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**February 3, 1988**

# **RECENT DEVELOPMENTS**

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

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# **DOMESTIC NONFINANCIAL DEVELOPMENTS**

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## DOMESTIC NONFINANCIAL DEVELOPMENTS

Production and employment continued to expand strongly in the fourth quarter. In particular, manufacturing output recorded another sizable gain, bolstered by the continued upswing in exports. However, domestic final sales were weak as consumption outlays and business fixed investment declined, and much of the production gain apparently went into inventories. This buildup in stocks may portend a near-term deceleration in activity, and initial claims for unemployment insurance have registered a noteworthy rise. Wages have shown little acceleration, despite the decline in the unemployment rate, and price inflation has moderated recently as energy prices have declined.

### Fourth-quarter GNP

According to the Commerce Department's preliminary estimates, real GNP rose at a 4-1/4 percent annual rate in the fourth quarter of 1987.<sup>1</sup> Arithmetically, business inventory accumulation more than accounted for the growth in output, as final sales (excluding accumulations at the Commodity Credit Corporation (CCC)) are estimated to have fallen 1-1/2 percent at an annual rate. Consumption spending declined substantially. More than half of the drop resulted from lower automobile purchases; however, outlays for nondurables also fell, and spending for services slowed from its earlier pace. In addition, business fixed investment dropped back somewhat, after a third-quarter surge. Exports meanwhile

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1. In deriving its preliminary fourth-quarter estimates, the Commerce Department did not have the December data for some key series--notably inventories, merchandise trade, shipments of nondefense capital goods, and construction put-in-place.

continued to soar at a double-digit rate, and net exports increased enough to account for about a percentage point of fourth-quarter GNP growth.

The national income and product accounts show agricultural stocks (measured as the sum of farm inventories and CCC stocks) continuing to rise very rapidly in the fourth quarter and over 1987 as a whole. However, the reported accumulation is largely a statistical artifact that is inconsistent with physical stocks data and also somewhat at odds with the fairly sharp price rebound that has occurred for many crops this past year. In reality, as is indicated in more detail in a later section, real agricultural inventories probably fell last year.

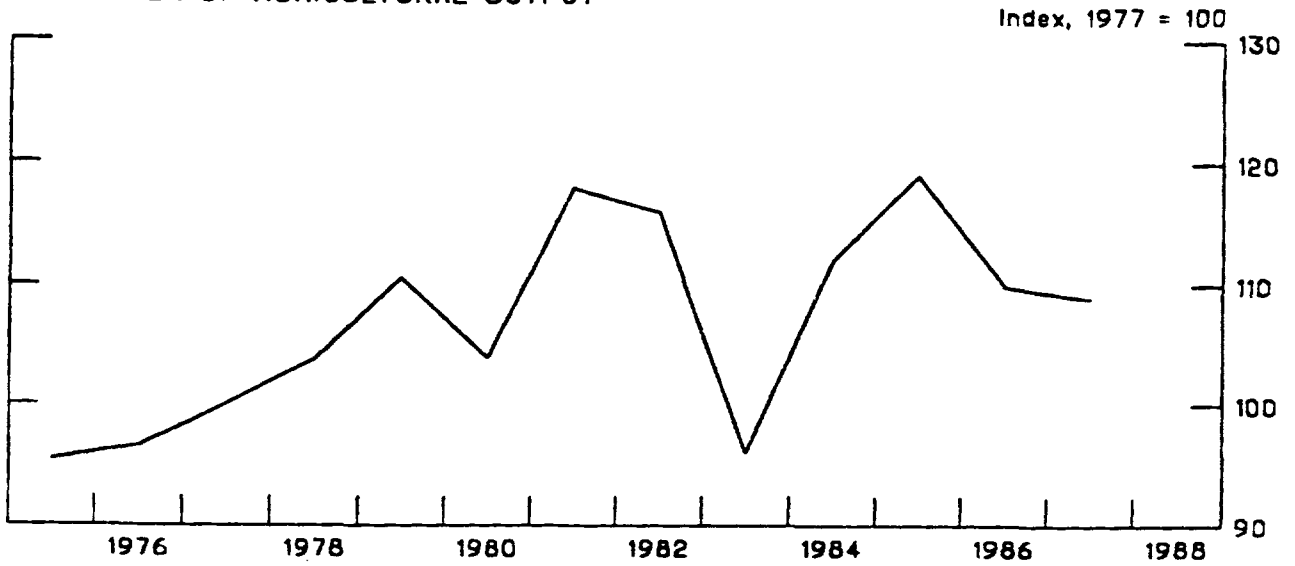
#### Industrial Production and Capacity Utilization

Industrial production rose 0.4 percent in November and 0.2 percent in December, after even larger gains in the summer and early fall. The small advance in December occurred as continued strength in output of materials and intermediate products was offset somewhat by declines for business equipment and automotive products. Chemicals and paper have bolstered materials production in recent months, which reflects, in part, the improved trade situation. Output of basic metals also is benefitting from the decline in the dollar, with the most recent strength occurring in nonferrous metals, particularly copper. The fairly widespread decline in the production of business equipment in December followed a surge in October and a flat November. The recent weakness in this category has been most pronounced in the computer industry.



Agriculture

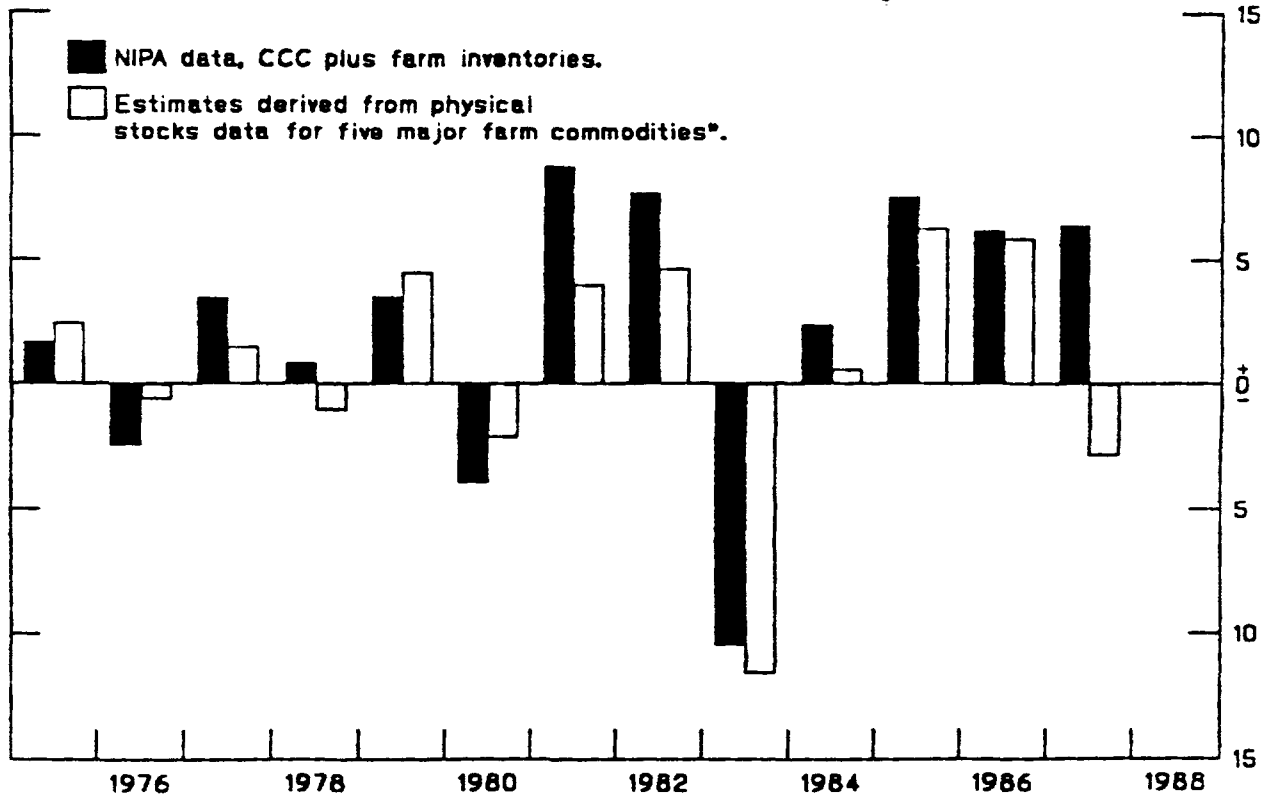
USDA INDEX OF AGRICULTURAL OUTPUT\*



\* 1987 figure is preliminary.

AGRICULTURAL INVENTORIES

Annual change, billions of 1982 dollars



\* Corn, wheat, soybeans, cattle, hogs. Yearend cattle inventory for 1987 is assumed to be unchanged from previous year (actual cattle inventory to be reported on February 5); other stock estimates are based on USDA inventory reports.

Early indications of industrial activity in January are mixed: auto schedules called for about a 10 percent reduction in assemblies and oil drilling is down somewhat. However, production of both steel and trucks is up, and preliminary data on electricity generation show a sizable gain--beyond the normal seasonal increase for January. A separate signal of industrial activity was given by the January Purchasing Manager's survey; more respondents reported increases than decreases, but the margin was smaller than in December.

Capacity utilization in manufacturing, mining, and utilities edged up 0.1 percentage point in December to 82.1 percent. For the fourth quarter, the average operating rate was 82 percent--its highest quarterly value since early 1980. Operating rates at manufacturers were little changed in December, after substantial increases earlier last year, especially in primary processing industries. The utilization rate for iron and steel was 91 percent in November 1987, compared with 65 percent in December 1986. Likewise, nonferrous metals industries were operating at nearly 90 percent of capacity at year-end, more than 10 percentage points higher than at the end of 1986. These high rates reflect not only sharp increases in output during the past year, but also permanent closings of many mills during the 1980s. Operating rates in most manufacturing industries now have moved above their 1967-86 average. Nevertheless, utilization rates in some industries, such as machinery and electrical equipment, remain below their longer-run averages.

**INDUSTRIAL PRODUCTION**  
(Percentage change from preceding period)

	1986	1987	1987		1987		
			Q3	Q4	Oct.	Nov.	Dec.
	-----Annual rate-----				---Monthly rate---		
<b>Total Index</b>	1.1	3.8	8.8	6.3	1.1	.4	.2
<b>Products</b>	2.1	3.8	8.3	4.5	1.1	.1	.1
<b>Final products</b>	1.1	3.2	7.9	4.4	1.2	.0	-.1
<b>Consumer goods</b>	3.5	3.1	6.4	2.6	1.2	.2	.1
Durable consumer goods	2.8	4.2	6.9	13.8	4.9	.0	-1.1
Nondurable consumer goods	3.8	2.7	6.3	-1.0	.0	.3	.5
<b>Equipment</b>	-1.5	3.6	9.7	6.5	1.2	-.2	-.2
Business equipment	-.5	3.5	9.3	7.6	1.7	.0	-.3
Defense & space equip.	6.2	4.0	.4	2.6	.2	-.1	.6
Oil & gas well drilling	-47.4	3.8	159.6	13.7	-.6	-3.7	-5.1
<b>Intermediate products</b>	5.3	5.3	9.6	4.8	.8	.6	.5
Construction supplies	6.0	4.1	9.7	3.8	.6	.7	.4
<b>Materials</b>	-.4	3.8	9.6	9.3	1.2	.8	.4
Durable goods materials	-1.4	4.0	9.2	13.2	1.8	.8	.6
Nondurable goods materials	4.8	6.9	14.1	3.4	-.3	.9	.7
Energy materials	-3.5	.0	5.7	7.3	1.3	.6	-.4

**CAPACITY UTILIZATION IN INDUSTRY**  
(Percent of capacity, seasonally adjusted)

	1978-80	1982	1967-86	1984	1987		
	High	Low	Avg.	High	Oct.	Nov.	Dec.
<b>Total industry</b>	86.9	69.5	81.5	81.8	81.9	82.0	82.1
<b>Manufacturing</b>	86.5	68.0	80.6	81.3	82.1	82.3	82.2
Durable	86.3	63.7	78.7	79.9	80.0	80.1	79.8
Nondurable	87.0	74.2	83.5	84.2	85.0	85.5	85.8
<b>Mining</b>	95.2	76.9	87.2	86.6	80.2	80.2	80.6
<b>Utilities</b>	88.5	78.0	87.3	84.8	80.5	81.0	80.5
<b>Industrial materials</b>	89.1	68.5	82.3	82.8	82.0	82.6	82.8
Metal materials	93.6	45.7	77.8	70.8	82.4	83.8	85.1
Paper materials	97.3	79.9	91.4	97.5	97.3	98.8	n.a.
Chemical materials	87.9	63.5	80.8	78.3	88.0	88.4	n.a.

Capacity utilization at producers of industrial materials, most of which are in the manufacturing sector, rose 0.2 percentage point in December to 82.8 percent. Gains came at producers of both durable and nondurable goods materials, while operating rates at energy materials industries eased somewhat. Materials industries, many of which also are included in the manufacturing primary processing grouping, have shown a broad-based rise in utilization in the past year. Utilization for textile, paper, and chemical materials reached 91.5 percent of capacity in December, 4.5 percentage points above its level a year earlier.

#### Employment and Unemployment

Labor demand remained strong through December, as employment registered further large gains and the unemployment rate continued to edge lower. Nonfarm payroll employment rose more than 300,000 in December, bringing the total of new jobs added in the fourth quarter to more than 1.1 million. Manufacturing employment was up for the sixth consecutive month and has increased close to 400,000 since June. While this growth has been widespread across both durable and nondurable goods industries, the largest gains have been in the trade-sensitive industries, such as electrical and nonelectrical machinery. Among the major manufacturing industries, only transportation equipment--motor vehicles, in particular--has shown sustained weakness. Construction posted strong gains over the past three months, broadly consistent with rising construction expenditures in the fourth quarter.

Employment in the services industry remained robust at year-end, led by growth in business and health services. In contrast, employment

in retail trade fell slightly in December, with weakness concentrated in the general merchandise area. Finance, insurance, and real estate employment was flat in December; gains in these industries had been small since spring, after several years of rapid expansion.

Although the average workweek was down two-tenths of an hour in December, work schedules, especially in factories, continue to be very high by historical standards. Aggregate hours of production and nonsupervisory workers grew at a 3-1/4 percent annual rate in the fourth quarter, after adjusting for the distorting effects of Labor Day.

Employment, as measured by the household survey, rose 240,000 in December, and the civilian unemployment rate fell 0.1 percentage point to 5.2 percent. Over the past six months, unemployment rates for adult men have fallen sharply, consistent with the strong job gains seen in the goods-producing sector, while joblessness among adult women has been essentially unchanged.

#### Personal Income and Consumption

Personal income grew at a somewhat faster pace in the fourth quarter than in the first three quarters of 1987. Buoyed by employment gains, wages and salaries posted another sizable increase, and farm income was bolstered by a large payment of farm subsidies, mainly in October. The growth of real disposable income also strengthened in the fourth quarter, but even with this pickup, the rise in real disposable income during 1987 was only 2 percent.

CHANGES IN EMPLOYMENT<sup>1</sup>  
(Thousands of employees; based on seasonally adjusted data)

	1986	1987	1987		1987		
			Q3	Q4	Oct.	Nov.	Dec.
--Average Monthly Changes--							
Nonfarm payroll employment <sup>2</sup>	159	250	205	379	549	263	326
Manufacturing	-14	34	51	69	78	89	40
Durable	-17	18	31	41	51	45	26
Nondurable	4	16	21	28	27	44	14
Construction	13	16	-6	48	64	24	55
Trade	31	47	41	54	110	36	16
Finance and services	110	107	85	117	132	74	145
Total government	30	30	6	77	140	20	70
Private nonfarm production workers	105	177	143	253	323	177	259
Manufacturing	-7	29	38	60	57	76	46
Total employment <sup>3</sup>	174 <sup>e</sup>	257	191	291	338	294	240
Nonagricultural	174 <sup>e</sup>	252	193	280	273	371	197

1. Average change from final month of preceding period to final month of period indicated.

2. Survey of establishments.

3. Survey of households.

e--Adjusted by board staff to eliminate distortions caused by the introduction of revised population estimates.

SELECTED UNEMPLOYMENT RATES  
(Percent; based on seasonally adjusted data)

	1986	1987	1987		1987		
			Q3	Q4	Oct.	Nov.	Dec.
Civilian, 16 years and older	7.0	6.2	6.0	5.9	6.0	5.9	5.8
Teenagers	18.3	16.9	16.1	16.6	17.2	16.6	16.1
20-24 years old	10.7	9.7	9.5	8.8	8.8	8.9	8.5
Men, 25 years and older	5.4	4.8	4.6	4.4	4.5	4.4	4.4
Women, 25 years and older	5.5	4.8	4.7	4.7	4.7	4.7	4.7
White	6.0	5.3	5.1	5.0	5.2	5.1	4.9
Black	14.5	13.0	12.5	12.2	12.1	12.2	12.2
Fulltime workers	6.6	5.8	5.6	5.5	5.6	5.5	5.4
Memo:							
Total national <sup>1</sup>	6.9	6.1	5.9	5.8	5.9	5.8	5.7

1. Includes resident armed forces as employed.

Consumption spending fell sharply in the fourth quarter and was up less than 1 percent over the four quarters of the year. A decline in auto sales of more than a million units accounted for part of last year's weakness in spending; but even excluding motor vehicles, consumption growth slowed from a 3-1/2 percent pace in 1986 to a 1-1/4 percent rate in 1987. To a large extent, the deceleration in spending last year reflects slowing in the growth of real disposable income. To be sure, the stock market crash in October may have damped consumption very recently, but this is far from clear at this point. Consumer spending excluding motor vehicles was generally weak before the crash; since the crash, spending has been essentially flat, with furniture and apparel outlets reporting the weakest sales.

