier. Despite the cutbacks in production, the inventory-to-shipments ratio soared to its highest level since 1975, and business sentiment continued to fall sharply. Consumer price inflation, net of the effects of fiscal measures, remains near zero.

Japan's trade surplus during the first quarter was $98 billion at an annual rate, essentially unchanged from the fourth quarter. The yen value of both imports and exports declined from their fourth-quarter levels. The decline in imports reflects the weakness of Japanese domestic demand, coupled with falling import prices. (During the first quarter, import prices were down 6 percent from a year earlier, led by sharp declines in the prices of oil and lumber.) The decline in exports can be linked to the Asian crises. In recent months, Japanese exports to Korea, Thailand and Indonesia have fallen by over one-third from a year earlier.

JAPANESE ECONOMIC INDICATORS
(Percent change from previous period except where noted, SA)

	1997		1998				
	Q3	Q4	Q1	Jan	Feb	Mar	Apr
Industrial Production	-0.3	-2.3	-1.4	2.9	-3.9	-1.9	n.a.
Housing Starts	-10.5	0.2	1.1	1.1	1.8	-1.3	n.a.
Machinery Orders	1.3	-12.9	-3.4	-0.8	-4.9	7.5	n.a.
New Car Registrations	2.9	-0.0	-7.5	-13.9	-1.6	1.5	-8.5
Unemployment Rate (%)	3.4	3.5	3.6	3.5	3.6	3.9	n.a.
Job Offers Ratio[1]	0.73	0.69	0.61	0.64	0.61	0.58	n.a.
Business Sentiment[2]	3	-11	-31	...	...	...	...
CPI (Tokyo area)[3]	1.7	2.1	2.1	2.0	2.0	2.2	0.7
Wholesale Prices[3]	1.7	1.4	-0.4	0.8	-1.0	-1.1	-2.7

1. Level of indicator.
2. Percent of large manufacturing firms having a favorable view of business conditions less those with an unfavorable view (Tankan survey).
3. Percent change from previous year, NSA.

On April 24, the Japanese government released the details of a massive ¥16 trillion stimulus package, which appears to contain ¥12 trillion (2.4 percent of GDP) of "real water" stimulus. The real water portion of the package includes ¥4 trillion of temporary tax cuts, divided evenly between CY1998 and CY1999, and about ¥8 trillion of government expenditures, mostly public works projects. The portion of the package that is not real water consists of steps to boost the land market (including plans to streamline foreclosure on bad loans and to facilitate the sale of underlying collateral) and programs to help small businesses. The stimulus package will be transformed into a supplementary budget that will be submitted to the Diet later this month.

Two financial reform measures were implemented on April 1 as part of Japan's "Big Bang" program. First, the Bank of Japan Reform Law, which strengthens BOJ independence and increases the transparency of monetary policy formulation, came into effect. Second, a new foreign exchange law abolishes restrictions on cross-border capital transactions and allows Japanese citizens to open deposit and investment accounts abroad.

Economic activity in the eleven European countries scheduled to enter monetary union appears to have continued to expand at a moderate rate in the first quarter. Partial data suggests that area-wide industrial production rose at an average rate of about 1 percent, while both business and consumer confidence continued the upward trend begun last year. The average unemployment rate fell as a result of widespread declines across countries. Inflation remains quite subdued across the area.

EURO-11 ECONOMIC INDICATORS[1]
(Percent change from previous period except where noted, SA)

	1996	1997				1998	
		Q1	Q2	Q3	Q4	Q1	Apr
GDP	1.9	1.5	5.0	3.3	2.0	n.a.	n.a.
Industrial Production	0.9	0.8	2.0	1.8	1.0	0.9[2]	n.a.
Unemployment Rate[3]	12.3	12.5	12.5	12.5	12.4	12.1	n.a.
Business Confidence[4]	-16	-9	-7	-2	1	2	3
Consumer Confidence[5]	-21	-19	-19	-15	-11	-8	-6
Consumer Prices[6]	2.0	1.7	1.2	1.5	1.4	1.2	n.a.

1. Weighted by GDP shares, except as otherwise noted.
2. Partial data; excludes Austria and Ireland.
3. Excludes Portugal.
4. Excludes Austria and Finland.
5. Excludes Austria, Finland, and Portugal.
6. Harmonized CPI; percent change from previous year, weighted by shares in private final domestic consumption expenditure.

In **Germany**, indicators for the first quarter suggest a pick-up in growth from its sluggish fourth-quarter pace, as both production and orders rose substantially. The rise in orders owed primarily to increases in domestic orders, suggesting that the long-awaited pick-up in domestic demand may have begun to occur. Business confidence strengthened further during the first quarter. Conditions in the labor market have improved somewhat this year, with the all-German unemployment rate edging down from 11.8 percent in December to 11.4 percent in April. Consumer price inflation rose slightly in April reflecting an increase of 1 percentage point in the value-added tax.

GERMAN ECONOMIC INDICATORS
(Percent change from previous period except where noted, SA)

	1997		1998				
	Q3	Q4	Q1	Jan	Feb	Mar	Apr
Industrial Production	1.9	0.5	1.7	2.1	-0.3	-1.0	n.a.
Orders	2.4	-0.7	3.0	3.3	0.1	-1.3	n.a.
Unemployment Rate (%)	11.6	11.8	11.5	11.6	11.5	11.5	11.4
Western Germany	9.9	9.9	9.6	9.7	9.6	9.6	9.5
Eastern Germany	18.8	19.6	19.2	19.2	19.2	19.3	19.1
Capacity Utilization[1]	85.9	87.0	87.4	...	...	...	...
Business Climate[1,2]	16.0	17.3	18.3	19.0	17.0	19.0	n.a.
Consumer Prices[3]							
All-Germany	1.9	1.8	1.2	1.3	1.1	1.1	1.4
Western Germany	1.9	1.7	1.1	1.2	1.1	1.0	1.4

1. Western Germany.
2. Percent of firms citing an improvement in business conditions (current and expected over the next six months) less those citing a deterioration.
3. Percent change from previous year.

Incoming data for **France** suggest that growth continued at a healthy pace in the first quarter. Consumption of manufactured products increased 1.5 percent, as a surge in post-holiday purchases in January was only partially reversed later in the quarter. Durable goods purchases were especially strong in March. For January and February on average, industrial production increased 0.4 percent from the fourth quarter, as continued strength in manufacturing offset lower utilities production. Recent business surveys show that business confidence remains high. Conditions in the labor market have continued to improve; the unemployment rate declined to 12.0 percent in March. Inflationary pressures remain subdued. In April, consumer prices were 1.0 percent above their year-earlier level.

FRENCH ECONOMIC INDICATORS
(Percent change from previous period except where noted, SA)

	1997		1998				
	Q3	Q4	Q1	Jan	Feb	Mar	Apr
Consumption of Manufactured Products	2.5	1.0	1.5	3.7	-2.7	-0.1	n.a.
Industrial Production	1.8	1.7	n.a.	-0.9	0.7	n.a.	n.a.
Capacity Utilization	84.9	81.2	82.5	...	...	...	...
Unemployment Rate (%)	12.5	12.4	12.1	12.1	12.1	12.0	n.a.
Business Confidence[1]	14.5	15.3	17.7	16.0	18.0	19.0	20.0
Consumer Prices[2]	1.3	1.2	0.7	0.5	0.7	0.8	1.0

1. Percent balance of manufacturing firms citing an improvement in the outlook versus those citing a worsening.
2. Percent change from previous year.