Sales of domestically produced cars increased in December, but not enough to bring inventories down to acceptable levels. At year-end, stocks of new domestic cars were 1-3/4 million units--equal to more than a 70-day supply relative to the December sales pace. Accordingly, in January, all of the automakers extended and expanded their December round of incentive programs, which now cover about two-thirds of all models. Even so, domestic auto sales were at a 6.6 million unit annual rate in the first 20 days of January--about 3/4 of a million units below the December pace. Sales of domestically produced trucks were at a 3.5 million unit annual rate in the first 20 days of January, down from the 4 million unit pace of December. January production apparently was only 6 million units at an annual rate; plans for coming months call for a small pickup in assembly rates, to the 6-1/4 to 6-1/2 million unit range

PERSONAL INCOME  
 (Average monthly change at an annual rate;  
 billions of dollars)

	1986	1987	1987		1987		
			Q3	Q4	Oct. <sup>r</sup>	Nov. <sup>r</sup>	Dec. <sup>p</sup>
Total personal income	14.2	21.0	22.6	27.1	70.6	-17.8	28.6
Wages and salaries	7.5	12.2	13.6	13.7	17.8	14.4	9.0
Private	5.6	9.8	11.6	10.9	15.7	11.8	5.2
Other labor income	.7	.8	.8	.8	.8	.8	.9
Proprietors' income	2.6	2.6	1.3	5.4	41.7	-37.4	12.0
Farm	.5	.3	-.7	2.9	39.1	-40.1	9.7
Rent, dividends and interest	1.7	4.4	6.1	6.6	7.2	6.2	6.5
Transfer payments	2.5	2.0	1.8	1.5	4.4	-1.1	1.1
Less: Personal contributions for social insurance	.8	1.0	.9	.9	1.2	1.0	.6
Less: Personal tax and nontax payments	3.2	3.5	3.9	4.2	4.7	4.5	3.4
Equals: Disposable personal income	11.0	17.5	18.7	23.0	66.0	-22.3	25.3
Memo: Real disposable income	6.3	4.4	5.9	12.8	44.6	-25.7	19.4



REAL PERSONAL CONSUMPTION EXPENDITURES<sup>1</sup>  
(Percent change from preceding period)

	1986	1987	1987		1987		
			Q3	Q4	Oct. <sup>r</sup>	Nov. <sup>r</sup>	Dec. <sup>p</sup>
			--Annual rate--		--Monthly rate--		
Personal consumption expenditures	4.1	.6	5.4	-3.8	-1.1	.2	.5
Excluding motor vehicles	3.5	1.2	2.3	-1.0	.1	-.1	.1
Durable goods	12.4	-3.7	24.3	-20.4	-7.4	1.7	2.6
Excluding motor vehicles	12.7	-1.9	2.4	-7.9	-1.2	-4.0	5.1
Nondurable goods	2.9	-1.7	-1.5	-4.5	-.6	.1	.1
Excluding gasoline	2.4	-1.5	-1.1	-4.4	-.6	.3	.2
Services	2.4	3.8	5.0	2.8	.6	-.1	.1
Excluding energy	3.0	4.0	3.7	3.2	.5	.1	.1
Personal saving rate (percent)	4.3	3.8	2.8	4.9	5.6	4.5	4.7

1. Annual changes are from fourth quarter to fourth quarter.  
r--Revised.  
p--Preliminary.

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

	1986	1987	1987		1987		
			Q3	Q4	Oct.	Nov.	Dec.
Autos and light trucks	16.1	15.0	16.3	14.7	13.6	14.8	15.6
Autos	11.5	10.3	11.4	10.0	9.1	10.1	10.9
Light trucks	4.7	4.7	4.9	4.7	4.6	4.7	4.7
Domestically produced <sup>1</sup>	12.0	11.0	11.9	10.5	9.5	10.7	11.4
Autos	8.2	7.1	7.8	6.6	5.8	6.8	7.3
Light trucks	3.8	3.9	4.1	3.9	3.7	4.0	4.1
Imports	4.2	4.0	4.4	4.1	4.1	4.0	4.2
Autos	3.2	3.2	3.6	3.4	3.3	3.3	3.6
Japanese	2.4	2.2	2.4	2.4	2.2	2.3	2.6
Korean	.2	.3	.5	.3	.3	.3	.3
European	.7	.7	.7	.7	.7	.7	.7
Light trucks	.9	.8	.8	.8	.8	.7	.7
Memo:							
Auto production	7.8	7.1	6.3	7.0	7.3	7.1	6.5

1. Includes vehicles produced in Canada and Mexico for General Motors, Ford, and Chrysler.

for February and March. The latest data on the foreign car market show sales at a brisk 3.6 million unit annual rate in December.

### Business Fixed Investment

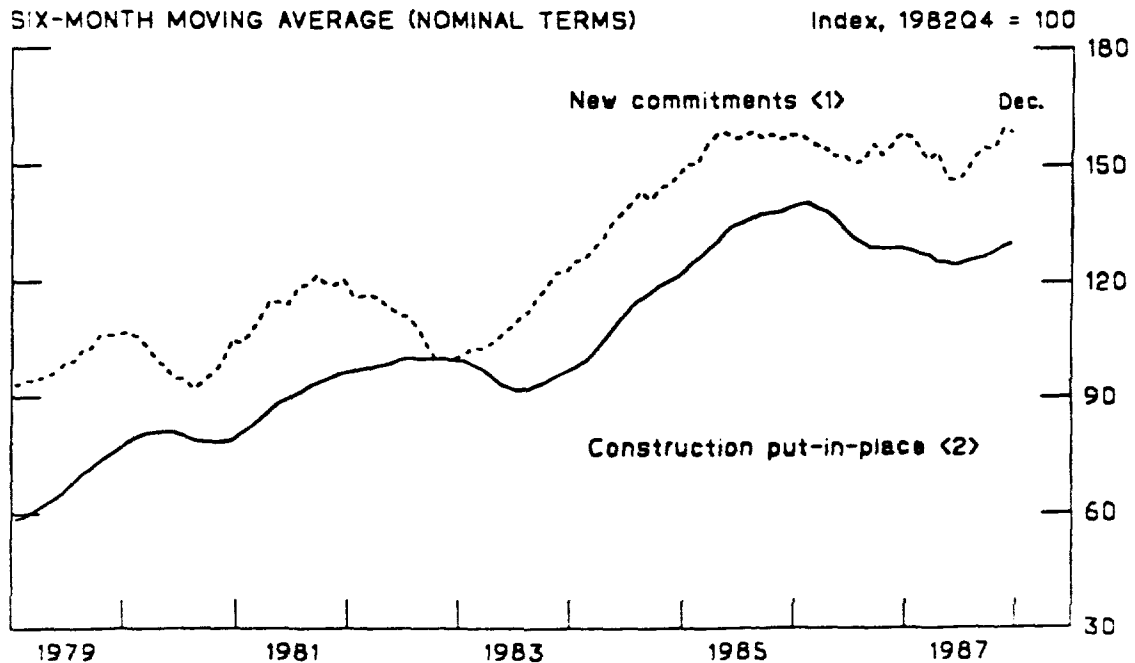
Real spending for business fixed investment is estimated to have fallen about 3-1/2 percent at an annual rate in the fourth quarter, with declines in outlays for equipment--particularly office and computing equipment--partially offset by increased construction activity. Over the four quarters of 1987, real investment outlays rose 3-3/4 percent, a sharp turnaround from the 4-3/4 percent decline in 1986. The improvement in capital spending reflected the accelerated growth of output last year, as well as a lagged response to the interest rate declines and rising share prices of previous years. Equipment spending for most major categories increased in 1987, with outlays for computing equipment, the largest single component of business investment, up 9 percent. Moreover, petroleum drilling activity, which collapsed in 1986, rose 20 percent last year as oil prices recovered. Other sectors of nonresidential construction were reasonably firm last year after falling sharply in 1986.

In the fourth quarter, real outlays for nonresidential structures rose substantially, with large increases in the office and other commercial sectors. The sharp rise in office construction for a second straight quarter was surprising, given the persistence of high vacancy rates. Petroleum drilling activity declined in the fourth quarter in response to the weakening of oil prices since late summer.

**BUSINESS CAPITAL SPENDING INDICATORS**  
 (Percentage change from preceding comparable periods;  
 based on seasonally adjusted data)

	1987			1987	
	Q2	Q3	Q4	Nov.	Dec.
<u>Producers' durable equipment</u>					
Nondefense capital goods					
Shipments	2.7	5.1	2.1	-1.3	6.5
Excl. aircraft	2.5	5.8	.8	-2.1	2.2
Office & computing equip.	2.4	6.2	-4.6	-8.5	2.1
Orders	9.0	3.3	3.1	-1.1	11.5
Excl. aircraft	5.9	4.9	.1	-3.8	3.1
Office & computing equip.	13.4	4.3	-7.0	-14.8	5.1
Sales of heavy-weight trucks (thousands of units, A.R.)					
	299	303	320	340	313
<u>Nonresidential structures</u>					
Nonresidential construction	.8	3.6	2.0	4.6	-3.3
Office	-4.0	4.6	4.6	7.2	-2.9
Other commercial	3.5	.0	2.9	7.0	-9.6
Industrial	6.6	8.3	.7	5.9	-6.6
All other	.4	3.9	.8	2.1	.3
Rotary drilling rigs in use	6.8	16.3	.0	-4.1	-4.8

**Nonresidential Construction and New Commitments**



<1> Sum of contracts (from F.W.Dodge) and permits (from Census) for industrial, commercial, and institutional construction.

<2> Includes only the building components of nonresidential construction, i.e., industrial, commercial, institutional, and hotels and motels.

On the equipment side, the BEA estimates that real outlays fell 7-1/4 percent at an annual rate in the fourth quarter, after a third-quarter surge. Shipments of nondefense capital goods, which represent about two-thirds of equipment spending, rose for the quarter. However, some of the rise in shipments may have gone into inventories or exports; in addition, business purchases of motor vehicles declined in the fourth quarter.

Looking ahead, new orders for nondefense capital goods (excluding aircraft) were little changed in the fourth quarter, after appreciable gains earlier in the year, while new building commitments continued to trend up.

#### Business Inventories

Business inventory accumulation jumped sharply in October and November. In total manufacturing and trade, stocks expanded at an annual rate of \$56 billion in 1982 dollars during the two months. This pace is considerably faster than the \$20 billion rate seen over the first three quarters of last year. About half of the accumulation occurred in the manufacturing and wholesale trade sectors. However, because manufacturing and wholesale stocks were relatively lean through early fall, the large accumulation does not seem to have resulted in excessive overhangs in these two sectors.

In contrast, there are some signs of excessive inventories in the retail sector. In addition to auto dealers' stocks, certain types of nonauto inventories may have become burdensome in recent months. Although the accumulation of nonauto retail inventories in October and

November was not especially large, it occurred at a time when consumer spending slowed markedly and stocks already seemed high relative to near-term sales prospects. As a result, November inventory-sales ratios for certain types of stores--in particular those carrying nondurable goods other than food--shot up to the highest levels observed in the current expansion. Inventory corrections, through slower production growth, cutbacks in imports, or deeper discounting, may be necessary if consumer spending remains sluggish.

In the wholesale sector, distributors of motor vehicles, electrical goods, and machinery--categories where a large proportion of the merchandise comes from overseas--posted sizable accumulations in October and November. The merchant wholesalers' inventory-sales ratio rose sharply in November based on constant-dollar data, but was still within the range set over the preceding two years.

In conjunction with the sustained strength of industrial output, manufacturers continued to expand their inventories in the fourth quarter, after a significant buildup in the third quarter. By industry, inventories in basic metals, machinery, and aircraft, where orders have been robust through much of this year, posted large increases. Despite the buildup, the strength in sales pushed the constant-dollar inventory-to-shipments ratio for all manufacturing to near its lowest level in 15 years at the end of November.

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

	1987			1987		
	Q2	Q3	Q4	Oct.	Nov.	Dec.
<b>Current Cost Basis:</b>						
Total	47.0	30.3	--	91.2	76.0	--
Manufacturing	6.1	20.2	26.2	22.6	39.1	16.9
Wholesale	14.1	.6	--	40.6	15.2	--
Retail	26.7	9.5	--	28.0	21.7	--
Automotive	9.3	2.9	--	18.8	6.1	--
Ex. auto	17.4	6.5	--	9.2	15.5	--
<b>Constant Dollar Basis:</b>						
Total	20.7	5.3	--	73.8	38.3	--
Manufacturing	-4.4	12.1	--	1.1	13.1	--
Wholesale	9.6	1.2	--	24.6	15.3	--
Retail	15.5	-8.0	--	48.0	9.9	--
Automotive	3.0	-11.9	--	36.2	2.3	--
Ex. auto	12.5	3.9	--	11.9	7.6	--

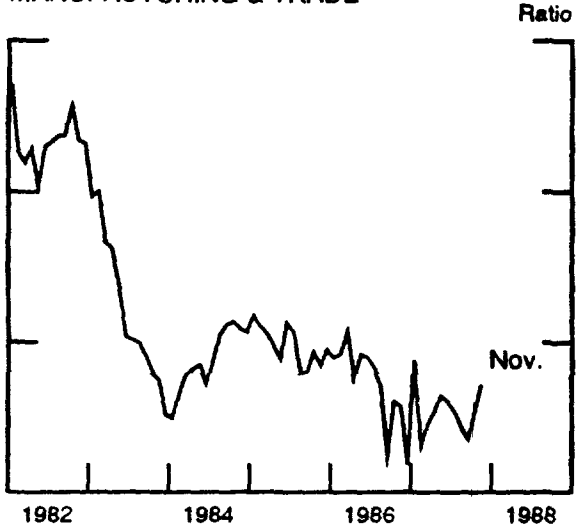
INVENTORIES RELATIVE TO SALES<sup>1</sup>  
(Months supply; based on seasonally adjusted data)

	1987			1987				
	Q2	Q3	Q4	Oct.	Nov.	Dec.		
Range in								
Preceding 12 months: <sup>2</sup>								
Current Cost Basis:	low	high						
Total	1.47	1.55	1.51	1.49	--	1.49	1.51	--
Manufacturing	1.59	1.69	1.63	1.62	1.60	1.59	1.60	1.57
Wholesale	1.18	1.28	1.23	1.20	--	1.20	1.23	--
Retail	1.47	1.63	1.60	1.59	--	1.63	1.64	--
Automotive	1.49	2.12	1.96	1.88	--	2.01	2.04	--
Ex. auto	1.43	1.52	1.49	1.50	--	1.52	1.53	--
<b>Constant Dollar Basis:</b>								
Total	1.47	1.54	1.51	1.49	--	1.50	1.52	--
Manufacturing	1.60	1.67	1.63	1.63	--	1.60	1.61	--
Wholesale	1.23	1.30	1.27	1.24	--	1.25	1.29	--
Retail	1.43	1.60	1.57	1.54	--	1.61	1.62	--
Automotive	1.42	2.05	1.88	1.68	--	1.88	1.91	--
Ex. auto	1.42	1.52	1.49	1.50	--	1.53	1.54	--

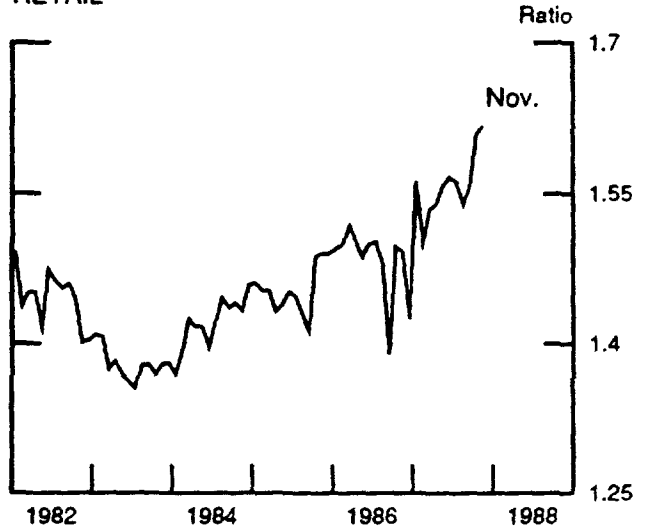
1. Ratio of end-of period inventories to average monthly sales for the period  
2. Highs and lows are specific to each series and are not necessary coincident

### Ratio of Inventories to Sales (Constant dollar basis)

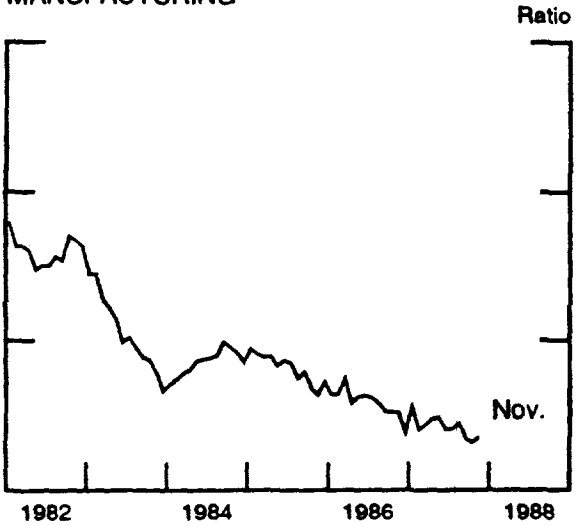
MANUFACTURING & TRADE



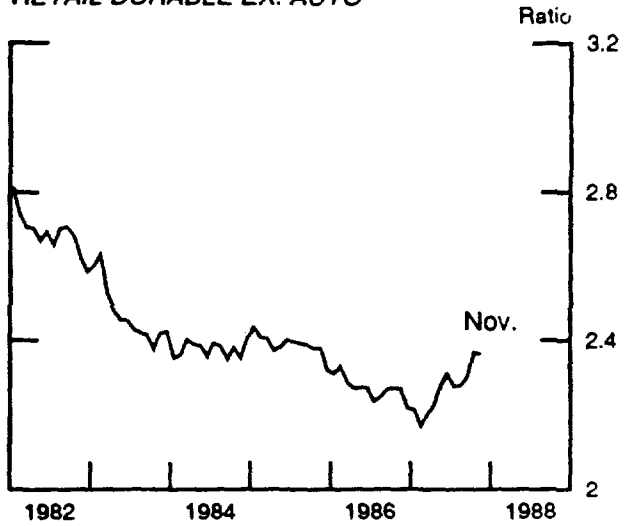
RETAIL



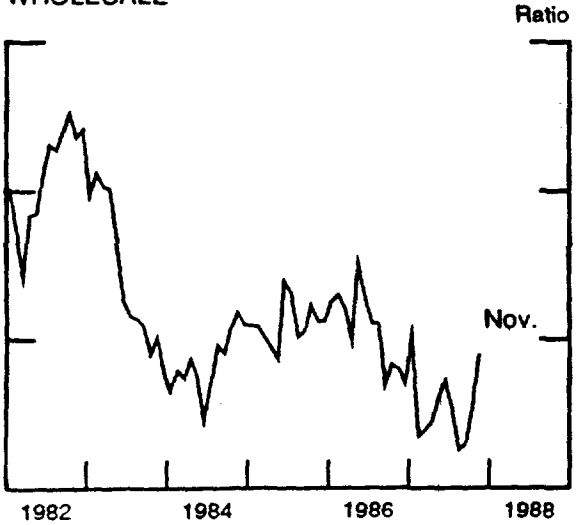
MANUFACTURING



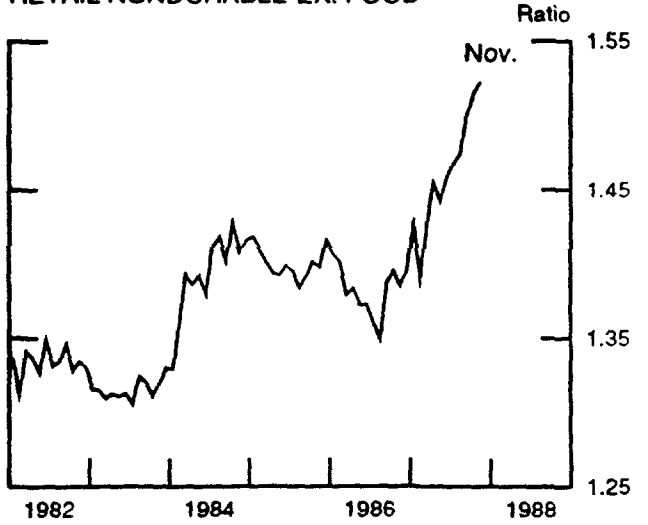
RETAIL DURABLE EX. AUTO



WHOLESALE



RETAIL NONDURABLE EX. FOOD



Housing Markets

Housing starts posted a broad decline in the fourth quarter to a 1.52 million unit pace, down about 6-1/2 percent from the third quarter. Despite considerable strength in construction early in 1987, the year as a whole was about 10 percent below the 1986 average and the lowest in five years.

In the single-family market, starts and new home sales declined in the fourth quarter. Although mortgage interest rates fell by a full percentage point in the wake of the stock market collapse, this stimulative effect may have been offset by the losses in household wealth and some erosion of consumer confidence. However, survey data for January indicated that homebuilder views of new home sales conditions had turned more favorable, returning to levels reported six months earlier.

Multifamily housing starts fell sharply in December after a surprising jump in November. For the fourth quarter as a whole, multifamily starts were about 6-1/2 percent below the pace of recent quarters, owing to high vacancy rates on rental apartments and the 1986 tax law changes that reduced the rate of return on such properties. Builders remain generally pessimistic about the outlook for multifamily construction.

Median sales prices of new homes in the fourth quarter were up 16 percent from a year earlier, similar to the year-over-year increase recorded during the third quarter. Quality improvements and regional shifts have accounted for about three-quarters of recent increases in



new home sales prices; the constant-quality new home price index, which corrects for these influences, rose 3-1/2 percent over the year ending in 1987-Q3. The median sales price of existing homes rose about 5 percent over the four quarters of 1987.

Marked regional disparities in housing construction were apparent in 1987. Starts were off almost 15 percent in the West and South. Starts in the Northeast also fell somewhat but remained 17 percent above the 1983-86 average. In north central states, housing starts held steady last year, following a nearly 25 percent jump the previous year.

#### Federal Government

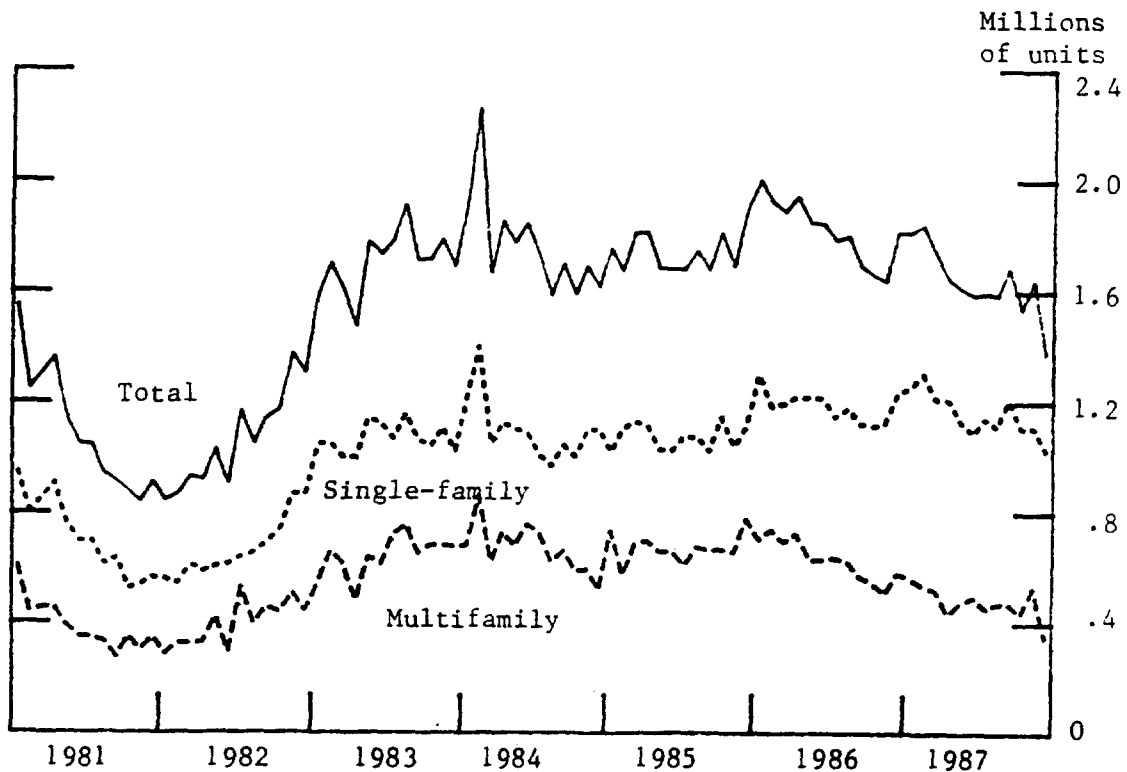
Real federal purchases, excluding inventory changes at the Commodity Credit Corporation (CCC), were essentially unchanged in the fourth quarter, following substantial increases in the preceding three quarters (see chart). Over the four quarters of 1987, such purchases were up 6 percent. Defense purchases edged down only slightly last quarter, barely interrupting the uptrend in military spending that continued last year despite cuts in appropriations in 1986 and 1987. This strength reflects deliveries of equipment ordered in the first half of the decade, as well as previously contracted research expenses. With further reductions in appropriations for 1988, the trend in defense purchases is widely expected to reverse. Nondefense purchases excluding CCC, which have been quite erratic over the past two years, rose sharply in the second quarter of last year, owing in part to a rise in spending

PRIVATE HOUSING ACTIVITY  
(Seasonally adjusted annual rates, millions of units)

	1987		1987				1987		
	Annual	Q1	Q2	Q3	Q4	Oct.	Nov.	Dec. <sup>1</sup>	
All units									
Permits	1.52	1.68	1.54	1.50	1.42	1.46	1.47	1.34	
Starts	1.62	1.80	1.61	1.62	1.52	1.54	1.64	1.37	
Single-family units									
Permits	1.03	1.15	1.04	1.00	.98	.98	.98	.97	
Starts	1.14	1.26	1.14	1.16	1.08	1.11	1.11	1.02	
Sales									
New homes	n.a.	.72	.67	.67	.64	.67	.66	.60	
Existing homes	n.a.	3.62	3.61	3.43	3.42	3.57	3.41	3.28	
Multifamily units									
Permits	.49	.54	.50	.49	.45	.49	.49	.37	
Starts	.47	.54	.47	.47	.44	.43	.53	.35	
Mobile home shipments	n.a.	.23	.23	.24	n.a.	.24	.23	n.a.	

1. Preliminary estimates.  
n.a.--not available.

PRIVATE HOUSING STARTS  
(Seasonally adjusted annual rate)

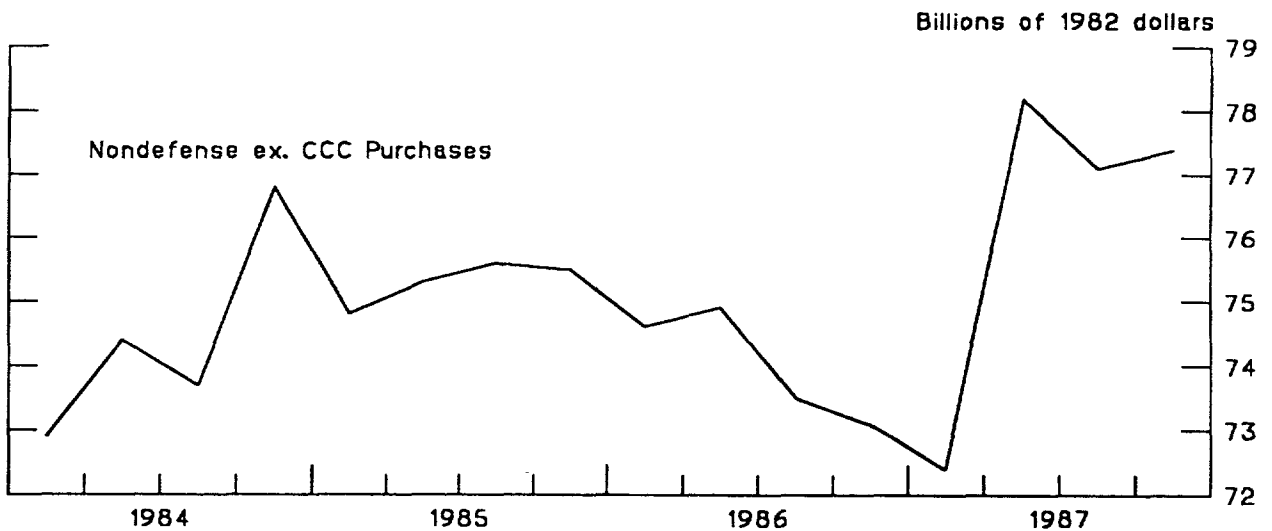
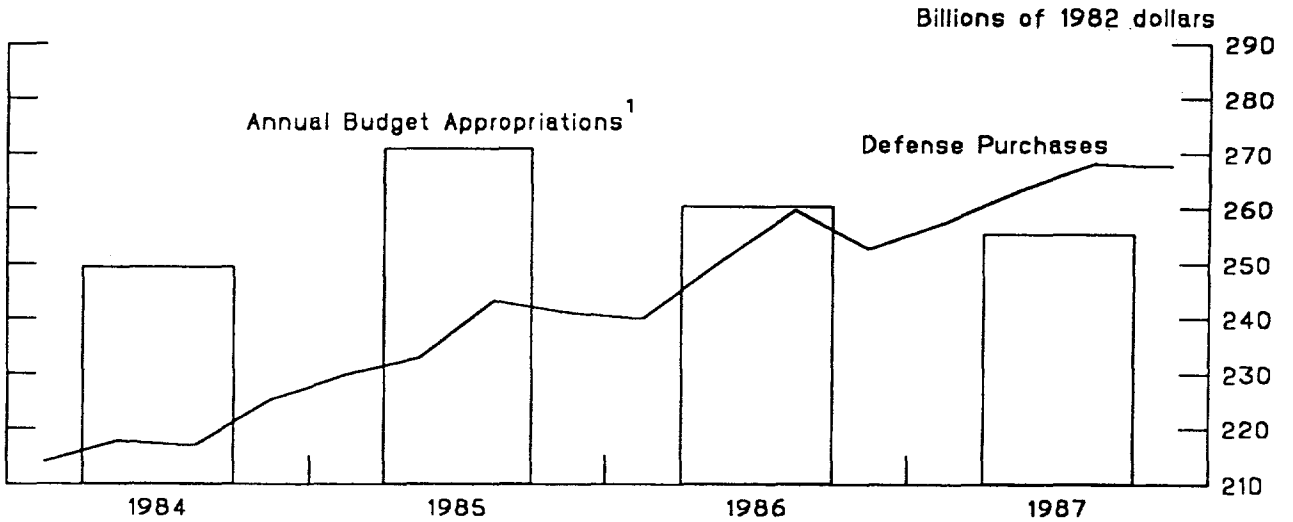
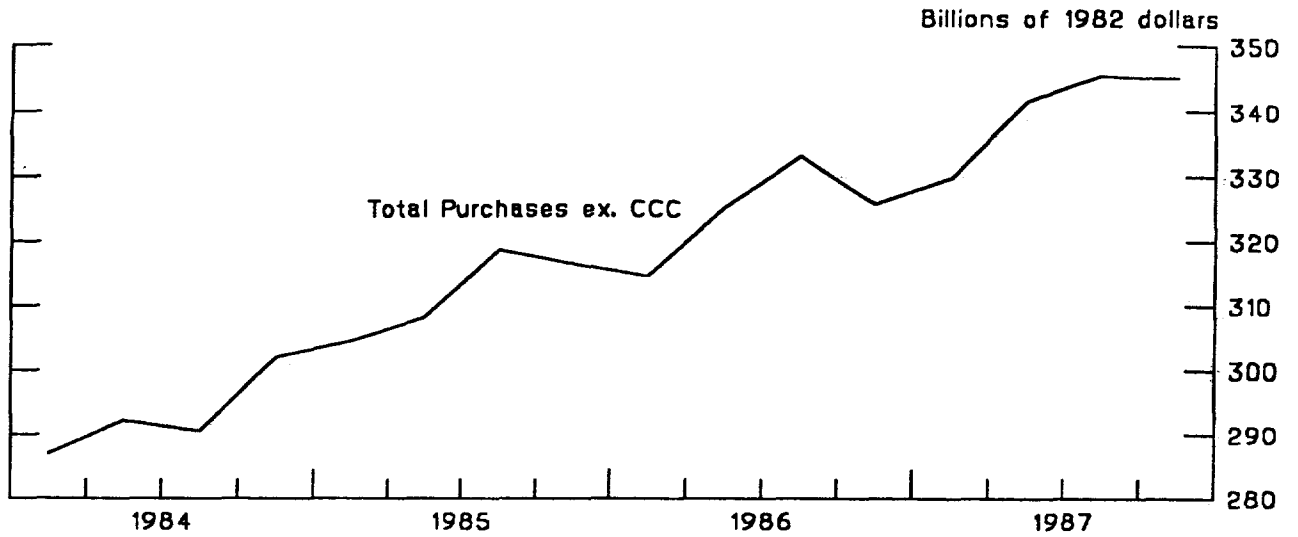


for the space shuttle and increased staffing by the Internal Revenue Service and the Immigration and Naturalization Service. Since then, they have been about flat.

On a unified basis, federal outlays exceeded revenues by \$23.9 billion in December, and over the first three months of FY1988 the deficit has totaled \$80.4 billion, nearly \$17 billion greater than at this time last year. This increase in the deficit is attributable to an unusual rise in outlays as social security benefit payments and a portion of military pay were shifted from early January to December 31 when the payment date fell on the long holiday weekend. Other outlay patterns in the first quarter of the fiscal year could have been somewhat distorted by delays in budget actions in Congress and, therefore, may not be indicative of growth for the fiscal year as a whole.