In **Italy**, monthly indicators generally point to modest economic growth in the first quarter. Although industrial production in January and February changed little on average from its fourth-quarter level, consumer confidence more than retraced its fourth-quarter decline while business sentiment soared due to the removal of any remaining doubt regarding Italy's first-wave entry into the EMU. Inflation remains below 2 percent.

ITALIAN ECONOMIC INDICATORS
(Percent change from previous period except where noted, SA)

	1997		1998				
	Q3	Q4	Q1	Jan	Feb	Mar	Apr
Industrial Production	0.5	1.3	n.a.	0.9	-1.3	n.a.	n.a.
Cap. Utilization (%)	77.7	79.0	78.2	...	...	...	...
Unemployment Rate (%)	12.1	12.1	12.1	...	...	...	...
Consumer Confidence[1]	117.2	115.3	118.6	120.8	118.7	116.3	120.3
Bus. Sentiment[2] (%)	18.0	17.0	32.0	35.0	34.0	27.0	n.a.
Consumer Prices[3]	1.5	1.6	1.7	1.6	1.8	1.7	1.8

1. Level of index, NSA.
2. Percent of manufacturing firms having a favorable view of business conditions minus those with an unfavorable outlook.
3. Percent change from previous year.

On April 17, the government approved its long-range plan to eliminate the budget deficit by 2001 and reduce government debt to 60 percent of GDP--the Maastricht reference value--by 2016. Reductions in debt servicing costs account for most of the projected decline in government indebtedness. Nonetheless, achieving the medium-term fiscal objectives remains a challenge for the government as the rift between the center-left coalition and the Communists on welfare reform and health care spending remains wide.

On April 22, the Bank of Italy cut its official discount and Lombard rates by 50 basis points each. Currently, the discount rate stands at 5 percent and the Lombard rate at 6½ percent. Since July 1997, Italian official rates have been lowered six times for a cumulative total of 4 percentage points.

The pace of economic activity in the **United Kingdom** slowed further in the first quarter. The preliminary estimate showed real GDP growth of 1.6 percent(SAAR); subsequent data suggest that the revised figure will be a little higher. Industrial production declined for the second consecutive quarter, as manufacturing output was little changed and continued mild weather led to lower output of utilities industries. Output growth in the service sector slowed somewhat, but consumer expenditure remained robust.

Recent survey data suggest that the outlook for manufacturing industries has deteriorated in the current quarter. Business sentiment weakened in April, reflecting continued soft export orders due primarily to the strength of sterling. Conditions in the labor market remain tight, however, with the official claims-based unemployment rate dipping to 4.8 percent in April, while underlying average annual earnings growth picked up to 4.9 percent in February. Retail prices excluding mortgage interest payments rose 2.6 percent over the year to March, slightly above the government's target of 2½ percent for underlying inflation.

In its May *Inflation Report*, the Monetary Policy Committee of the Bank of England lowered slightly its central projection for inflation over the medium term, as economic activity appeared somewhat weaker than had been assumed at the time of the February *Report* while sterling had appreciated somewhat further. The MPC noted that in the near term the balance of risks to activity are on

UNITED KINGDOM ECONOMIC INDICATORS
(Percent change from previous period except where noted, SA)

	1997		1998				
	Q3	Q4	Q1	Jan	Feb	Mar	Apr
Real GDP (AR)	3.6	2.5	1.6	...	...	...	...
Non-oil GDP (AR)	2.9	2.9	1.9	...	...	...	...
Industrial Production	1.0	-0.9	-0.4	-0.5	0.1	0.6	n.a.
Retail Sales	1.0	1.4	0.9	1.8	-1.2	0.3	n.a.
Unemployment Rate (%)	5.3	5.1	4.9	5.0	4.9	4.9	4.8
Business Confidence[1]	18.0	13.0	10.7	9.0	11.0	12.0	3.0
Consumer Prices[2]	2.8	2.8	2.5	2.5	2.6	2.6	n.a.
Producer Input Prices[3]	-8.5	-8.9	-10.0	-10.1	-9.8	-10.1	-9.0
Average Earnings[3]	4.4	4.6	n.a.	4.6	4.9	n.a.	n.a.

1. Percent of firms expecting output to increase in the next four months minus those expecting output to decrease.
2. Retail prices excluding mortgage interest payments. Percent change from previous year.
3. Percent change from previous year.

the downside. However, the risks to the exchange rate are asymmetric, so that in the medium term the balance of risks to inflation are on the upside, reflecting the possibility of the exchange rate falling more sharply than assumed in the central projection.

On April 23, the Bank of England Act 1998 was passed by Parliament. The bill formally implements, as of June 1, the changes to the Bank of England announced by Chancellor of the Exchequer Gordon Brown last May, including the granting of operational responsibility for setting interest rates to the Bank of England, the creation of the Monetary Policy Committee, and the transfer of banking supervision to the Financial Services Administration. The provisions for setting monetary policy have been operating de facto from the Chancellor's announcement last May.

In **Canada**, monthly indicators show that the economy has regained its momentum, shaking off the effects of the January ice storm in eastern Canada. Real GDP at factor cost rose 0.9 percent in February, fully recovering from the 0.8 percent decline in January, and employment was up strongly for the quarter as a whole. Employment rose by a further 72,000 in April, the second largest monthly increase in the past three years. The unemployment rate fell to 8.4 percent in April, down from 9.5 percent the previous April, and the lowest since August 1990.

Housing starts rose at a rapid clip in February and March, reflecting strong income growth and moderate mortgage interest rates. Housing starts retreated in April, but the decline was entirely due to a drop in volatile multiple-unit construction. Housing related purchases -- mostly furniture and appliances -- offset weakness in motor vehicle sales to buoy overall retail sales in February.

Consumer price inflation has edged back below the Bank of Canada's 1 to 3 percent target range in recent months, to 0.8 percent (12-month change) in April. Excluding food and energy, consumer prices rose 1.2 percent in the 12 months to April, down from 1.6 percent in February. The good inflation news comes despite the depreciation of the Canadian currency since October. Declines in computer prices and mortgage interest payments over the past year have helped hold down core inflation. A 3.7 percent decline in energy prices over the preceding twelve months has contributed to the low rate of overall inflation.

In its semi-annual Monetary Policy Report issued on May 13, the Bank of Canada indicated its belief that "monetary conditions in the recent range would be broadly appropriate" over the next six months. Beyond the six-month horizon, however, the Bank sees some tightening in monetary conditions if aggregate demand remains robust and the economy continues to take up slack.

CANADIAN ECONOMIC INDICATORS
(Percent change from previous period except where noted, SA)

	1997		1998				
	Q3	Q4	Q1	Jan	Feb	Mar	Apr
GDP at Factor Cost	1.1	0.7	n.a.	-0.8	0.9	n.a.	n.a.
Industrial Production	1.6	0.7	n.a.	-2.9	2.3	n.a.	n.a.
Manufacturing Survey: Shipments	2.5	0.9	n.a.	-3.8	2.9	n.a.	n.a.
New Orders	2.0	1.6	n.a.	-0.6	0.8	n.a.	n.a.
Retail Sales	1.7	1.2	n.a.	-1.8	0.1	n.a.	n.a.
Housing Starts	2.2	0.1	1.8	-5.5	9.0	4.1	-8.1
Employment	0.8	0.4	0.7	-0.0	0.6	0.1	0.5
Unemployment Rate (%)	9.0	8.9	8.7	8.9	8.6	8.5	8.4
Consumer Prices[1]	1.7	1.0	1.0	1.1	1.0	0.9	0.8
Consumer Attitudes[2]	119.9	116.8	n.a.	...	...	...	...
Business Confidence[3]	164.9	159.2	n.a.	...	...	...	...

1. Percent change from year earlier.
2. Level of index, 1991 = 100.
3. Level of index, 1977 = 100.

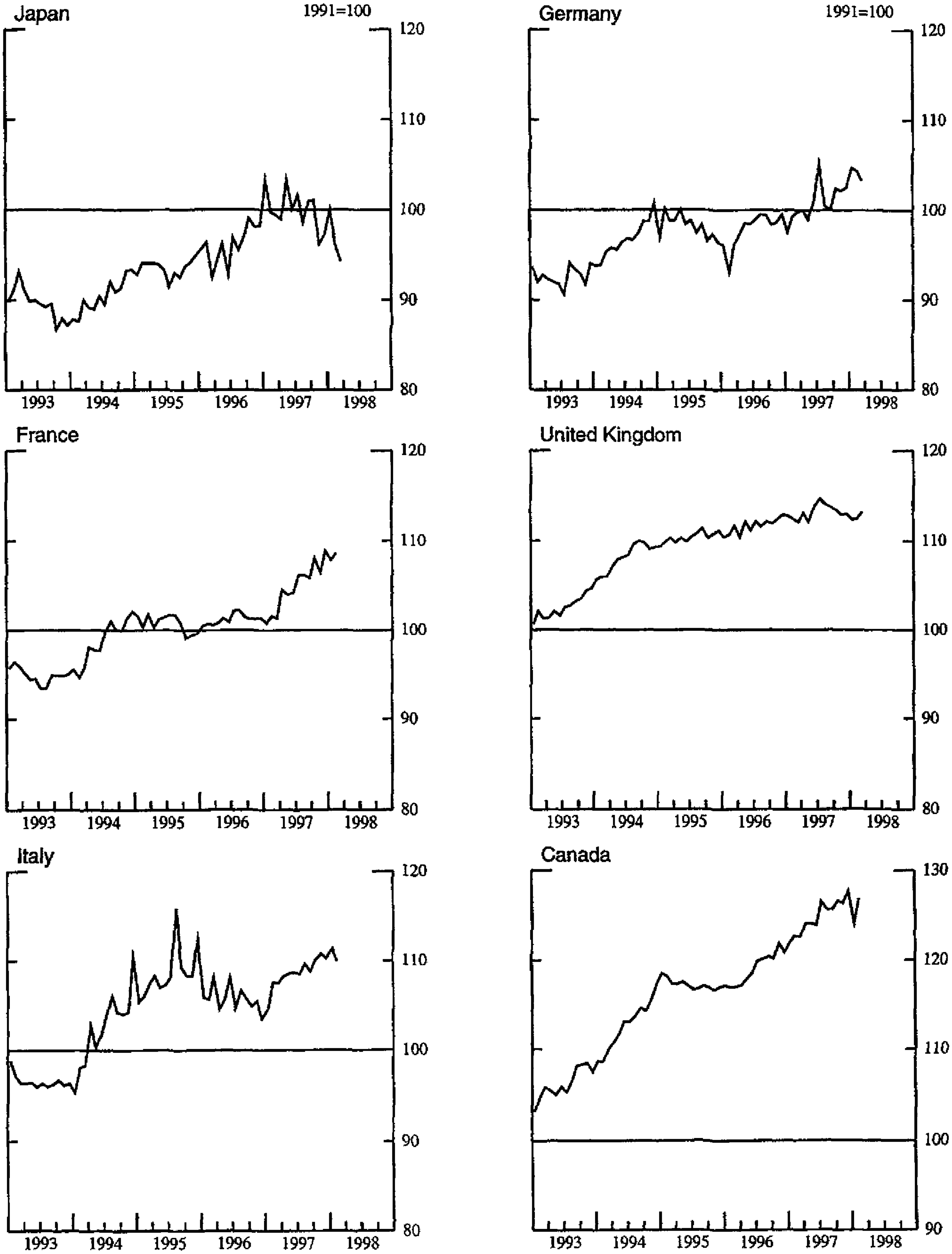
EXTERNAL BALANCES
(Billions of U.S. dollars, SAAR)

	1997		1998			
	Q3	Q4	Q1	Jan	Feb	Mar
Japan: trade	88.7	98.8	98.0	100.1	110.2	83.7
current account	99.6	119.2	116.6	97.3	148.7	103.8
Germany: trade[1]	76.1	79.4	n.a.	39.6	77.5	n.a.
current account[1]	-8.9	17.0	n.a.	-89.1	0.6	n.a.
France: trade	29.8	34.2	n.a.	32.4	27.6	n.a.
current account	34.0	43.9	n.a.	35.8	n.a.	n.a.
U.K.: trade	-18.4	-28.1	n.a.	-22.1	-43.3	n.a.
current account	8.9	0.8	n.a.	...	...	...
Italy: trade	28.6	25.5	n.a.	n.a.	n.a.	n.a.
current account[1]	45.9	37.5	n.a.	n.a.	n.a.	n.a.
Canada: trade	13.5	11.6	n.a.	12.4	15.3	n.a.
current account	-19.1	-17.7	n.a.	...	...	...