Revenues over the first three months of FY1988 are up about 8 percent from a year earlier. In coming months, revenue flows relative to a year earlier are likely to slow a bit due to the further effects of tax reform. Beginning in January, the growth of withholdings is expected to slow, on balance, as the reduction in individual tax rates more than offsets an increase in social security payroll taxes. Nonwithheld taxes in January appear to be about the same as those recorded last year when there was a large bulge in individual declarations. At that time, payments were made for capital gains realizations taken before the increase in rates on January 1, 1987.

FEDERAL PURCHASES EXCLUDING CCC



1. Real appropriations are estimated by deflating nominal levels by the NIPA price index for defense purchases.

This year, realizations may have been boosted by the surge in stock market activity that accompanied the sharp swings in equity prices.

Updated budget estimates for FY1988 and projections for subsequent years are expected from the Administration around mid-February and from the Congressional Budget Office (CBO) on February 11.<sup>2</sup> It appears likely that the Administration will request some further revenue and outlay changes for FY1989. The Administration's FY1989 deficit estimate is expected to be at about the Gramm-Rudman-Hollings target of \$136 billion, assuming full enactment of the budget agreement reached last November, along with the Administration's economic assumptions and associated program cost estimates. CBO, on the other hand, is expected to be more pessimistic about economic prospects and to show larger deficits; the FY1989 figure, even with inclusion of the summit agreement, is anticipated to be \$20 billion to \$40 billion above the FY1989 target.

#### State and Local Government Sector

Real purchases of goods and services by state and local governments rose 4.8 percent at an annual rate in the fourth quarter of last year, owing to a surge in outlays for construction, which had declined sharply in the two preceding quarters. Over the four quarters of 1987, real construction outlays increased 2 percent, well below the 9 percent average gain during the three previous years.

Although capital spending was sluggish last year, many of the fundamental factors affecting the demand for further outlays have not

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2. Some of CBO's projections are likely to be presented in testimony on February 4.

changed. The extended decline in the school-age population turned around in 1984 and, with changes in locational needs, more spending on schools is expected. In addition, overcrowding in prisons has forced many governments to improve correctional facilities, making this the fastest growing area of state budget outlays by fiscal 1987.

The state and local deficit in its combined operating and capital account, excluding social insurance funds, appears to have risen in the fourth quarter to about \$10 billion--its largest level since early 1975. Expenditures have now risen faster than receipts for the third consecutive year, especially for compensation and other nonconstruction items.

#### Agricultural Production

Aggregate farm production appears to have been little changed in 1987, but remained well below its 1985 peak. (See chart.) Poultry production rose nearly 10 percent last year, and pork production strengthened as the year progressed. However, beef production turned down, and the output of several of the major farm crops continued to be restrained by government farm programs; acreage of the three main crops--wheat, corn, and soybeans--was 15 percent less than in 1985, and production of these crops therefore also has dropped.

The volume of agricultural exports rose sharply in 1987--the first annual increase since 1980. Gains were widespread among grains, oilseeds, and other farm crops. The upswing appears to reflect a variety of factors, including U.S. export subsidies, adverse crop

conditions in some foreign countries, the markdown of price supports beginning in 1986, and the decline in the exchange value of the dollar.

With exports up and farm crop output held down by government programs, some of the farm sector's inventory overhang is being worked off. As of December 1, the stocks of wheat, corn, and soybeans (including those owned or financed by the CCC) were all down from a year earlier, by amounts ranging from 5 to 10 percent. USDA supply-demand projections suggest that the stocks of wheat and soybeans will be approaching more normal levels by the end of the current marketing year, but that the level of corn inventories still will be relatively high. Overall, as shown in the accompanying chart, real agricultural stocks probably fell in 1987, in contrast to the BEA estimate of a \$6-1/2 billion rise.

### Prices

Inflation reports were favorable late last year, in large part owing to declines in energy prices. The consumer price index for all urban consumers rose only 0.1 percent in December, after a 0.3 percent increase in November. Producer prices of finished goods were unchanged in November and fell 0.3 percent in December. Despite the recent performance, both measures registered marked acceleration for the year as a whole, mainly reflecting the first-half rebound in energy prices: the CPI was up 4.4 percent compared with a 1.1 percent increase in 1986, and the PPI for finished goods rose 2.3 percent after dropping by a similar amount in 1986.

RECENT CHANGES IN CONSUMER PRICES  
(Percentage change; based on seasonally adjusted data)<sup>1</sup>

	Relative Importance Dec. 1986	1986	1987	1987		1987	
				Q3	Q4	Nov.	Dec.
				-Annual rate-		-Monthly rate-	
All items <sup>2</sup>	100.0	1.1	4.4	3.6	3.2	.3	.1
Food	16.2	3.8	3.5	1.4	4.0	.1	.5
Energy	7.4	-19.7	8.2	5.0	-4.6	.8	-1.1
All items less food and energy	76.4	3.8	4.2	3.7	3.9	.3	.1
Commodities	26.1	1.4	3.5	3.0	2.1	.3	-.3
Services	50.3	5.2	4.6	4.2	5.0	.3	.4

Memorandum:

CPI-W <sup>3</sup>	100.0	.7	4.5	3.8	3.0	.3	.1
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1. Changes are from final month of preceding period to final month of period indicated.

2. Official index for all urban consumers.

3. Index for urban wage earners and clerical workers.

RECENT CHANGES IN PRODUCER PRICES  
(Percentage change; based on seasonally adjusted data)<sup>1</sup>

	Relative Importance Dec. 1986	1986	1987	1987		1987	
				Q3	Q4	Nov.	Dec.
				-Annual rate-		-Monthly rate-	
Finished goods	100.0	-2.3	2.2	2.7	-2.0	.0	-.3
Consumer foods	26.3	2.9	-.2	-1.7	-4.1	.3	-1.3
Consumer energy	8.6	-38.0	10.2	2.0	-13.8	-.8	-1.9
Other consumer goods	40.6	3.0	2.6	4.9	1.7	.0	.5
Capital equipment	24.5	2.1	1.3	4.4	-.6	.1	.2
Intermediate materials <sup>2</sup>	95.0	-4.5	5.6	4.6	4.1	.4	.1
Exc. energy	82.9	.1	5.3	5.0	8.2	.5	.6
Crude food materials	42.5	-1.4	1.7	-6.2	-1.8	-3.0	1.3
Crude energy	40.9	-27.5	10.5	6.1	-15.9	-1.1	-1.5
Other crude materials	16.6	1.7	22.4	37.1	24.5	.9	.6

1. Changes are from final month of preceding period to final month of period indicated.

2. Excludes materials for food manufacturing and animal feeds.



The CPI for energy fell about 1 percent in December, as much of last autumn's decline in crude oil costs was passed on to the retail level. Some additional passthrough at the retail level may show up in January. During 1987, CPI energy prices rose more than 8 percent--after a 20 percent decline in 1986. In contrast to energy, food prices picked up in the December CPI, owing to a spurt in prices of fresh fruits and vegetables. In particular, lettuce, which has been affected by a virus, posted an exceptional increase of more than 70 percent. However, the producer prices of fresh fruits and vegetables fell in December, and consequently, the retail prices of these items are not likely to continue rising at the December pace. Over the year, CPI food prices rose 3-1/2 percent, about the same as in 1986.

Excluding food and energy items, the CPI rose only 0.1 percent in December. The commodities component was down 0.3 percent, with declines in several categories, consistent with reports of larger-than-usual markdowns. In particular, the index for apparel fell nearly 1-1/2 percent, reversing part of its hike over the preceding three months. New car prices, with the latest round of sales incentives, were down 0.2 percent. For 1987 as a whole, the CPI excluding food and energy increased 4.2 percent, compared with a rise of 3.8 percent in 1986, reflecting in part the acceleration in some categories for which import prices have risen rapidly, such as apparel, photographic equipment, toys, and sporting goods.

At the producer level, there is little indication so far that higher import prices have led to a pickup in price increases for

domestically produced finished goods. The index excluding food and energy items rose about 2 percent last year, after a 2-3/4 percent increase in 1986, with the slowdown attributable to a decline in the PPI for autos. However, prices for (nonfood, nonenergy) intermediate and crude materials accelerated sharply in 1987, rising about 5 percent and 22 percent respectively, after several years of relatively flat or declining prices. The increases last year were led by metals, chemicals, plastics, and paper--industries in which operating rates have risen to high levels this past year. In addition, higher oil prices put upward pressure on the prices of many petroleum derivatives, and the decline in the exchange value of the dollar helped to boost prices for materials that are traded in world markets.

Increases for crude nonfood materials less energy slowed in November and December as prices receded for several items, notably for cotton and steel scrap. Price indexes for industrial commodities have drifted down a bit recently, but on the whole, remain in the same general range as over the past few months. Copper prices have dropped back from record year-end levels, and lead and cotton prices have weakened; however, the prices for aluminum and steel scrap have picked up again.

#### Wages and Labor Costs

Several recent indicators suggest that the rise in employment costs remained at a comparatively moderate pace last year, after trending lower during the preceding several years. The change in hourly compensation in the private nonfarm sector, as measured by the

employment cost index (ECI), was 3.3 percent in 1987, about the same pace as in 1986. Benefits advanced at about the same rate as wages and salaries last year.

The hourly compensation gain in manufacturing continued to be about 3 percent last year, despite some pickup in wages for unionized workers. Separate data on workers covered by major bargaining contracts suggest that the higher wage change for union workers can be traced largely to increased COLA payments. But first-year wage settlements also were higher than those negotiated in 1986, when initial-year pay cuts were more prevalent. Outside of manufacturing, hourly compensation accelerated considerably in services, and to a lesser extent in trade, while increases in finance, insurance, and real estate were smaller.

The regional dispersion in the rate of wage inflation widened further last year. In the Northeast, where labor markets appear relatively tight by a variety of measures, compensation rose 5 percent last year--up from 4 percent in 1986. Elsewhere, wage increases averaged close to 3 percent for a second year.

Separate data on collective bargaining activity last year under major contracts (1,000 or more workers) also show only moderate pay increases, with first-year adjustments (excluding potential COLAs) averaging 2.2 percent and adjustments over the life of the contract averaging 2.1 percent annually. Nevertheless, this was the first year since 1982, when such comparisons could first be made, that current settlements did not provide lower wage adjustments than the bargaining

EMPLOYMENT COST INDEX  
(Percentage change from 12 months earlier; not seasonally adjusted)

	Dec.	Dec.	1987		
	1985	1986	June	Sept.	Dec.
Total private nonfarm compensation	3.9	3.2	3.0	3.3	3.3
Wages and salaries	4.1	3.1	3.0	3.3	3.3
Benefits	3.5	3.4	3.3	3.1	3.5
By industry:					
Manufacturing	3.3	3.3	2.2	2.6	3.1
Union	1.9	1.9	1.4	1.6	2.8
Nonunion	4.6	4.0	2.7	3.2	3.2
Trade	--	2.6	3.4	3.3	3.0
Finance	--	3.1	3.0	2.7	2.0
Services	--	4.3	4.3	5.2	5.2
By bargaining status:					
Union	2.6	2.1	1.9	2.0	2.8
Nonunion	4.6	3.6	3.4	3.7	3.6
By region:					
Northeast	4.9	4.1	4.0	4.5	5.0
South	4.1	3.3	2.8	2.7	3.0
Midwest	3.1	2.8	3.2	3.1	2.8
West	3.9	2.3	2.0	2.8	2.6

NEGOTIATED WAGE RATE CHANGES  
UNDER MAJOR COLLECTIVE BARGAINING SETTLEMENTS<sup>1</sup>  
(PERCENT CHANGE)

	1984	1985	1986	Same parties as during 1987 under prior settlements	
				1987	1987
All industries					
First-year adjustments	2.4	2.3	1.2	2.2	2.2
Average over life of contract	2.4	2.7	1.8	2.1	2.1
Workers affected (in thousands)	2261	2193	2486	--	2037

1. Contracts covering 1,000 or more workers; estimates exclude potential gains under cost-of-living clauses.

EFFECTIVE WAGE CHANGE IN MAJOR UNION CONTRACTS AND ITS COMPONENTS  
(Percentage change)

	1983	1984	1985	1986	1987
Total	4.0	3.7	3.3	2.3	3.1
Contribution of:					
New settlements	.8	.8	.7	.5	.7
COLAs	.6	.9	.8	.2	.5
Deferred increases	2.5	2.0	1.8	1.7	1.8

agreements they replaced. Overall union wages, as measured by the effective wage change series for major contracts, rose at a 3.1 percent annual rate in 1987, compared with 2.3 percent the year before. Much of the pickup reflects a larger contribution from COLAs, which responded to the rise in CPI inflation.

Approximately 2-3/4 million workers covered under major collective bargaining agreements (those covering 1,000 workers or more) will negotiate contracts in 1988. The industries with large numbers of workers scheduled to bargain include state and local government, construction, mining, clothing manufacturing, food stores, trucking, and the auto industry.

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# **DOMESTIC FINANCIAL DEVELOPMENTS**

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SELECTED FINANCIAL MARKET QUOTATIONS<sup>1</sup>  
(Percent)

	1987				1988	Change from:	
	Jan.-Feb.	Sept. 3 <sup>2</sup>	Oct. 16 <sup>3</sup>	FOMC	Feb. 2	Oct. 16 <sup>3</sup>	FOMC
	lows			Dec. 16			Dec. 16
<b>Short-term rates</b>							
Federal funds <sup>4</sup>	5.95	6.85	7.59	6.71	6.81	-.78	.10
Treasury bills <sup>5</sup>							
3-month	5.30	6.19	6.93	5.94	5.71	-1.22	-.23
6-month	5.31	6.30	7.58	6.40	6.09	-1.49	-.31
1-year	5.35	6.98	7.74	6.71	6.24	-1.50	-.47
<b>Commercial paper</b>							
1-month	5.81	6.88	7.94	8.22	6.65	-1.29	-1.57
3-month	5.73	6.97	8.65	7.93	6.69	-1.96	-1.24
<b>Large negotiable CDs<sup>5</sup></b>							
1-month	5.85	6.90	7.92	8.09	6.65	-1.27	-1.44
3-month	5.80	7.01	8.90	7.81	6.70	-2.20	-1.11
6-month	5.78	7.35	9.12	7.81	6.79	-2.33	-1.02
<b>Eurodollar deposits<sup>6</sup></b>							
1-month	6.00	7.01	7.79	8.41	6.85	-.94	-1.56
3-month	6.00	7.11	8.69	8.13	7.03	-1.66	-1.10
Bank prime rate	7.50	8.25	9.25	8.75	8.50	-.75	-.25
<b>Intermediate- and long-term rates</b>							
<b>U.S. Treasury (constant maturity)</b>							
3-year	6.34	8.48	9.52	8.15	7.38	-2.14	-.77
10-year	7.01	9.29	10.23	9.00	8.18	-2.05	-.82
30-year	7.29	9.47	10.24	9.14	8.32	-1.92	-.82
<b>Municipal revenue<sup>7</sup></b>							
(Bond Buyer)	6.92	8.47	9.59	8.57	7.84	-1.75	-.73
Corporate A utility (recently offered)	8.78	10.60e	11.50	10.59e	9.70e	-1.80	-.89
<b>Home mortgage rates<sup>8</sup></b>							
S&L fixed-rate	9.10	10.63	11.58	10.66	10.16	-1.42	-.50
S&L ARM, 1-yr.	7.52	7.84	8.45	7.91	7.74	-.71	-.17

	1986	1987		1988	Change from:	
	Year end	Record	FOMC	Feb. 2	Record	FOMC
		highs	Dec. 16		highs	Dec. 16
<b>Stock prices</b>						
Dow-Jones Industrial	1895.95	2722.42	1974.47	1952.92	-28.27	-1.09
NYSE Composite	138.58	187.99	138.34	143.61	-23.61	3.81
AMEX Composite	263.27	365.01	252.10	270.14	-25.99	7.16
NASDAQ (OTC)	348.83	455.26	319.25	347.19	-23.74	8.75

1. One-day quotes except as noted.

2. Day prior to increase in discount rate on September 4, 1987.

3. Last business day prior to stock market decline on Monday, October 19, 1987.

4. Average for two-week reserve maintenance period closest to date shown, except Jan.-Feb. low, which is one-week average ending Feb. 25, and Sept. 3 which is one-week average ending Sept. 2. Last observation is average for current maintenance period to date.

5. Secondary market.

6. Averages for statement week closest to date shown.

7. One-day quotes for closest Thursday.

8. Quotes for week ending Friday closest to date shown.

e--estimate.

## DOMESTIC FINANCIAL DEVELOPMENTS

Interest rates have fallen considerably, on balance, since the December FOMC meeting. The markets have moved ahead without any clear change in the federal funds rate, which has continued to fluctuate near 6-3/4 percent. Better U.S. trade performance has bolstered confidence in the dollar, and incoming indicators showing a weakening in domestic demand have raised hopes of weaker credit demands and further monetary policy easing.