1. Not seasonally adjusted.
... Data not available on a monthly basis.

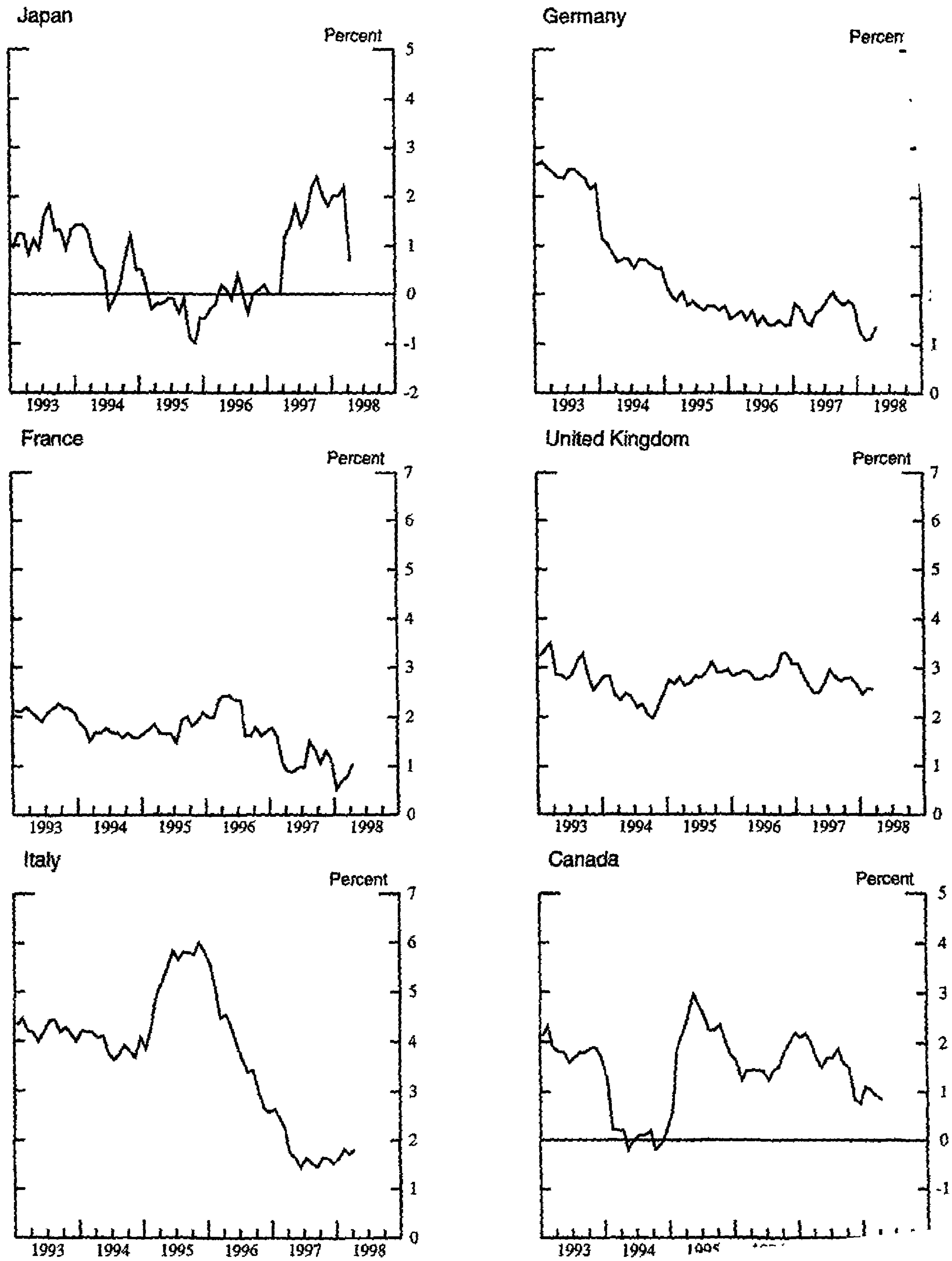
MAY 14, 1998

Industrial Production in Selected Industrial Countries



MAY 14, 1998

Consumer Price Inflation in Selected Industrial Countries
(12-month change)



Economic Situation in Other Countries

In Korea and the ASEAN region, economic activity continued to be generally weak due to a decline in domestic demand, although Singapore showed signs of a rebound. Growth has slowed in China and contracted sharply in Hong Kong, but remains relatively steady in Taiwan. In Latin America, growth was strong in Argentina and Mexico, but weak in Brazil and Venezuela. Inflation has generally been stable to moderate, although it accelerated in Indonesia as well as in Venezuela.

The general adjustment toward surplus in external balances in Asia continued, with the exception of Taiwan. In Latin America, external balances continued to deteriorate except in Brazil, where the trade deficit narrowed further.

Implementation of reforms continued in Korea, Thailand, and the Philippines under their respective IMF programs. In April, Indonesia reached agreement with the IMF on a revised program and qualified for a $1 billion drawing on its stand-by in May. However, Malaysia rejected an IMF recommendation against bailing out insolvent firms.

Individual country notes. **Korea** is experiencing a sharp recession. Based on partial data for several components of aggregate expenditures, we estimate that real GDP fell 8 percent (SAAR) during the first quarter. Real activity has contracted as a result of a downturn in domestic demand that is attributable in part to a high degree of economic uncertainty, balance sheet adjustments by corporations and households, and tight credit conditions. CPI inflation rose to 8.8 percent in April on a 12-month basis from an average rate of below 5 percent in 1997 because of the depreciation of the won.

Korea's current account surplus rose to $43 billion (AR) during the first quarter, a swing of $72 billion from the $29 billion deficit recorded a year earlier. Most of the swing in the balance in dollar terms has reflected a contraction in imports, which fell 35 percent from their year-earlier level. A sharp decline in the volume of imports, due to weak domestic demand, a real depreciation of the won, and financing constraints, has been reinforced by a considerable fall in the dollar price of imported goods.

Korea has experienced substantial labor unrest during the past two months, due in part to a marked rise in unemployment and a limited social safety net. The unemployment rate rose to 6.5 percent in March compared with 2.1 percent in October. One major federation of Korean trade unions has demanded that a key labor reform approved by the Korean legislature in February--which eased the ability of employers to lay off workers in the context of restructurings--be modified significantly. Employees at the financially distressed Kia conglomerate went on a temporary strike in April to forestall the government from selling its majority stake in Kia to a third party.

Financial market developments have been mixed during the past six weeks. The Korean won has remained basically stable at around 1400 won/dollar, supported by the Korean government's success in raising $3.9 billion through issuing 5- and 10-year international market bonds at spreads about 350 basis points over comparable-maturity U.S. Treasuries. However, the Korean stock market has declined about 35 percent since the March FOMC meeting, returning to near its mid-December trough.

KOREAN ECONOMIC INDICATORS
(Percent change from year earlier except where noted)

	1996	1997	1997	1998	1998	
			Q4	Q1	Mar	Apr
Real GDP	6.8	5.5	3.9	n.a.	...	...
Industrial Production	8.4	8.1	7.0	-7.9	-10.1	n.a.
Consumer Prices	4.9	4.4	5.0	8.9	9.0	8.8
Trade Balance[1]	-15.3	-3.9	10.8	38.4	45.6	n.a.
Current Account[1]	-23.7	-8.6	13.2	42.8	44.4	n.a.

1. Billions of U.S. dollars, AR, NSA.

In the **ASEAN** region, weakening domestic demand and tightening liquidity continued to constrain economic activity. In Indonesia, real year-over-year GDP growth slowed in the fourth quarter of 1997 to under 1.5 percent. Industrial production declined in Malaysia and Thailand in the early months of 1998, but Singapore showed signs of a rebound led by a surge in the output of high-valued pharmaceuticals.

ASEAN ECONOMIC INDICATORS: GROWTH

	1996	1997	1997 Q4	1998 Jan	1998 Feb	1998 Mar
Real GDP, SAAR						
Indonesia	8.0	4.7	1.4[1]	...	...	...
Malaysia	8.6	7.8	6.5	...	...	...
Philippines	5.7	5.1	1.1	...	...	...
Singapore	6.7	7.5	2.2	...	...	...
Thailand	6.4	-0.4	n.a.	...	...	...
Industrial Production[1]						
Indonesia	6.6	n.a.	1.6	n.a.	n.a.	n.a.
Malaysia	11.0	10.8	10.2	3.0	-2.2	n.a.
Philippines	4.3	3.8	12.3	-12.7	n.a.	n.a.
Singapore	4.0	4.3	8.3	-5.1	16.5	8.5
Thailand	7.2	-0.9	-11.5	-15.8	-13.7	n.a.

1. Year-over-Year.

Consumer prices accelerated in Indonesia as spot food shortages and announcements of impending withdrawals of subsidies triggered panic buying of basic consumer goods, and the weak currency kept import prices high. Recent increases in fuel prices set off a new round of protests that have turned violent, with security forces firing on student demonstrators and mobs attacking shops owned by ethnic Chinese. These protests are roiling financial markets and heightening uncertainty about the economic situation.