Key short-term market yields are off more than one-quarter percentage point, while bond yields have dropped three-quarters of a point or more. The biggest declines have been registered by rates on private short-term instruments; these have eased by a point to a point and a half, reflecting an unwinding of the pressures that emerged before the year-end. The prime rate was reduced one-quarter point on February 2. Owing to the anticipatory positioning and ample provision of reserves by the Desk, the money markets in fact did not manifest any great tightness near the year-end statement date.

The monetary aggregates finished 1987 on a weak note, with M1 declining and M2 and M3 posting only small advances in December. For the year, M2 finished about 1-1/2 percentage points below its 5-1/2 to 8-1/2 percent range, and M3 was at the bottom of its identical range. In January, however, all the aggregates accelerated markedly.

Credit demands appear to have moderated throughout the economy in early 1988. Business short-term borrowing, especially in the commercial



**MONETARY AGGREGATES**  
(Based on seasonally adjusted data unless otherwise noted)<sup>1</sup>

	1986:Q4 to		1987		1988	Growth Q487 - Jan.88 <sup>pe</sup>	
	1987:Q4	Q3	Q4	Nov.	Dec.		Jan. <sup>pe</sup>
	----- Percentage change at annual rates -----						
1. M1	5.9	-0.1	3.7	-6.5	-5.7	15	4
2. M2	4.1	3.0	4.3	-0.6	1.9	10	5
3. M3	5.4	4.8	5.7	4.3	1.5	7	5
<b>Selected components</b>							<b>Levels bill. \$ Dec.87</b>
4. M1-A	2.5	-2.2	4.2	-6.0	-6.7	14	498.3
5. Currency	8.6	6.7	9.9	13.5	7.9	16	199.7
6. Demand deposits	-1.3	-8.1	0.4	-18.8	-16.6	12	291.6
7. Other checkable deposits	13.1	4.6	2.4	-7.9	-3.8	17	254.7
8. M2 minus M1 <sup>2</sup>	3.5	4.1	4.6	1.5	4.5	8	2142.5
9. Overnight RPs and Eurodollars, NSA	14.2	17.4	7.6	-92.7	-24.4	72	77.2
10. General purpose & broker/dealer money market mutual fund shares, NSA	6.1	5.0	14.1	11.6	7.1	19	221.5
11. Commercial banks	2.4	1.7	3.4	7.3	5.4	6	919.1
12. Savings deposits, SA, plus MMDAs, NSA	2.3	-2.4	-4.7	-5.4	1.0	2	534.5
13. Small time deposits	3.4	8.0	15.4	25.1	12.3	11	384.7
14. Thrift institutions	3.7	3.6	2.1	2.6	6.6	8	929.6
17. M3 minus M2 <sup>4</sup>	10.8	11.8	11.1	23.0	0.2	-1	766.7
18. Large time deposits	8.4	6.2	14.2	23.4	8.9	-5	489.0
19. At commercial banks, net <sup>5</sup>	10.7	4.1	9.2	21.6	0.7	-11	322.9
20. At thrift institutions	4.1	10.7	24.3	27.2	24.3	8	166.0
21. Institution-only money market mutual fund shares, NSA	2.3	1.9	17.9	101.5	1.4	60	88.6
22. Term RPs, NSA	32.5	26.4	-2.6	31.4	-32.8	-9	106.7
23. Term Eurodollars, NSA	14.7	16.6	11.1	9.0	6.5	-46	92.3

-- Average monthly change in billions of dollars --

**MEMORANDA:**

24. Managed liabilities at commercial banks (25+26)	5.5	2.9	5.2	4.5	5.1	-9	563.1
25. Large time deposits, gross	3.4	-0.8	5.4	7.3	1.7	0	386.7
26. Nondeposit funds	2.1	3.7	-0.2	-2.8	3.4	-9	176.4
27. Net due to related foreign institutions, NSA	2.1	3.2	1.0	-3.7	7.3	-6.5	14.0
28. Other	2.4	-0.6	-1.2	0.7	-3.9	5.7	162.4
29. U.S. government deposits at commercial banks	0.2	-1.5	0.2	3.1	-14.6	-4	24.0

1. Dollar amounts shown under memoranda are calculated on an end-month-of-quarter basis.

2. Nontransactions M2 is seasonally adjusted as a whole.

3. Growth rates are for savings deposits, seasonally adjusted, plus money market deposit accounts (MMDAs) not seasonally adjusted. Commercial bank savings deposits excluding MMDAs increased during December and January at rates of 2.0 percent and 1 percent, respectively. At thrift institutions, savings deposits excluding MMDAs increased during December and January at rates of 8.2 and 4 percent, respectively.

The non-M2 component of M3 is seasonally adjusted as a whole.

Net of large-denomination time deposits held by money market mutual funds and thrift institutions.

4. Consists of borrowings from other than commercial banks in the form of federal funds purchased, securities sold under agreements to repurchase, and other liabilities for borrowed money (including borrowings from the Federal Reserve and unaffiliated foreign banks, loan RPs and other minor items). Data are partially estimated.

5. Consists of Treasury demand deposits and note balances at commercial banks.

pe--preliminary estimates.

paper market, was relatively strong in the fourth quarter of last year as financing needs increased; preliminary data suggest a somewhat slower pace of borrowing in January with little net change in commercial paper after year-end. Corporate bond issuance picked up a bit in January in response to the decline in interest rates, but it remained below its pace earlier in 1987. After a fourth-quarter boost from transitory factors, Treasury financing has dropped back in the current quarter. Tax-exempt bond offerings have been light recently. The latest available data suggest some moderation of mortgage borrowing by households and only slow expansion of consumer installment credit at the end of 1987. Overall, domestic nonfinancial debt is estimated to have expanded at something under a 10 percent annual rate in the fourth quarter, and available data suggest a slightly slower pace so far in the current quarter.

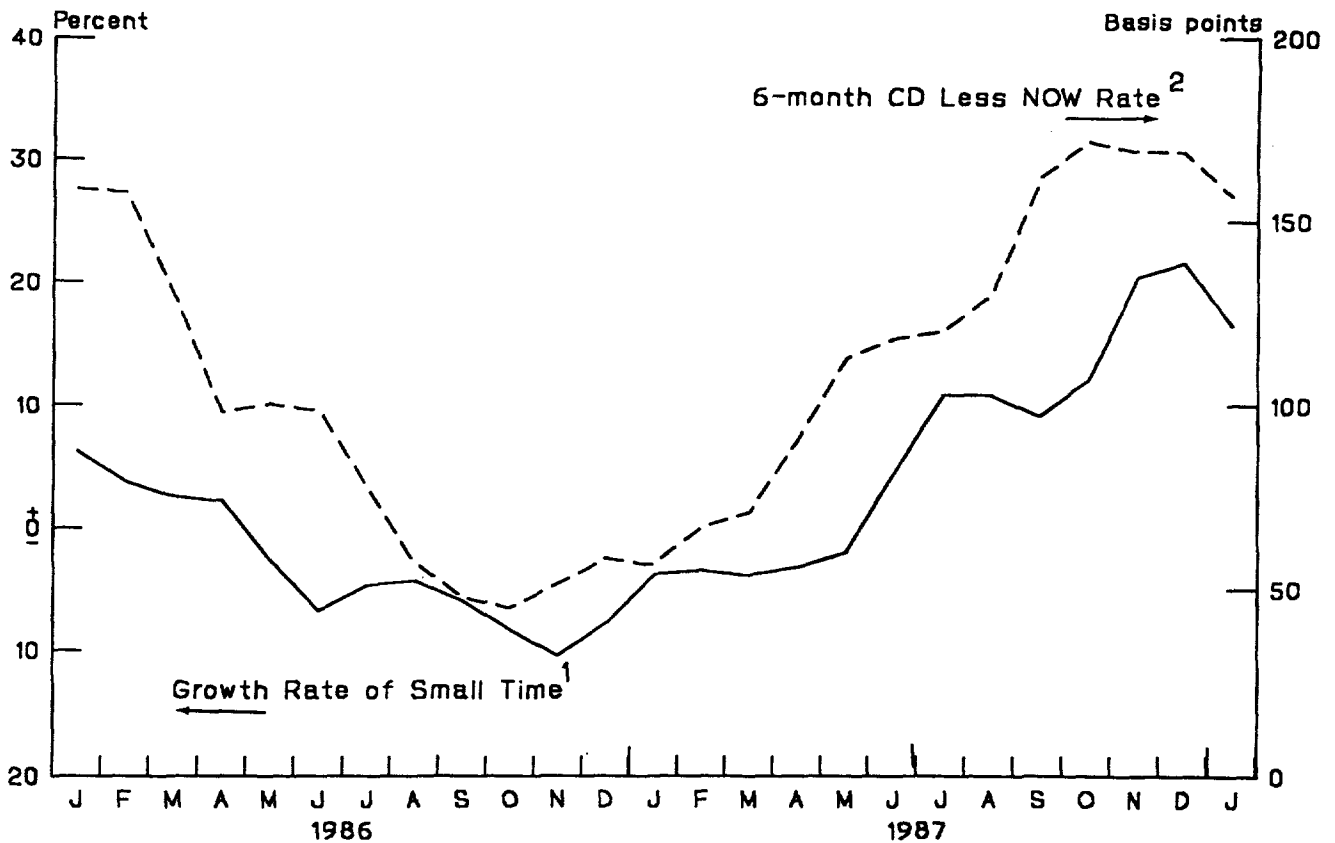
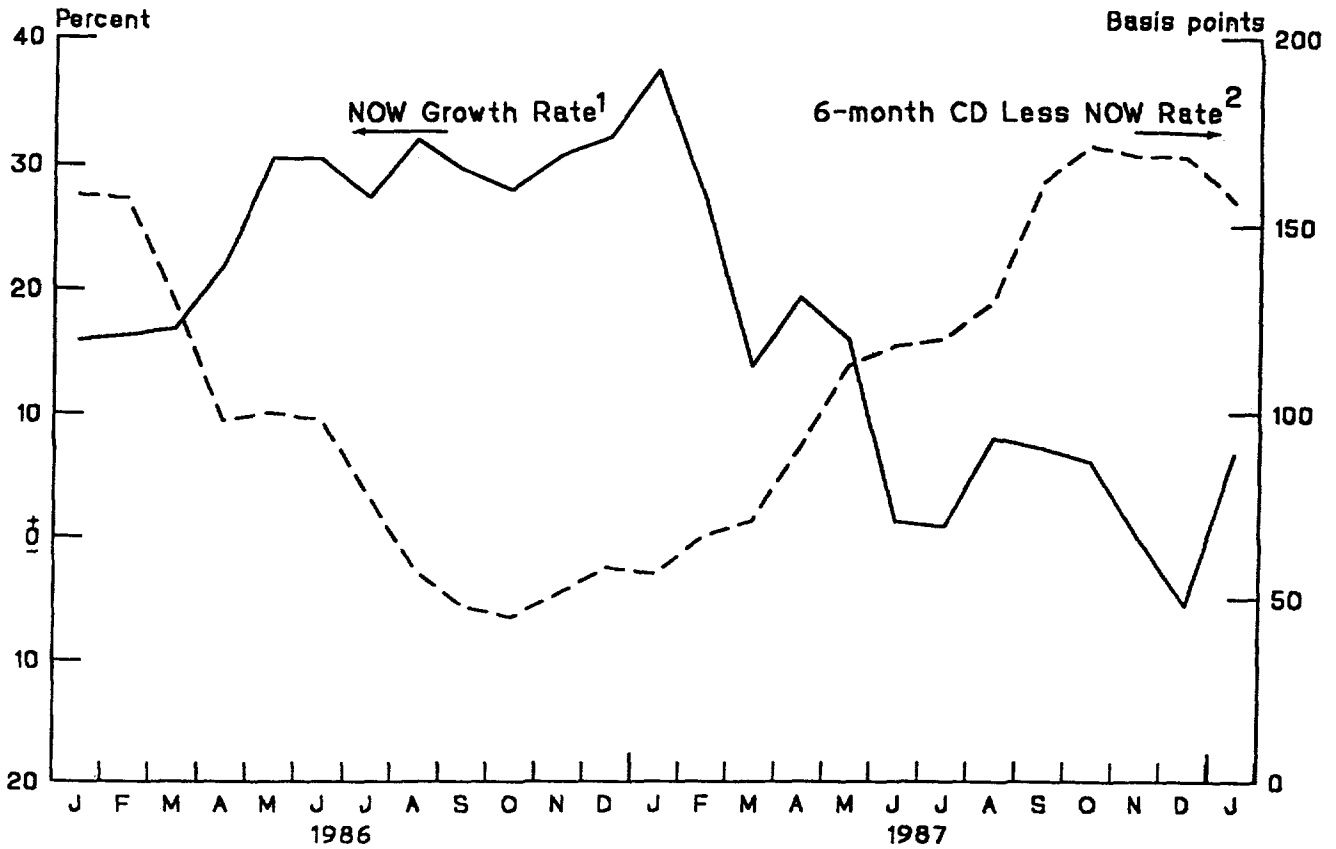
#### Monetary Aggregates<sup>1</sup>

The broader monetary aggregates accelerated sharply in January, after growing little in the final two months of 1987. M2 appears to have expanded at a 10 percent annual rate and M3 at a 7 percent rate. Much of the pickup was attributable to a turnaround in M1, which grew at around a 15 percent pace in January, reversing declines in both November and December. Demand deposits rebounded in January, as did other check-

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1. The data reported herein do not incorporate benchmarking and seasonal factor revisions, which will be reported in the Bluebook. Those revisions, however, do not materially alter the picture.

Opportunity Costs and Growth of OCDs and Small Time Deposits  
(Monthly)



NOTE: January 1988 deposit interest rates are estimated.

1. Two-month moving averages.

2. Commercial bank rates, annual effective yields.

able deposits (OCDs)<sup>2</sup>. The resurgence in OCDs probably reflected, in part, a narrower spread between rates on NOW accounts and yields on competing instruments, such as small time deposits, as illustrated in the chart. Stronger currency growth, which also contributed to the January surge in M1, appears partly to have reflected seasonal factors that do not yet fully incorporate effects of the Martin Luther King holiday, which was observed widely beginning only in 1987.

In addition to robust M1 expansion, M2 growth was boosted by a quickening in the growth of its nontransactions component. Hefty inflows to money market mutual funds likely resulted from their continued attractiveness relative to retail deposits and market instruments. Also, overnight RPs and Eurodollars rebounded, and runoffs of MMDAs and savings deposits abated, more than offsetting slower, although still robust, growth in small time deposits.

The moderation of growth in small time deposits and strengthening of the more liquid components of M2 are consistent with some narrowing since October in the spread between rates on small time deposits and NOW and other liquid accounts. A narrowing of the rate spread has tended to be reflected in a shift between small time and liquid deposits.

Growth in M3 picked up in January despite weakness in its non-M2 component, which declined as a surge in institution-only MMMFs was

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2. Results of a survey of senior financial officers and discussions with nine corporate cash managers about the behavior of demand deposits in November and December 1987, conducted in mid-January, are presented in an appendix. The survey pointed to the likely importance of changes in compensating balances in explaining the fluctuations in demand deposits in recent months.

GROSS OFFERINGS OF SECURITIES BY U.S. CORPORATIONS  
(Monthly rates, not seasonally adjusted, billions of dollars)

	1986	1987				1988	
	Year	Year	Q3	Q4 <sup>P</sup>	Nov. <sup>P</sup>	Dec. <sup>P</sup>	Jan. <sup>P</sup>
Corporate securities - total <sup>1</sup>	28.18	23.94	26.50	15.16	13.63	11.05	19.24
Public offerings in U.S.	24.48	21.75	23.72	14.25	12.90	10.70	17.90
Stocks--total <sup>2</sup>	5.15	4.44	5.07	1.49	.70	.70	2.20
Nonfinancial	2.51	2.31	2.36	.69	.50	.01	.70
Utility	.64	.57	.71	.13	.18	.00	.10
Industrial	1.87	1.74	1.65	.56	.32	.01	.60
Financial	2.64	2.13	2.71	.80	.20	.69	1.50
Bonds--total <sup>1</sup>	19.33	17.31	18.65	12.76	12.20	10.00	15.70
Nonfinancial	9.62	6.58	6.62	4.65	2.65	5.60	5.90
Utility	3.61	2.01	4.17	2.01	1.49	2.30	1.45
Industrial	6.01	4.57	2.45	2.64	1.16	3.30	4.45
Financial	9.71	10.73	12.03	8.11	9.55	4.40	9.80
By quality <sup>3</sup>							
Aaa and Aa	4.70	3.20	2.79	4.49	3.97	2.06	4.25
A and Baa	6.05	5.15	4.43	3.84	2.91	4.12	7.20
Less than Baa	3.42	2.77	3.67	1.32	.35	2.36	.35
No rating (or unknown)	.20	.07	.05	.05	.03	.09	.20
Memo items:							
Equity-based bonds <sup>4</sup>	.86	.87	.47	.35	.00	.68	.40
Mortgage-backed bonds	4.14	5.17	6.36	1.89	2.89	.58	3.70
Variable-rate notes	1.02	1.86	2.75	.62	1.12	.05	.70
Bonds sold abroad - total	3.55	2.03	2.51	.86	.73	.35	1.30
Nonfinancial	1.50	.94	1.27	.39	.25	.09	.25
Financial	2.05	1.09	1.24	.47	.48	.26	1.05
Stocks sold abroad - total	.15	.16	.27	.05	.00	.00	.04
Nonfinancial	.09	.12	.16	.05	.00	.00	.04
Financial	.06	.04	.11	.00	.00	.00	.00

1. Securities issued in the private placement market are not included. Total reflects gross proceeds rather than par value of original discount bonds.