ASEAN ECONOMIC INDICATORS: INFLATION
(Percent change from year earlier)

	1996	1997	1997 Q4	1998 Q1	1998 Mar	1998 Apr
Consumer Prices						
Indonesia	8.0	6.5	10.0	29.7	39.1	44.9
Malaysia	3.5	2.7	2.7	4.3	5.1	n.a.
Philippines	8.4	5.1	6.1	7.1	7.3	7.9
Singapore	1.4	2.0	2.3	1.0	1.0	n.a.
Thailand	5.8	5.6	7.5	9.0	9.5	10.1

Trade balances have continued to swing into surplus for most of the ASEAN countries. This primarily reflects the effects of weakened currencies and slowing growth discouraging imports, although export performance has begun to strengthen as well.

ASEAN ECONOMIC INDICATORS: TRADE BALANCE[1]

	1996	1997	1997	1998		
			Q4	Jan	Feb	Mar
Indonesia	6.9	11.8	12.5	18.8	20.4	n.a.
Malaysia	-0.1	-0.2	1.7	7.0	7.9	12.0
Philippines	-11.4	-10.7	-9.2	-8.7	-4.3	n.a.
Singapore[2]	-5.9	-5.8	-3.3	5.4	0.5	6.1
Thailand	-16.1	-4.6	10.0	10.4	13.7	11.9

1. Billions of U.S. dollars, AR, NSA.
2. Non-oil trade balance.

Implementation of economic reforms varied across the ASEAN region. In mid-April, Indonesia signed its third letter of intent with the IMF, agreeing to a 117-point program that focuses on monetary policy, resolution of private external debt, banking reforms, and other structural reforms. Jakarta also agreed to weekly monitoring of monetary indicators. On April 22, the government announced it had met the target date for the first round of reforms, and on May 4 the IMF Executive Board voted to release $1 billion of the $10 billion credit. Contingent on continued satisfactory implementation of the program, the IMF will release another $1 billion in June.

Elsewhere, Thailand announced a 15-point plan in late April to address the continuing crisis in the financial system. The plan includes raising the debt ceiling on foreign borrowing by the government, an IMF recommendation, and loosening restrictions on joint ventures between local banks and foreign investors. In early April, the Philippines submitted a plan to the IMF, under its $1.4 billion stand-by facility, to improve financial sector supervision. In response to a caution from the IMF against bailing out insolvent firms, Prime Minister Mahathir reaffirmed his government's intention to assist firms harmed by what he characterized as foreign speculators' attack on the ringgit.

In **Hong Kong**, economic activity has weakened significantly. We estimate that output *fell* 6 percent in the fourth quarter of 1997 (SAAR) from the previous quarter. In the first quarter, the unemployment rate rose to 3.5 percent from 2.4 percent in the previous quarter. Interest rates rose sharply in mid-May amid concerns that a weaker economy and renewed turmoil in Indonesia might make the Hong Kong dollar vulnerable to a speculative attack.

On May 14, the yield spread between Hong Kong government securities and comparable U.S. Treasuries was around 300 basis points at maturities of 1-10 years, up about 100 basis points from the beginning of the month. Foreign exchange reserves were $97 billion at the end of March, up about $4 billion from December.

In **China**, real GDP growth slowed to 7.2 percent in the first quarter over a year ago, while consumer prices remained virtually unchanged in April from a year earlier. China's trade surplus increased in the first four months of 1998. The dollar value of exports was up 12 percent in the first four months of this year from year-earlier levels, and 8 percent in April, significantly less than the 20 percent growth rate in 1997. The dollar value of imports rose 3 percent in the first four months from a year earlier, equal to the growth rate in 1997. Total reserves less gold were $144 billion in March, up about $1 billion from the beginning of the year.

CHINESE ECONOMIC INDICATORS
(Percent change from year earlier except where noted)

	1996	1997	1997	1998	1998	
			Q4	Q1	Mar	Apr
Real GDP	9.7	8.8	8.2	7.2	...	...
Industrial Production	15.6	13.1	13.0	10.3	10.7	n.a.
Consumer Prices[1]	7.0	0.4	0.4	0.7	0.7	-0.3
Trade Balance[2]	12.2	40.3	38.8	42.4	40.8	51.1

1. End of period.
2. Billions of U.S. dollars, AR, NSA.

Taiwan's industrial production decelerated in the first quarter, as export growth slowed substantially. A very small trade surplus in the first four months of 1998 compares with a surplus of $4.8 billion (AR) in the year-earlier period. Exports to Asia fell sharply from year-ago levels, while exports to the United States and Europe rose slightly; imports fell 3 percent. Consumer price inflation rose above 2 percent (year-over-year) in March and April. Inflation has been more evident in wholesale prices, which rose at an average rate of about 5 percent (year-over-year) in the first four months of 1998. International reserves were about $84 billion at the end of March, largely unchanged from the beginning of the year.

TAIWAN ECONOMIC INDICATORS
(Percent change from year earlier except where noted, NSA)

	1996	1997	1997	1998	1998	
			Q4	Q1	Mar	Apr
Real GDP	5.7	6.8	7.1	n.a.	...	...
Industrial Production	1.6	7.0	8.2	4.6	3.9	n.a.
Consumer Prices[1]	2.5	0.2	0.2	2.6	2.6	2.1
Trade Balance[2]	14.3	7.7	2.2	-2.4	4.8	3.2
Current Account[2]	10.5	7.4	8.8	n.a.	...	...

1. End of period.
2. Billions of U.S. dollars, AR, NSA.

In **Mexico**, economic activity remains strong but the pace of growth has slowed somewhat as a result of budget cuts in January and March prompted by the decline in oil prices. Growth of industrial production slowed to 7.2 percent in February from its year-earlier level, compared with a 7.6 percent rate in January. On the other hand, the unemployment rate declined to 3.4 percent in March from 3.6 percent in January. The trade deficit widened to $7.2 billion (AR) in the first quarter.

MEXICAN ECONOMIC INDICATORS
(Percent change from year earlier except where noted)

	1996	1997	1997	1998	1998	
			Q4	Q1	Mar	Apr
Real GDP	5.1	7.0	6.7	n.a.	...	...
Industrial Production	10.4	9.2	8.9	n.a.	n.a.	n.a.
Unemployment Rate (%)	5.5	3.7	3.1	3.5	3.4	n.a.
Consumer Prices[1]	27.7	15.7	14.3	22.5	15.4	11.9
Trade Balance[2]	6.5	0.6	-5.2	-7.2	-7.2	n.a.
Imports[2]	89.5	109.8	124.0	119.2	134.4	n.a.
Exports[2]	96.0	110.4	118.8	112.0	127.2	n.a.
Current Account[2]	-1.9	-7.3	-12.4	n.a.	...	...

1. End of period; percentage change from previous period, AR, NSA.
2. Billions of U.S. dollars, AR, NSA.

The CPI inflation rate fell to under 12 percent (AR) in April. The peso value of the dollar has stabilized since the Bank of Mexico tightened monetary policy in mid-March. The 28-day cetes interest rate has declined to 17.4 percent in May, below its mid-March high of 21.52 percent. Spreads on Mexican Brady bonds, adjusted for collateral, fell slightly from 479 basis points on January 2 to about 430 basis points in recent trading.

In **Brazil**, economic activity has been sluggish. Industrial output of consumer durables and capital goods rose somewhat in February, but to a level still about 10 percent below its peak in October 1997. The unemployment rate reached 8.2 percent in March, the highest since 1984. Inflation was around 6 percent (AR) in March.

Indications are that net capital inflows have been strong in recent months, prompting the central bank to intervene to mitigate upward pressures on the currency. International reserves (liquidity concept) rose to $75 billion in mid-May from $52 billion at end-1997. Events in recent weeks, however, have cast a pall on Brazilian stocks and Brady bonds. In April, two close allies of President Cardoso, Brazil's communications minister and a leader in Brazil's unruly lower house, died, fueling the perception that economic reforms would be more difficult to pass through Congress. These perceptions were further heightened by the defeat (by one vote) in early May of the government's social security reform proposal. (The proposal is critical to fiscal stability.)

BRAZILIAN ECONOMIC INDICATORS
(Percent change from year earlier except where noted)

	1996	1997	1997	1998	1998	
			Q4	Q1	Feb	Mar
Real GDP[1]	2.9	3.0	2.0	n.a.	...	...
Industrial Production[1]	5.4	2.0	-9.2	-10.0	11.3	8.7
Open Unemployment Rate (%)	5.4	5.6	5.3	7.6	7.4	8.2
Consumer Prices[2]	9.4	4.3	4.5	7.4	6.2	6.2
Trade Balance[3]	-5.5	-8.4	-11.6	-6.4	-1.2	-9.6
Current Account[3]	-24.3	-33.8	-44.8	-24.0	-20.4	-30.0

1. Percent-change from previous period, SAAR.
2. INPC, Percentage change from previous period, AR. Annual data are Dec/Dec.
3. Billions of U.S. dollars, AR, NSA.

In early April, the central bank had reduced its overnight lending rate by about 5 percentage points over the previous 6 weeks to 23 percent. Large net capital inflows plus concern over rising unemployment most likely motivated the interest rate reduction.

In **Argentina**, economic activity continues to grow at a healthy pace with low inflation. Industrial production (SA) in March was up 6.4 percent over a year ago. Consumer prices have been roughly flat over the past two months, and the 12-month inflation rate in April was slightly over 1 percent. A combination of strong imports due to robust growth, a fall in commodity prices, and a slowdown in exports to Brazil has led to further deterioration of the current account deficit, which widened to about $15 billion (AR) in the fourth quarter of 1997. The recent widening of the trade deficit has exceeded the IMF's target under the terms of Argentina's Extended Fund Facility.

ARGENTINE ECONOMIC INDICATORS
(Percent change from year earlier except where noted)

	1996	1997	1997	1998	1998	
			Q4	Q1	Mar	Apr
Real GDP	4.3	8.4	8.2	n.a.	...	...
Industrial Production (SA)	3.1	8.6	9.2	6.8	6.4	n.a.
Unemployment Rate (%)[2]	17.2	14.9	13.7	...	...	...
Consumer Prices[1]	0.1	0.3	-0.8	3.6	-1.2	0.0
Trade Balance[3]	1.6	-3.2	-7.2	-6.0	-6.0	n.a.
Current Account[3]	-4.0	-10.2	-15.2	n.a.	...	...

1. End of period; percentage change from previous period, AR, NSA.
2. Unemployment figures available only in May and October of each year. The annual figure is the average of the two surveys.
3. Billions of U.S. dollars, AR, NSA.

In **Venezuela**, the recent slump in oil prices, together with the accompanying tightening of fiscal and monetary policies, is putting considerable strain on the economy. The unemployment rate rose by a percentage point in the first quarter of this year. Although quarterly data on real GDP are not available, the government has acknowledged that economic activity may have contracted in the first quarter. Inflation has been rising recently, reaching almost 50 percent (AR) in April.

Falling oil prices have led to declines in both exports and government revenues, causing international reserves (excluding gold) to fall 13 percent during January-March, and forcing the government to cut public spending. Despite this tightening, the fiscal situation has deteriorated and fears of devaluation have grown. In order to prevent a large depreciation of the bolivar and a bigger rundown of international reserves, the government has raised interest rates substantially. The bolivar has depreciated some 6 percent through April this year but is still considered substantially overvalued.

VENEZUELAN ECONOMIC INDICATORS
(Percent change from year earlier except where noted)

	1996	1997	1997	1998	1998	
			Q4	Q1	Mar	Apr
Real GDP	-0.4	5.1	...	...	...	...
Unemployment Rate (NSA, %)	11.8	11.8	10.6	11.6	...	...
Consumer Prices[1]	103.3	37.6	43.2	32.1	37.7	49.4
Non-oil Trade Balance[2]	-4.8	-6.6	-8.0	n.a.	n.a.	n.a.
Trade Balance[2]	13.8	11.6	-9.2	n.a.	n.a.	n.a.
Current Account[2]	8.8	6.0	...	...	...	...

1. End of period; percentage change from previous period, AR, NSA.
2. Billions of U.S. dollars, AR, NSA.

In **Russia**, recent data confirm a slowing of activity in the first quarter, possibly reflecting the influence of higher interest rates and shaken business confidence over this period arising from spillover to Russian financial markets from the Asian financial crises. Real GDP in the first quarter showed no increase on a year-over-year basis after rising about 3/4 percent in the previous quarter. Industrial output growth also slowed noticeably in the first quarter. The inflation rate has continued to moderate in recent months, moving down to a 12-month rate of 8-1/2 percent in March.

So far in the second quarter, interest rates have eased slightly on balance, despite episodes of downward pressure on the ruble seemingly related to concern over the uncertain political situation.

On April 24, the Duma (parliament) voted to accept Sergei Kiriyenko as Prime Minister. The Communist-dominated Duma had twice previously voted to reject Kiriyenko, President Yeltsin's choice to replace the fired Viktor Chernomyrdin. However, the Duma backed down when faced with the certainty of its dissolution and new parliamentary elections if it had voted against Kiriyenko a third time. Kiriyenko's cabinet appointments suggest that the new government will be at least as supportive of economic reform as its predecessor. Probably the most pressing problem facing the new government is to hold down the budget deficit (optimistically estimated to be about 5 percent of GDP in the recently passed 1998 budget) in the face of increased interest costs and falling revenue from the oil sector (which accounts for over one-third of total government taxes).

RUSSIAN ECONOMIC INDICATORS
(Percent change from year earlier except where noted)

	1996	1997	1997	1998	1998	
			Q4	Q1	Feb	Mar
Real GDP	-6.3	0.4	0.8	0.0	0.0	0.1
Industrial Production	-5.2	1.9	3.4	1.3	1.4	0.9
Consumer Prices	52.8	14.8	11.8	9.3	9.4	8.5
Ruble Depreciation	12.5	12.7	7.8	6.1	7.0	6.1
Trade Balance[1]	16.4	n.a.	n.a.	n.a.	...	...
Current Account[1]	2.2	-1.4	n.a.	n.a.	...	...

1. Billions of U.S. dollars.

Appendix: New Exchange Rate Indices

The staff's multilateral trade weighted index of the dollar's exchange value against the other G-10 currencies is about to be retired. Prompted in part by the expected creation of the euro on 1 January 1999, which will lead to the extinction of half of the currencies included in the G-10 index, and in part by increasing interest in the currencies of our developing and newly industrializing trading partners, the staff has developed some new exchange rate indices to summarize and characterize the dollar's movements in foreign exchange markets.