2. Includes equity issues associated with debt/equity swaps.

3. Bonds categorized according to Moody's bond ratings or Standard and Poors if unrated by Moody's. Excludes mortgage-backed and asset-backed bonds.

4. Includes bonds convertible into equity and bonds with warrants that entitle the holder to purchase equity in the future.

p--preliminary.

outweighed by runoffs in net large time deposits, term RPs, and term Eurodollars. The decline in the large time deposit component of M3 reflected a falloff in issuance by banks and thrifts, as well as substantial purchases by money funds.

[Bank credit data for January are still being reviewed to account for recent reporting changes.]

#### Business Finance

Funding needs of nonfinancial businesses appear to have risen sharply in recent months. In the fourth quarter, the financing gap jumped to \$90 billion, owing largely to the inventory buildup. In addition, share retirements remained large, with the completion of acquisitions initiated before the crash and a stepped-up rate of share repurchases. More recently, announcements of new mergers and buyouts have picked up, partly reflecting the decline in interest rates and the fall in the dollar, which has stimulated foreign interest in U.S. firms.

Despite the large needs, some sources of funds have lain virtually untapped, owing to residual effects of the October plunge in stock prices. Gross issues of new equities increased in January, but the volume was still much smaller than before the crash. Issuance of bonds with equity characteristics, such as convertibles and junk bonds, have nearly vanished again after a brief surge in December; increasing concerns about the possible effects of a weakening economic environment have diminished investors' appetites for new public issues, though private placements have reportedly taken up some of this slack.

TREASURY AND AGENCY FINANCING<sup>1</sup>  
(Total for period; billions of dollars)

	<u>1987</u>	<u>1988</u>	<u>1987</u>	<u>1988</u>	
	Q4 <sup>p</sup>	Q1 <sup>e</sup>	Dec. <sup>p</sup>	Jan. <sup>e</sup>	Feb. <sup>e</sup>
<u>Treasury financing</u>					
Total surplus/deficit (-)	-80.4	-36.3	-23.9	17.2	-24.5
Means of financing deficit:					
Net cash borrowing from the public	60.8	31.6	9.8	4.4	14.6
Marketable borrowings/ repayments (-)	48.6	28.7	8.6	4.9	13.9
Bills	11.0	-.5	-1.2	.3	-2.4
Coupons	37.6	29.1	9.8	4.6	16.3
Nonmarketable	12.2	3.0	1.2	-.5	.7
Decrease in the cash balance	14.0	6.5	-1.2	-17.5	16.1
Memo: Cash balance at end of period	22.4	15.9	22.4	39.9	23.8
Other <sup>2</sup>	5.6	-1.8	15.3	-4.1	-6.3
<u>Federally sponsored credit agencies, net cash borrowing<sup>3</sup></u>					
FHLBs	9.3	2.2	2.5	1.2	0.6
FNMA	4.4	.6	2.0	.1	.2
Farm Credit Banks	-.6	-1.5	-.7	-.5	-.2
FHLMC	3.3	.2	.5	.1	.1
FICO	1.2	.7	0	0	.7
SLMA	.1	.3	.1	-.4	.7

1. Data reported on a not seasonally adjusted, payment basis.

2. Includes checks issued less checks paid, accrued items and other transactions.

3. Excludes mortgage pass-through securities issued by FNMA and FHLMC.  
e--staff estimate.

p--preliminary.

Note: Details may not add to totals due to rounding.

Investment-grade debt, however, has responded strongly in January to recent declines in yields, roughly 90 basis points over the inter-meeting period. And, though commercial paper volume dipped a bit last month, short- and intermediate-term business credit from all sources swelled in the fourth quarter.<sup>3</sup>

The broad stock price indexes have advanced 4 to 8 percent, on balance, over the past six weeks in volatile markets. While a stream of proposals for new stock market rules is still flowing in, some changes already have been made. In response to the October debacle, the futures and options exchanges raised margins on equity-index products, but many of these increases have since been rolled back. The New York Stock Exchange adopted restraints on program trading on days when the Dow Jones industrial average moves 75 points, and the National Association of Securities Dealers implemented a number of changes in its automated system for small orders.

#### Treasury and Sponsored Agency Financing

The combined deficit of the federal government is expected to total about \$36 billion (not seasonally adjusted) in the first quarter of calendar 1988, down from \$80 billion in the last quarter of 1987. The fourth-quarter deficit was inflated by shifts in outlays of more than \$15 billion to December from January, as social security and some other

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3. Recent monthly changes in commercial paper data are difficult to interpret because a just completed change in the reporting panel of commercial paper brokers and dealers and the departure of Solomon Brothers and Paine Weber from the market late last year have introduced potential discontinuities to these data.



payments were made on December 31, prior to the New Year holiday weekend.

Net cash borrowing from the public should be about \$32 billion this quarter, which is likely to be largely accounted for by issuance of marketable coupon securities, including \$15 billion raised in this week's refunding. Regular bills are being allowed to run off again, and nonmarketable borrowing is expected to fall to about \$3 billion. The Treasury will finance the remainder of the first-quarter deficit by reducing its cash balance.

As a result of sizable exchange market intervention, purchases of Treasuries by foreign official institutions in the form of add-ons to auctions have remained at above-average levels in recent months. Such purchases amounted to almost \$4 billion in December and \$5 billion in January. They are expected to continue at moderate levels for the rest of the quarter. The high level of add-ons may have contributed to the Treasury's recent decisions to cut back the size of some auctions, including the \$500 million reduction in the amount of 2-year notes auctioned January 27. The amounts of the 3-, 10-, and 30-year issues in the midquarter refunding also are slightly smaller than in most recent quarters.

The Treasury may receive about \$2 billion of additional cash this quarter from the direct sale of special securities to the Mexican government. On December 29, the Treasury announced that it would offer up to \$10 billion, face value, of 20-year zero-coupon, nonmarketable foreign series bonds to the Mexican government early in 1988. These

bonds would be used as collateral for the principal on new Mexican bonds that would be offered to commercial banks in exchange for discounted amounts of outstanding Mexican bank loans.

Borrowing by federally sponsored credit agencies should slow substantially to \$2.5 billion in the first quarter of 1988 from its rapid, \$17.8 billion pace in the fourth quarter of 1987. A major portion of the slowdown is likely to be among the mortgage-related agencies--Fannie Mae, Freddie Mac, and the Home Loan Banks--and could reflect both seasonal influences and continued softness in the housing market. The Financing Corporation also is expected to reduce its borrowing during the first quarter, although borrowing should pick up again in the second quarter. An increase in debt paydown by the Farm Credit Banks, owing to still sluggish farm loan demand and loan liquidations, also contributes to the projected falloff in borrowing in the first quarter.

In early January, President Reagan signed legislation providing new financial assistance to the Farm Credit Banks (FCB) through debt guarantees and interest payments. A new institution, the Financial Assistance Corporation, will obtain up to \$4 billion of funds through the public sale of its own 15-year debt obligations, which will be fully guaranteed by the U.S. Treasury; the Treasury will pay interest on the guaranteed debt for the first five years, beginning in FY1989. In addition, the legislation provides channels to establish a secondary market for farm real estate loans, to encourage consolidation of FCB institutions, and to insure FCB's debt. Because the aid package significantly reduces the riskiness of the FCB debt, interest rate spreads

between its debt obligations and Treasury securities fell substantially at the FCB's most recent offering in late January.

Municipal Securities Markets

Offerings of tax-exempt bonds totaled \$94 billion in 1987, the lowest volume since 1983. Most of the decline in issuance since the high water mark in 1985 has reflected the tightening of restrictions on tax-exempt securities contained in the Tax Reform Act of 1986. In addition, the higher interest rates, which prevailed through most of 1987, were largely responsible for the reduced issuance of refunding bonds. Although offerings of bonds for public-purpose projects fell dramatically, the greatest reduction since 1985 has been in private-purpose issues, the primary target of tax reform.

GROSS OFFERINGS OF MUNICIPAL SECURITIES  
(Monthly rates, not seasonally adjusted, billions of dollars)

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1987</u>			<u>1987</u>		<u>1988</u>
	<u>Year</u>	<u>Year</u>	<u>Year</u>	<u>H1</u>	<u>Q3</u>	<u>Q4</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Jan.</u>
Total tax-exempt	19.82	14.04	9.21	10.26	8.16	8.18	9.62	7.46	5.10
Short-term <sup>1</sup>	1.97	1.79	1.36	1.20	1.83	1.24	1.86	.65	.50
Long-term	17.85	12.25	7.85	9.06	6.33	6.94	7.76	6.81	4.60
Refundings <sup>2</sup>	4.85	5.29	3.42	5.11	1.69	1.75	1.13	1.96	2.30
New capital	13.00	6.96	4.43	3.95	4.63	5.19	6.63	4.85	2.30
Total taxable	.03	.35	.32	.28	.15	.57	.75	.71	.20

1. Does not include tax-exempt commercial paper.

2. Includes all refunding bonds, not just advance refundings.

e--staff estimate

Tax-exempt bond issuance in December, at \$6.8 billion, was well below the average monthly pace for the year, and was the lowest December volume since 1981. During most of the intervening years, year-end offerings were boosted in anticipation of various changes in the tax laws.

Issuance of tax-exempt debt remained thin throughout most of January, except at the end of the month when the Bond Buyer revenue bond index dropped below 8 percent. This decline encouraged a rush of advance refunding bonds.

### Mortgage Markets

Since the last FOMC meeting, the average contract rate on new commitments for fixed-rate conventional home mortgages has declined 50 basis points, to 10.16 percent, while the average initial rate quoted on one-year ARMs has declined only about 15 basis points to 7.74 percent. Thus, the initial rate advantage provided by ARMs has lessened somewhat, but at almost 2-1/2 percentage points, it remains fairly wide by historical standards. Stimulated by much lower initial rates available on ARMs, a record 68 percent of all conventional home loans closed in early December contained adjustable-rate features. If the recent declines in fixed-rate credit costs are sustained, however, ARM lenders may have to become even more aggressive in pricing ARM products to retain market share; as fixed rates decline, many borrowers seek to lock in mortgage costs at those rates, despite wide spreads. Rate declines prompted the VA to lower its ceiling rate on fixed-rate mortgages a full percentage point, to 9.50 percent effective February 1.

Owing to the higher interest rates prevailing in the early fall, mortgage loans closed at FSLIC-insured institutions declined in November to a seasonally adjusted \$18.8 billion. Refinancings of existing mortgages again accounted for roughly one-fifth of the origination volume, compared with a peak share of two-fifths reached in March 1987.

MORTGAGE ACTIVITY AT ALL FSLIC-INSURED INSTITUTIONS  
(Monthly averages, billions of dollars, seasonally adjusted)

	Mortgage transactions		Net change in mortgage assets <sup>1</sup>		
			Total	Mortgage loans	Mortgage-backed securities
	Originations	Sales			
1985	16.4	8.2	4.1	4.2	-.1
1986-Q1	17.9	11.3	4.5	3.0	1.5
Q2	20.7	12.9	6.0	.8	5.2
Q3	23.4	17.5	2.5	-.4	2.9
Q4	25.5	15.0	5.7	1.7	4.0
1987-Q1	21.4	12.5	1.2	-.7	1.9
Q2	23.3	12.7	7.1	2.3	4.8
Q3	19.9	10.1	6.0	3.4	2.6
1987-Oct. r	20.5	7.4	9.9	5.1	4.9
Nov. p	18.8	5.9	10.6	6.2	4.4

1. Net changes are adjusted to account for structural changes caused by mergers, acquisitions, liquidations, terminations, or de novo institutions.

NEW ISSUES OF MORTGAGE-BACKED PASS-THROUGH SECURITIES  
BY FEDERALLY RELATED AGENCIES  
(Monthly averages, billions of dollars)

Period	Seasonally adjusted				Not seasonally adjusted			
	Total	GNMAs	FHLMCs	FNMA's	Total	GNMAs	FHLMCs	FNMA's
1985	9.0	3.8	3.2	2.0	9.0	3.8	3.2	2.0
1986	21.6	8.2	8.4	5.0	21.6	8.2	8.4	5.0
1987	19.7	8.2	6.2	5.3	19.7	8.2	6.2	5.3
1987-Q1	26.7	10.8	10.1	5.9	24.0	10.4	8.4	5.2
Q2	26.8	9.7	9.6	7.5	24.8	9.6	8.4	6.9
Q3	16.2	7.4	4.7	4.0	17.7	7.9	5.2	4.6
Q4 p	11.7	5.0	2.6	4.2	12.2	5.0	2.9	4.3
1987-Oct.	11.9	5.0	2.8	4.1	12.1	5.4	2.9	3.8
Nov. r	10.7	4.9	2.7	3.1	10.0	4.7	2.6	2.7
Dec. p	12.5	5.0	2.2	5.3	14.5	5.0	3.2	6.4
1988-Jan. p	n.a.	n.a.	2.4	1.9	n.a.	n.a.	1.8	1.7

r--revised.      p--preliminary.

The pace of refinancings of FHA-insured and VA-guaranteed mortgages also has remained flat in recent months.

Thrift institutions continued to be less active in the secondary mortgage market. Sales of mortgages by thrifts fell to \$5.9 billion in November, the lowest monthly level in three years. The continued fall-off in sales stems from the increased prevalence of adjustable-rate lending. Inasmuch as ARMs enable thrifts to narrow the maturity gap on their balance sheets, many institutions have tended to retain the ARMs they originate in their portfolios, rather than sell them outright or swap them for mortgage-backed securities. Largely because of these increases in ARM holdings, mortgage asset growth at FSLIC-insured thrifts picked up in November for the fifth consecutive month to register a net increase of \$10.6 billion, the second largest gain since 1984.

With the continued slowing in the pace of fixed-rate lending, issuance of federally related mortgage-backed pass-throughs has moderated in recent months. Even with a pickup in December, which occurred after seven consecutive monthly declines and largely reflected an increase in swap activity at FNMA, issuance of mortgage pass-throughs was at less than half the average monthly pace during the first six months of the year. Partial data for January show pass-through issuance remaining subdued.

Among derivative mortgage securities, offerings of CMOs dropped off sharply in December, from a monthly pace of about \$2 billion to roughly \$500 million. The decline partly reflected reduced arbitrage oppor-

CONSUMER INSTALLMENT CREDIT  
(Seasonally adjusted)

	Percent change (at annual rate)					Net change (billions of dollars)		Memo: Outstandings (billions of dollars)
	1986	1987		1987		1987		1987
		H1	Q3	Oct. <sup>r</sup>	Nov. <sup>p</sup>	Oct. <sup>r</sup>	Nov. <sup>p</sup>	Nov. <sup>p</sup>
Total <sup>1</sup>	10.5	3.5	10.1	5.7	4.4	2.88	2.22	607.7
Total, excluding auto	5.7	3.0	8.8	5.7	7.0	1.64	2.02	348.8
Selected types								
Auto	17.8	4.1	11.7	5.8	.9	1.24	.20	258.9
Revolving	10.6	3.6	12.5	12.2	3.8	1.44	.46	143.6
All other	2.6	2.5	6.3	1.2	9.2	.20	1.57	205.2
Selected holders								
Commercial banks	8.1	2.1	7.2	7.5	6.2	1.68	1.40	272.2
Finance companies	20.7	2.3	13.4	4.0	-2.9	.47	-.35	142.8
Credit unions	8.0	7.0	13.7	4.3	10.1	.30	.70	84.3
Savings institutions <sup>2</sup>	10.7	10.1	15.1	4.7	12.7	.25	.67	64.2

1. Includes items not shown separately.

2. Savings and loans, mutual savings banks, and federal savings banks.  
r--revised. p--preliminary.

Note: Details may not add to totals due to rounding.

CONSUMER INTEREST RATES  
(Annual percentage rate)

	1985	1986	1987	1987				
				Aug.	Sept.	Oct.	Nov.	Dec.
At commercial banks <sup>1</sup>								
New cars (48 mo.)	12.91	11.33	10.46	10.37	...	...	10.86	...
Personal (24 mo.)	15.94	14.83	14.23	14.22	...	...	14.58	...
Credit cards	18.69	18.26	17.92	17.83	...	...	17.82	...
At auto finance cos. <sup>2</sup>								
New cars	11.98	9.44	10.73	9.63	8.71	10.31	12.24	12.23
Used cars	17.59	15.95	14.61	14.53	14.58	14.76	14.90	14.97

1. Average of "most common" rate charged for specified type and maturity during the first week of the mid-month of each quarter.

2. Average rate for all loans of each type made during the month regardless of maturity.

tunities due to the narrowing of the spreads between mortgage pass-throughs, which back most CMOs, and Treasury securities in early December. Offerings of CMOs and other derivative securities may be rebounding a bit in the first quarter of this year, however, with more than \$3-1/2 billion of CMOs issued in January. FNMA, in particular, has been fairly active of late. Recently, the agency announced a two-class offering of combined interest-only and principal-only securities. One class receives all payments of principal and 60 percent of the interest; the second class receives the remaining 40 percent of the interest. FNMA recently announced a four-tranche REMIC issue backed by multifamily loans, one of the first REMIC issues backed by such loans. The \$203 million issue is FNMA's sixth REMIC, bringing its total issuance under REMIC authority to \$1.5 billion. FNMA now has \$13.5 billion in remaining REMIC authority, which expires in mid-July.