Three new indices of the dollar's overall foreign exchange value have been developed: a narrow nominal index, a broad nominal index, and a broad real or price-adjusted index.[1] These indices include a larger number of currencies than the G-10 index and have weights that vary over time. Furthermore, the weights are derived from more detailed measures of trading patterns than those in the G-10 index.

The movements of the narrow nominal and broad real indices are similar to those of the comparable G-10 indices, although the swings in the new series are generally less extreme. In contrast, the broad nominal index has moved quite differently due to the presence in the index of currencies of some high inflation countries. These currencies have experienced persistent depreciations against the dollar, a feature which tends to restrict the usefulness of the broad nominal index to discussions of shorter-term developments in foreign exchange markets because, over the longer-term, large nominal depreciations of a few currencies swamp information on the value of the dollar against other currencies.

The new indices employ a common weighting scheme based on measures of the competitiveness of U.S. goods. Considerably more weight is given to the Canadian dollar and the Japanese yen than is

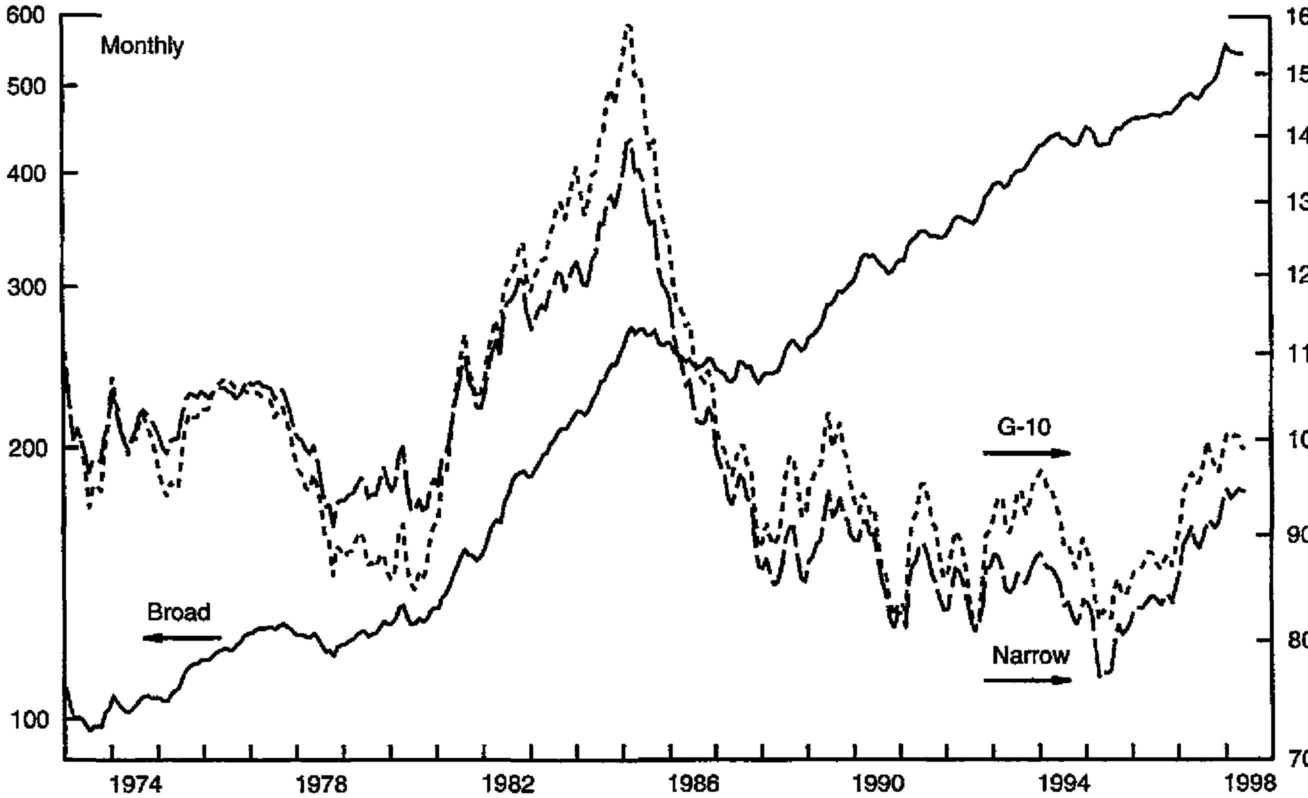
---

[1]A real version of the narrow index could be calculated when appropriate, and the broad version of the indices along with the narrow version implies a second narrow measure, comprised of the additional currencies in the broad measure.

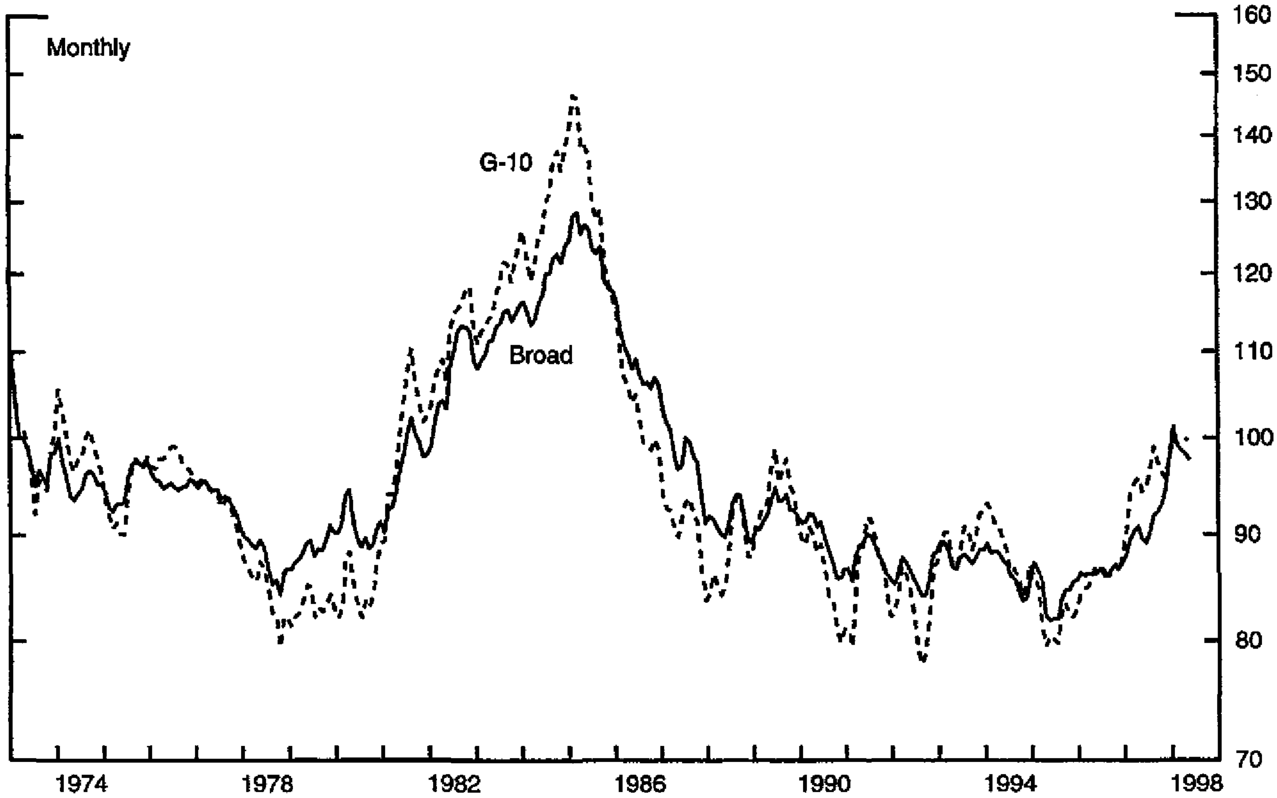
U.S. Dollar Exchange Rate Indices

(Ratio scales, Index, March 1973 = 100)