#### Consumer Installment Credit

Outstanding consumer installment credit grew at a 4-1/2 percent annual rate in November, after a 5-3/4 percent October gain. The easing of growth in November resulted mainly from much slower increases in revolving credit and in auto credit, the latter restrained by the absence of any sales incentives until very late in the month. Partially offsetting these slowdowns was a more rapid advance in other kinds of borrowing. Based on results from about two-thirds of the sample, it appears that growth of total installment credit in December probably increased to between 9 and 10 percent, primarily reflecting a pickup in revolving credit.



Over the first eleven months of 1987, outstanding installment debt rose at a 5-3/4 percent annual rate, significantly below the 10-1/2 percent 1986 increase and the 17-1/4 percent average annual gain of the 1983-85 period. The slowing in 1986 was in categories other than auto loans, while that in 1987 was in auto and revolving credit. Some deceleration in consumer credit in the past two years might have been expected after the exceptionally rapid increase in the early phases of

Changes in Consumer Installment Credit  
(Percent, seasonally adjusted annual rate)

	1983-85	1986	1987 <sup>1</sup>
Total	17.2	10.5	5.8
Excluding auto	16.4	5.7	5.3
Auto	18.4	17.8	6.2
Revolving	22.7	10.6	7.0
Other	13.0	2.6	4.1

1. Through November.

this prolonged recovery. During lengthy expansions, growth in buying and net credit extensions typically slow as initially pent-up consumer demands are satisfied and repayments rise in line with past credit extensions. In the recent period, substitution of borrowing through home equity lines of credit, which is recorded as mortgage credit, also has curtailed growth of consumer credit as usually measured.

## APPENDIX

### THE BEHAVIOR OF DEMAND DEPOSITS: THE RESULTS OF SURVEYS OF SENIOR FINANCIAL OFFICERS AND CORPORATE CASH MANAGERS

#### Summary

To obtain information about the behavior of demand deposits--especially their weakness in November and December--a survey of senior financial officers of commercial banks<sup>1</sup> and discussions with nine corporate cash managers were conducted in mid-January. These inquiries focused particularly on compensating balance arrangements and their impact on holdings of business demand deposits. The results of the survey indicate that, while there was sluggishness in household demand deposits over the period, most of the weakness occurred in business accounts and generally was widespread across types of business. Apart from any unusual movements related to the stock market drop, the weakness in demand deposits in November and December reflected most importantly lagged adjustments to account levels to earlier increases in interest rates. This was attributed both to closer management of balances as rates rose in 1987 and to reductions in required compensating balances.

In addition, because a majority of banks do not allow surpluses to be carried over past the end of the calendar year, businesses had an incentive to reduce any excess balances before the end of 1987. Firms shifting out of compensating balance arrangements in favor of payment for services by explicit fees also was cited as a factor reducing demand deposit levels; such shifts were reported to have accelerated in 1987 and may have been concentrated in the last quarter by the prohibition against carrying surpluses into the following year. These year-end settlement pressures underscore the difficulty in assessing seasonal patterns and interest-elasticities for demand deposits; year-end flows may be affected in complex ways by rate movements and other developments over the year. Finally, some slowing in business and financial activity toward the end of the 1987, especially compared to previous years, also was reported.

January's rebound in demand deposits on a month-average basis likely reflects the unwinding of these developments to some extent; adjustments to balance levels may have begun to reverse with recent rate declines, shifts out of compensating balance arrangements are not being concentrated by year-end settlement constraints, and the absence of

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1. The respondent panel to this survey is the same as that for the Senior Loan Officer Opinion Survey on Bank Lending Practices. See the note to the table for additional information about the survey panel.

previously-normal year-end financial and tax-related transactions at the end of last year has meant that the typical falloff in such transactions after year's end was not a factor this January.

Survey results indicate that compensating balances continue to be an important factor in business demand deposits. On average, respondents to the survey indicated that slightly more than 60 percent of business demand deposits are held under formal compensating balance arrangements, suggesting a continued high interest elasticity for demand deposits as a whole.<sup>2</sup> There is marked variation in the structure of compensating balance arrangements across institutions, although most use a monthly average of the 3-month Treasury bill rate to determine their earnings credit rate (ECR) and compute required balances monthly. Some institutions calculate required balances based on their ECR for the current month (or quarter) while others lag the rate by a month or more, contributing to the sluggishness in the response of demand deposit levels to changes in market interest rates.

Senior financial officers also were asked about NOW account behavior in November and December. Most reported normal growth; of the institutions reporting less than normal growth, almost 60 percent cited shifts to higher-yielding accounts as a factor.

#### Demand Deposit Activity in the November-December Period.

Nearly 50 percent of the respondents reported that demand deposit growth at their institutions was below normal or very weak over November and December. Only a few reported above normal demand deposit growth, and none experienced very strong growth. Of those with lower than normal demand deposit growth, 82 percent experienced weakness in business deposits while half cited weakness in household accounts. A higher percentage of the largest banks reported weakness in both business and household accounts than did smaller institutions; however, smaller institutions cited weakness in other accounts such as correspondent and local government deposits more frequently than did the largest banks.

Higher interest rates were the most important single factor in the weakness in demand deposits; 52 percent of the bank respondents that reported weakness in business demand deposits attributed it to more careful cash management by firms resulting from higher rates, and 30 percent indicated that higher interest rates (and thus higher ECRs) had led to reduced compensating balance requirements. Given the movements in interest rates, especially in the 3-month Treasury bill rate over the last three months, it is likely that such stock adjustments wound down or reversed in January.

<sup>2</sup> Deposit ownership estimates for all insured commercial banks based on the Demand Deposit Ownership Survey for the third quarter of 1987 show that 10.8 percent of demand deposits are held by financial businesses, 55.5 percent by nonfinancial businesses, and 26.2 percent by households.

Apart from the direct effects of higher interest rates, 35 percent of the respondents stated that customers switching from compensating balance arrangements to payment for services by explicit fees had depressed demand deposit levels at their banks. Of all the bank respondents, nearly 30 percent reported that such switches had accelerated in 1987. (The trend away from formal compensating balance arrangements in favor of fees is discussed more fully in a later section on the structure of compensating balances.) In their responses to question about changes in compensating balances, a few senior financial officers noted that some customers had reduced their balances below the required minimums late last year, preferring to make up the difference with fees; one cash manager contacted stated that her firm had done this in November and December because of cash flow problems. Several other cash managers indicated that more firms may be looking to reductions in compensating balances as a source of funds.

Slowing business activity also was seen to have been a factor in the weakness in business demand deposits by 30 percent of the bank survey respondents, while about 13 percent cited reduced financial activity associated with LBOs and merger financing. In addition, one of the cash managers indicated that several leasing subsidiaries had abnormally low demand deposit balances late in 1987 because of a noticeable absence of year-end tax-related transactions. Perhaps mirroring a slowing in business activity and transactions, reduced demands for credit and operational services by corporate customers were reported as a factor lowering demand balances by slightly more than a fifth of the banks with lower than normal business deposit growth. Responses in the "other" category were varied, including slow loan growth and the financial troubles of a particular bank.

The weakness in business demand deposits generally was not concentrated in any one sector; over three-fourths of the respondents reported weakness across all of their business accounts. Of the respondents that did cite specific sectors, real estate and mortgage banking were the most common. In terms of account structure, three-fourths of the institutions reported that the weakness in business demand deposits resulted from lower average balances, while about 14 percent reported a decline in the number of accounts as some customers continued to consolidate demand accounts in order to reduce expenses and to facilitate cash management. Several of the cash managers indicated that their firms were continuing to consolidate accounts for these reasons.

#### The Importance and Structure of Compensating Balances

About 62 percent of balances in business demand deposits at the respondent banks are made up of funds held under compensating balance arrangements.<sup>3</sup> This varies widely across institutions, with 12 percent

<sup>3</sup>. This figure (61.8 percent in the table) is a simple mean of the proportions reported by the individual respondents. It appears, (Footnote continues on next page)

reporting that less than 20 percent of their business demand deposits are held under such arrangements; a quarter of the respondents cited figures of over 80 percent.

The bulk of the banks in the panel, 83 percent, base their ECR on the 3-month Treasury bill rate, using either the secondary market or auction rates. Other rates also are used, including the federal funds rate, wholesale CD rates, and, in one case, the average of competitors' ECRs for the previous month. Smaller banks were somewhat more likely to use a rate other than the T-bill rate than were the largest institutions. One-third of all respondents indicated that their ECR is lagged a month or more in calculating required balances, and all banks adjusted for reserve requirements.

Compensating balance requirements are measured over a variety of periods. While 81 percent of the respondents indicated that they measured balances primarily on a monthly basis with another 16 percent reporting quarterly computation periods, many of the banks indicated that such arrangements were open to negotiation or were left to the discretion of the account manager. As a result, some banks are computing required balances over various periods for various customers. There also was somewhat more variation among smaller banks in the length of computation period used than among the largest institutions.

The variation in compensating balance arrangements also is evident in the willingness of banks to allow carryforwards of surpluses or deficits. About two-thirds of the respondents allow carryovers from one computation period to the next. Some allow it only for certain customers, and a few institutions allow carryovers only of overages, not deficits. About three-fourths of the respondents that allow period-to-period carryovers do not allow carryovers beyond the end of the calendar year, effectively requiring account settlement at year-end.

Only 14 percent of banks reported changes in their compensating balance arrangements during 1987. Overall the changes appeared to be minor, such as beginning to charge for FDIC insurance. Two banks indicated customers had initiated changes in their accounts.

The survey results confirm the view expressed by corporate cash managers that businesses have been moving away from compensating balance arrangements in favor of reimbursing their banks for services by explicit fees. Three-fourths of the bank respondents reported that such a

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(Footnote continued from previous page)

however, to be reasonably robust; when the responses are weighted by business deposits as reported on the DDOS, the mean is 67.2 percent. Unfortunately, while this is the preferred weighting system, only about three-fourths of the surveyed institutions report on the DDOS. Weighting by total demand deposits, which gives undue weight to banks with lower than average proportions of business to total demand deposits, yields a mean of 65.9 percent.

shift had been occurring and 39 percent of these indicated that it had accelerated in 1987.<sup>4</sup> Three of the cash managers contacted said that their firms had shifted out of compensating balances over the last quarter of 1987, and, as a result, their demand deposit levels were well below previous normal levels. All of these firms were on a year-end settlement basis; because they planned to begin to compensate their banks by fees as of the beginning of 1988, they reduced their balances over the fourth quarter of 1987.

In general, the move away from compensating balances and toward fee compensation has been underway for some time. High interest rates in the late 1970s and in the early part of this decade spurred the rise of cash management techniques, and more importantly, trained cash management personnel. More recently, heightened competition among commercial banks has led to increased unbundling of fees charged for various types of credit and especially operational services. The combination of spreading cash management expertise and the reserve requirement wedge, which makes payment for services or credit by compensating balances more expensive than by explicit fees, has continued to reduce the use of compensating balance arrangements.<sup>5</sup> Indeed, a major bank commented that recent articles in cash management journals have spurred some shifts by their customers. Such changes do not occur instantly; the cash manager at a major chemical company stated that his company had begun to review its use of compensating balances only early last year. In addition, the cash management literature often notes that such a shift requires the education of senior management because fees must be budgeted and approved while the cost of compensating balances is indirect.

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4. Despite the bulk of respondents indicating such a shift has been occurring, 80 percent indicated that the proportion of business demand deposits with formal compensating balance arrangements had not changed over 1987. This may reflect the addition of new customers as well as higher compensating balances in the first part of 1987 compared to the first part of 1986 resulting from lower levels of interest rates. In addition, cash managers report that some firms dropping compensating balance arrangements switched to sweep or controlled disbursement accounts, which have zero balances.

5. The panel of banks was asked if the National Corporate Cash Management Association's proposed standardized account analysis had affected their compensating balance arrangements. This proposal was an attempt by the association to foster more standardization in reporting of charges for services to facilitate comparison among banks and to increase the efficiency of cash management practices. About 90 percent of the respondents reported it had not had any effect. Those citing an effect generally referred to changes in the format of their monthly statements. It was not seen as having an effect on year-end settlements, which apparently already characterized the bulk of accounts.

NOW Account Growth

Approximately 70 percent of the respondents reported that growth in NOW accounts at their institutions had been about normal in November and December, with 21 percent citing below normal or very weak growth. As with demand deposits, none reported very strong growth.

Nearly 60 percent of the institutions with less than normal growth attributed it to shifts of funds into other, higher-yielding accounts. This is in line with the opportunity costs of holding NOW accounts over the period. Based on the data from the Board's survey of rates paid on retail deposits, the spread between yields on 6-month small time deposits and NOW accounts at commercial banks widened to about 170 basis points in the fourth quarter of last year compared to approximately 135 in the third quarter. This spread stabilized over the fourth quarter and is estimated to have narrowed somewhat over January, suggesting that the earlier downward stock adjustment of NOW accounts likely has begun to reverse. Somewhat more than one-third of bank respondents were not able to identify the reasons for the weakness in NOWs at their banks.

SENIOR FINANCIAL OFFICER OPINION SURVEY  
 AT SELECTED LARGE BANKS IN THE UNITED STATES  
 (Status of policy as of January 1, 1988)  
 (Number of banks and percent of banks answering question)  
 (By volume of total domestic assets, in \$ billions, as of June 30, 1987)

Selected Responses

1. Adjusting for normal seasonal variation and abstracting from any unusual movements related to the stock market drop, please characterize demand deposit growth at your bank over November and December on a monthly average basis.

	Very Strong		Above Normal		About Normal		Below Normal		Very Weak		Total Banks
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	0	0.0	4	7.0	25	43.9	22	38.6	6	10.5	57
\$7.5 and Over	0	0.0	3	9.7	14	45.2	11	35.5	3	9.7	31
Under \$7.5	0	0.0	1	3.8	11	42.3	11	42.3	3	11.5	26

2. If you characterized recent growth as "very weak" or "below normal", was the weakness in: (more than one may apply.)

	Business Accounts		Household Accounts		Other Accounts		Total Banks
	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	23	82.1	14	50.0	5	17.9	28
\$7.5 and Over	13	92.9	8	57.1	0	0.0	14
Under \$7.5	10	71.4	6	42.9	5	35.7	14

Note: As of June 30, 1987, 32 respondents had domestic assets of \$7.5 billion or more; combined assets of these banks totalled \$670 billion, compared with \$810 billion for the entire panel of 60 banks and \$2.5 trillion for all federally insured commercial banks.



3. a. If you characterized recent growth in business demand deposits as "very weak" or "below normal", to what would you attribute the weakness? (more than one may apply.)

- a. Slowing business activity.
- b. Reduced financial activity associated with LBOs and merger financing.
- c. More careful cash management as a result of higher interest rates.
- d. Reduced compensating balance requirements because of higher interest rates.
- e. Reduced compensating balance requirements because of lower use of credit services.
- f. Reduced compensating balance requirements because of lower use of operational services.
- g. Reduced compensating balances to make up for overages relative to requirements earlier in the year.
- h. Other (please explain).

	Slowing Business Activity		Reduced LBO and Merger Activity		Cash Management		Balance Requirements due to Higher Rate		Bal. Reqs due to Use of Credit Services	
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct
All Respondents	7	30.4	3	13.0	12	52.2	7	30.4	3	13.0
\$7.5 and Over	3	23.1	2	15.4	7	53.8	3	23.1	2	15.4
Under \$7.5	4	40.0	1	10.0	5	50.0	4	40.0	1	10.0

	Bal. Reqs due to Use of Op. Services		Bal. Reqs to Make up for Earlier Overage		Other		Shifts from Balances to Fees		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	4	17.4	1	4.3	6	26.1	8	34.8	23
\$7.5 and Over	2	15.4	1	7.7	3	23.1	5	38.5	13
Under \$7.5	2	20.0	0	0.0	3	30.0	3	30.0	10

b. If growth in business demand deposits has been weak, has the slow growth been concentrated in particular types of businesses? If so, which? (For example, nonfinancial business, mortgage bankers, or securities brokers)

	Financial Institutions		Securities Firms		Real Estate Firms		Reduced M&A Activity		Energy-Related Firms		No Apparent Concentration		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	2	9.1	1	4.5	3	13.6	1	4.5	1	4.5	17	77.3	22
\$7.5 and Over	1	8.3	1	8.3	2	16.7	1	8.3	0	0.0	9	75.0	12
Under \$7.5	1	10.0	0	0.0	1	10.0	0	0.0	1	10.0	8	80.0	10

4. a. Roughly what portion of balances in business demand deposits held at your bank would you estimate typically is made up of funds held under formal compensating balance arrangements? (Include balances held to compensate for both credit services and operational services.)

	0-20%		21-40%		41-60%		61-80%		Over 80%		Mean	Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct		
All Respondents	6	12.0	2	4.0	15	30.0	14	28.0	13	26.0	61.8	50
\$7.5 and Over	4	13.8	2	6.9	8	27.6	8	27.6	7	24.1	61.0	29
Under \$7.5	2	9.5	0	0	7	33.3	6	28.6	6	28.6	62.8	21

b. Has this proportion changed much in the last year?