Nominal Indices



Real Indices



1996 Weights for U.S. Dollar Exchange Rate Index
(percent)

Country or Region	G-10	Narrow	Broad	Export Sector	Import Sector
Canada	9.1	29.4	17.3	12.9	21.7
EU-11	57.6	28.4	16.7	17.9	15.5
Japan	13.6	26.9	15.8	14.2	17.4
Mexico			7.7	5.5	10.0
China			6.6	5.5	7.7
Korea			4.3	5.2	3.4
United Kingdom	11.9	7.4	4.4	4.8	3.9
Taiwan			4.2	3.9	4.5
Singapore			3.5	4.0	3.0
Hong Kong			3.2	4.9	1.5
Brazil			2.8	4.3	1.3
Malaysia			2.6	2.6	2.7
Switzerland	3.6	3.5	2.0	2.9	1.2
Thailand			1.8	2.0	1.7
Australia		2.7	1.6	2.6	0.5
Indonesia			1.4	1.6	1.2
Philippines			1.2	1.1	1.2
Sweden	4.2	1.7	1.0	1.0	1.1
Argentina			1.0	1.7	0.2
Chile			0.9	1.5	0.3
Total	100.0	100.0	100.0	100.0	100.0
EU-11:					
Germany	20.8	9.9	5.8	5.8	5.8
France	13.1	5.0	3.0	3.1	2.8
Italy	9.0	4.5	2.7	2.6	2.7
Belgium/Luxembourg	6.4	2.3	1.4	1.7	1.0
Netherlands	8.3	2.6	1.5	2.1	1.0
Spain		1.4	0.8	1.0	0.6
Ireland		1.2	0.7	0.7	0.7
Austria		0.7	0.4	0.5	0.3
Finland		0.6	0.3	0.3	0.3
Portugal		0.2	0.1	0.1	0.1
Total	57.6	28.4	16.7	17.9	15.5

given by the G-10 index,[2] with an offsetting decline in the weight assigned to the euro-area currencies.

The narrow nominal index includes dollar exchange rates against the currencies of Canada, the EU-11 countries, Japan, the United Kingdom, Switzerland, Australia, and Sweden--making it a 16-currency index until Europe's monetary union begins, at which time it will become a 7-currency index. The broad index includes, along with the currencies in the narrow index, four currencies from Latin America and nine from Asia--making it a 29-currency index until European Monetary Union begins and a 20-currency index thereafter.

While we expect that these new indices will become the standard summary measures used in presentations to the Board and the FOMC on the foreign exchange value of the dollar, other, specially-tailored exchange rate indices may also be used from time to time. Two key exchange rate indices are likely candidates in this regard--one currently used in the nonagricultural export sector of the staff's trade model and the other currently used in the non-oil import sector. Weights for these indices are shown in the two rightmost columns of the preceding table. The average of the weights for these two indices form the basis for the weights in the broad and narrow summary indices.

A number of factors went into the decisions on which currencies to include in the indices. Aside from creating indices that will accommodate the introduction of the euro, our basic strategy was to enlarge the currency coverage to include the currencies of other major U.S. trading partners. Currency selection for the broad indices was based largely on country trade shares, although, at the margin, other considerations also influenced our choices. The foreign countries whose currencies are included in the broad indices supplied more than 90 percent of U.S. non-oil imports in 1997 and absorbed more than 85 percent of U.S. nonagricultural exports in that year. Those same countries were responsible for 70 percent of aggregate world trade in 1996, measured as the sum of multilateral exports and imports, and they generated a bit more than

[2] The G-10 index uses fixed weights based on multilateral trade shares between 1972 and 1976.

half of world GNP in 1995, measured on the basis of purchasing power parity exchange rates.

Trade Shares by Group
(percent)

	Broad	Narrow	G-10
U.S. non-oil imports (1997)	91	55	53
U.S. nonagricultural exports (1997)	88	56	52
World multilateral trade (1996)	70	50	43
memo:			
World GNP share (1995, PPP basis)	54	31	27

While the subset of countries with currencies in the narrow index provides significantly less coverage in terms of trade share and productive capacity, the coverage is still substantial. Moreover, the narrow nominal index was designed not only to measure competitive pressures on the dollar, particularly against the major industrial countries, but also to serve as one gauge of financial pressures on the dollar. As a consequence, the index includes currencies traded in deep and relatively liquid financial markets and excludes currencies with a history of high inflation relative to the United States or with limited liquidity and depth in financial intermediation.

The weighting scheme is based on measures of trade competitiveness, where the weights capture the extent to which U.S. goods compete with the goods produced in foreign countries.

For the portion of that competition which occurs in the U.S. market, a weight equal to a country's share of U.S. imports is used to proxy for the degree of competition from that country. These weights are the import sector weights mentioned earlier.

For the portion of that competition which occurs in foreign markets, we use the export sector weights mentioned earlier. These weights are made up of two pieces, corresponding to the fact that U.S. goods compete with the goods of a particular foreign country in that country's home market and in third-country markets. One piece--which measures foreign home-market competition like that between U.S. and German goods in Germany--is proxied by the U.S. export share to the foreign country. A second piece--which measures foreign third-market competition like that between U.S. and German goods in Japan--is proxied by the U.S. export share to the third country scaled by the share of the foreign country's goods in the third country's imports. In this way, a country will have a high combined export weight if it figures importantly as a direct destination for U.S. exports or is a major exporter to other countries that take a large share of U.S. exports.

The weight in the summary index is then computed as the simple average of the bilateral import share weights and the combined export weights. Overall, we believe that this weighting scheme is useful in that it lends itself to a number of other purposes not detailed here, including the calculation of summary exchange rate measures for other currencies and the calculation of indices for other subsets of currency groupings.

Consistent with the shift away from fixed-weight indices in the United States, the new exchange rate indices use weights that vary over time. A benefit of this approach is that the exchange rate index can readily incorporate changes in the pattern of trade, such as the expansion of trade with China or other Asian economies. In addition, adjustable weights permit the recognition of events such as the accession of a second wave of EU countries to the European Monetary Union, which would affect the trade shares assigned to currencies in the indices.

Because the new indices are intended to be proxies for competitiveness, the data used to compute the bilateral import and export shares for the United States exclude U.S. military exports and trade in oil and agricultural commodities, which are less likely to be differentiated by country of destination or origin and thus less likely to reflect differences in competitiveness among countries. Comparably disaggregated trade data for other countries are not as readily available. Therefore, the import and export shares used in the calculation of third-country competitiveness are based on aggregate bilateral merchandise imports and exports for each country pair. In addition, because of the impending move into monetary union by 11 EU countries, and the highly integrated trading relationships among the remaining member countries, intra-EU trade is excluded in the calculations.

Because the weights in the new indices vary over time and because the data used to construct the weights are released with a lag and are periodically revised, the new indices will be subject to revision. This is particularly true for index values in the current year and the year immediately preceding the current year, although earlier historical values may also be revised from time to time.