	Increased		Decreased		No		Uncertain		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	2	4.0	6	12.0	40	80.0	2	4.0	50
\$7.5 and Over	0	0	5	17.2	24	82.8	0	0	29
Under \$7.5	2	9.5	1	4.8	16	76.2	2	9.5	21

5. a. Please indicate which interest rate is used as a basis for your ECR.

	Three-Month Treasury Bill Rate		Ninety-Day CD Rate		Other Rate		Average of Several Rates		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	48	82.8	3	5.2	3	5.2	4	6.9	58
\$7.5 and Over	27	84.4	2	6.3	0	0	3	9.4	32
Under \$7.5	21	80.8	1	3.8	3	11.5	1	3.8	26

b. How is this rate measured? For example, is a moving average used? Are rates measured on a weekly, monthly, or quarterly basis? Are rates measured on an average basis over the period or on an end-of-period basis?

Basis:

	Month		Quarter		Weekly		Longer		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	46	80.7	9	15.8	1	1.8	1	1.8	57
\$7.5 and Over	26	81.3	5	15.6	0	0.0	1	3.1	32
Under \$7.5	20	80.0	4	16.0	1	4.0	0	0.0	25

Other:

	ECR Applied with a Lag		A Moving Average is Used		Total
	Banks	Pct	Banks	Pct	
All Respondents	19	33.9	10	17.9	56
\$7.5 and Over	13	40.6	6	18.8	32
Under \$7.5	6	25.0	4	16.7	24

c. Over what period (e.g. a month, a quarter) are compensating balance requirements measured?

	Month		Quarter		Year		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks
All Respondents	48	82.8	9	15.5	1	1.7	58
\$7.5 and Over	28	87.5	4	12.5	0	0	32
Under \$7.5	20	76.9	5	19.2	1	3.8	26

d. Can account surpluses or deficiencies in one period be carried over to the following period?

	Yes		No		For Some Customers		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks
All Respondents	40	69.0	15	25.9	3	5.2	58
\$7.5 and Over	21	65.6	10	31.3	1	3.1	32
Under \$7.5	19	73.1	5	19.2	2	7.7	26

e. Can they be carried past the end of a calendar year?

	Yes		No		For Some Customers		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks
All Respondents	10	23.3	32	74.4	1	2.3	43
\$7.5 and Over	6	27.3	15	68.2	1	4.5	22
Under \$7.5	4	19.0	17	81.0	0	0	21

5. a. More broadly, how have your ECR formula and other aspects of your compensating balance arrangements been changed during 1987, if at all?

	No Change		Customers Changed Procedures		Bank Changed Procedures		Began Adjusting for FDIC Insurance		Other		Total
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	Banks
All Respondents	50	86.2	2	3.4	4	6.9	2	3.4	0	0.0	58
\$7.5 and Over	28	87.5	0	0.0	4	12.5	0	0.0	0	0.0	32
Under \$7.5	22	84.6	2	7.7	0	0.0	2	7.7	0	0.0	26

- b. Reportedly, arrangements for compensating for banking services have been shifting in recent years from compensating balance arrangements to explicit fees. Has such a shift been occurring at your bank in recent years?

	Yes		No		Total Banks
	Banks	Pct	Banks	Pct	
All Respondents	37	74.0	13	26.0	50
\$7.5 and Over	15	62.5	9	37.5	24
Under \$7.5	22	84.6	4	15.4	26

If so, did it accelerate in 1987?

	Yes		No		Total Banks
	Banks	Pct	Banks	Pct	
All Respondents	14	38.9	22	61.1	36
\$7.5 and Over	8	53.3	7	46.7	15
Under \$7.5	6	28.6	15	71.4	21

7. Growth in aggregate other checkable deposits (i.e. NOW accounts) also slowed in 1987 and was especially weak in November and December. Adjusting for normal seasonal variation, please characterize growth in NOW accounts at your bank over November and December, on a monthly average basis.

	Very Strong		Above Normal		About Normal		Below Normal		Very Weak		Total Banks
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	0	0.0	5	8.9	39	69.6	11	19.6	1	1.8	56
\$7.5 and Over	0	0.0	2	6.7	21	70.0	7	23.3	0	0.0	30
Under \$7.5	0	0.0	3	11.5	18	69.2	4	15.4	1	3.8	26

8. If you characterized recent growth in NOW accounts as "very weak" or "below normal", to what would you attribute the weakness?

	Slow Growth in Avg Account Balances		Shifts to Other Accounts		Reduced Consumer Spending		Not Identifiable		Total Banks
	Banks	Pct	Banks	Pct	Banks	Pct	Banks	Pct	
All Respondents	1	8.3	7	58.3	1	8.3	4	33.3	12
\$7.5 and Over	0	0.0	4	57.1	1	14.3	3	42.9	7
Under \$7.5	1	20.0	3	60.0	0	0.0	1	20.0	5

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# **INTERNATIONAL DEVELOPMENTS**

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Foreign Exchange Markets

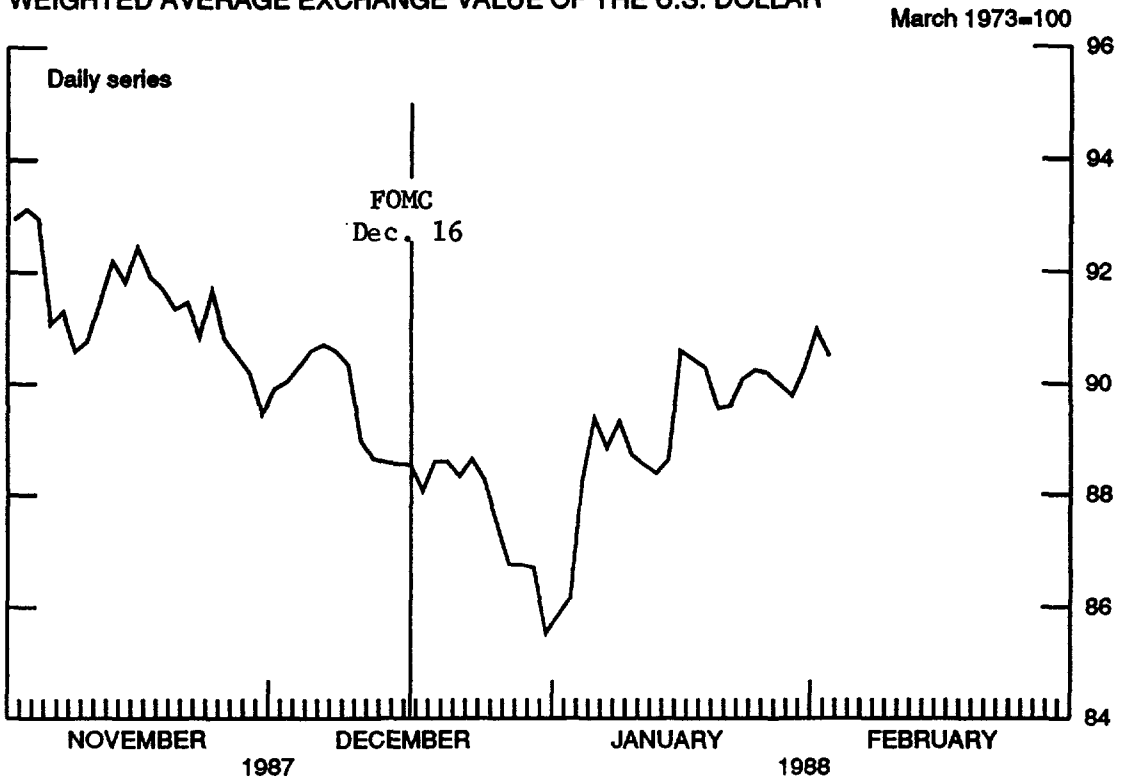
Since the last FOMC meeting on December 15-16, the weighted-average foreign-exchange value of the dollar in terms of other G-10 currencies has moved up on balance about 2-1/2 percent, as shown on the chart below. The dollar has gained more against the mark and other EMS currencies -- about 3-1/4 percent; against the yen, the dollar advanced only 1 percent.

Although the dollar steadied briefly in mid-December, shortly after the December FOMC meeting the dollar began to decline amid reports that the G-7 countries no longer supported the Louvre accord. The dollar continued to fall even after the release of a statement by G-7 authorities on December 22 that they would intensify their efforts to coordinate policies and stabilize exchange rates. Market participants appeared to be disappointed by the absence of new measures in the statement, and renewed selling pressure at the end of December brought the dollar to historical lows near 120 yen/dollar and 1.57 marks/dollar. The dollar's fall in late December occurred despite very heavy concerted intervention purchases of dollars, including more than \$1-1/2 billion by the Desk.

The dollar rallied in the first week of the new year as continued visible concerted intervention purchases evidently convinced market participants of authorities' resolve to support the dollar. The release on January 15 of U.S. November trade data showing a smaller than expected deficit provided an additional upward impetus to the dollar.

Chart 1

WEIGHTED AVERAGE EXCHANGE VALUE OF THE U.S. DOLLAR



Since mid-January the dollar has steadied, and trading has been subdued compared with the hectic activity in late December and early January.

Interest differentials on dollar assets versus both yen and mark assets have moved against the dollar during the intermeeting period as U.S. interest rates have fallen by more than corresponding German and Japanese rates. Since mid-December, German short-term interest rates have eased about 40 basis points, while Japanese short-term interest rates are nearly unchanged. This, together with the perception of greater strength in the Japanese economy, may have contributed to the noticeable strengthening of the yen-mark cross rate during the intermeeting period.

. The Desk's intervention purchases totaled about \$2.3 billion, of which slightly less than \$1 billion were bought against yen (entirely for the Treasury) and the rest were purchased against marks. Because its yen balances were depleted by these large drawings, the Treasury made provisions to exchange some of its holdings of SDRs for yen. In an arrangement announced at the time of Japanese Prime Minister Takeshita's visit to Washington in mid-January, the government of Japan agreed to exchange yen for U.S. SDR holdings. The Treasury also asked the IMF to arrange the exchange of yen for SDRs with member countries of the Fund other than Japan as the yen became



available and to make certain payments to the United States in yen. In several transactions under the latter arrangements, the Treasury has augmented its yen balances by about \$215 million equivalent.

Despite the wide swing in the dollar's value during the intermeeting period, the relationships among currencies within the EMS parity-grid remained fairly stable. As the dollar gained against the mark in January, several EMS countries took the opportunity to lower interest rates and rebuild mark reserves. The Bank of France cut its money-market intervention rate twice by a total of 50 basis points to 7-1/4 percent. The Netherlands also cut its discount rate twice by a total of 50 basis points to 3-1/4 percent, and Belgium reduced its discount rate by 25 basis points to 6-3/4 percent.

. Following recent expressions of concern by U.K. authorities about inflationary pressures, on February 1 the Bank of England announced an increase in its money-market dealing rate by 50 basis points to 8-7/8 percent, and U.K. clearing banks followed with matching increases in base lending rates to 9 percent.

#### U.S. International Financial Transactions

Foreigners sold, net, more than \$6.5 billion in U.S. stocks in November. (See line 2b of the Summary Table of U.S. International Transactions.) This decline is four times larger than the next largest

monthly decline recorded in the past decade. Most of the selling came from Europe, especially Switzerland and the United Kingdom, while Japan and Canada registered small net purchases. In contrast, private foreigners purchased, net, more than \$5 billion in U.S. Treasury securities in the month. (See line 3.) Japan, Germany, and the United Kingdom accounted for most of these net purchases. Foreign net purchases of corporate bonds remained small in November, owing in part to uncertainty about the dollar exchange rate which discouraged new Eurobond issues; new issues also were very light in December. For the fourth quarter as a whole, it is likely that foreign private security transactions produced a small net capital outflow.

Banks reported relatively modest inflows, \$2 billion, in November (see line 1), as inflows to U.S. offices of foreign-based banks were offset by advances by U.S.-based banks to their own foreign offices. The advances by U.S. banks were partly in response to reduced funding of foreign affiliates by U.S. bank holding companies. Partial data indicate that foreign-based banks increased substantially their liabilities to their own foreign offices at the end of December.

Eurodollar holdings of U.S. nonbank residents, which include bank holding company deposits at affiliated banks, declined markedly in the fourth quarter (line 3 of the Banking Table); this capital inflow, if reported accurately, will appear in the fourth-quarter data on U.S. international transactions as 'Other Capital Flows' (line 8 of the Summary Table).

SUMMARY OF U.S. INTERNATIONAL TRANSACTIONS  
(Billions of dollars)

	1985	1986	1986	1987					
	Year	Year	Q4	Q1	Q2	Q3	Sept.	Oct.	Nov.
<b>Private Capital</b>									
<b>Banks</b>									
1. Change in net foreign positions of banking offices in the U.S. (+ = inflow)	33.6	22.3	10.1	13.1	-1.2	25.3	15.2	-0.8	2.0
<b>Securities</b>									
2. Private securities transactions, net	43.0	65.5	14.2	16.7	16.0	11.7	6.0	2.8	-7.8
a) foreign net purchases (+) of U.S. corporate bonds	46.0	53.5	12.2	8.5	7.5	7.7	3.4	1.4	0.4
b) foreign net purchases (+) of U.S. corporate stocks	4.8	18.0	0.3	10.2	8.7	5.4	2.8	2.0	-6.7
c) U.S. net purchases (-) of foreign securities	-7.9	-5.9	1.7	-1.9	-0.3	-1.4	-0.2	-0.6	-1.5
3. Foreign net purchases (+) of U.S. Treasury obligations	20.5	4.0	-4.0	-2.8	-2.1	-2.7	-1.3	-5.0	5.3
<b>Official Capital</b>									
4. Changes in foreign official reserves assets in U.S. (+ = increase)	-2.0	33.5	1.7	15.3	11.6	0.7	1.8	12.5	1.7
a) By area									
G-10 countries (incl. Switz.)	-0.4	30.8	0.9	15.7	13.2	-5.7	-0.7	7.4	1.8
OPEC	-6.9	-8.3	-4.8	-2.7	-2.0	-1.4	-0.2	-1.1	-1.2
All other countries	5.3	10.8	5.6	2.3	0.5	7.8	2.7	6.2	1.0
b) By type									
U.S. Treasury securities	-0.8	34.4	4.4	12.2	11.1	0.8	-1.1	5.6	5.6
Other <1>	-1.1	-1.0	-2.8	3.1	0.6	-0.1	3.0	7.0	-4.0
5. Changes in U.S. official reserve assets (+ = decrease)	-3.9	0.3	0.1	2.0	3.4	*	0.4	0.4	1.0
<b>Other transactions (Quarterly data)</b>									
6. U.S. direct investment (-) abroad 3/	-17.3	-28.0	-3.8	-9.8	-5.4	-7.3	n.a.	n.a.	n.a.
7. Foreign direct investment (+) in U.S. 3/	19.0	25.1	12.6	7.7	9.5	8.9	n.a.	n.a.	n.a.
8. Other capital flows (+ = inflow) 2/ 3/	5.6	-5.2	-4.7	0.1	2.8	2.2	n.a.	n.a.	n.a.
9. U.S. current account balance 3/	-116.4	-141.4	-38.0	-36.8	-41.1	-43.4	n.a.	n.a.	n.a.
10. Statistical discrepancy 3/	17.9	23.9	11.8	-5.5	6.5	4.6	n.a.	n.a.	n.a.

**MEMO:**

U.S. merchandise trade balance -- part of line 9 (Balance of payments basis, seasonally adjusted)

-124.4   -144.3   -38.6   -38.8   -39.6   -39.8   n.a.   n.a.   n.a.

1. Includes deposits in banks, commercial paper, acceptances, borrowing under repurchase agreements, and other securities.
2. Includes U.S. government assets other than official reserves, transactions by nonbanking concerns, and other banking and official transactions not shown elsewhere. In addition, it includes amounts resulting from revisions of the data in lines 1 through 5 since publication of the quarterly data in the Survey of Current Business.
3. Includes seasonal adjustment for quarterly data.

\* Less than \$50 million.

NOTE: Details may not add to total because of rounding.

INTERNATIONAL BANKING DATA  
(Billions of dollars)

	1983	1984	1985	1986	1987					
	Dec.	Dec.	Dec.	Dec.	Mar.	June	Sept.	Oct.	Nov.	Dec.
1. Net Claims of U.S. Banking Offices (excluding IBFS) on Own Foreign Offices and IBFS	44.5	33.0	28.2	22.3	9.1	5.0	-7.8	-7.2	-3.5	-10.8
(a) U.S.-chartered banks	40.5	32.1	32.4	31.7	21.6	16.3	12.6	15.6	18.0	15.2
(b) Foreign-chartered banks	4.0	.9	-4.2	-9.4	-12.4	-11.3	-20.3	-22.9	-21.5	-26.0
2. Credit Extended to U.S. Nonbank Residents by Foreign Branches of U.S. Banks	18.6	20.7	18.7	16.8	16.0	15.6	17.1	17.1	17.9	15.8
3. Eurodollar Holdings of U.S. Nonbank Residents <u>1/</u>	124.3	117.6	111.1	124.5	134.0	135.7	141.1	138.1	134.0	132.3

1. Includes term and overnight Eurodollars held by money market mutual funds.

Note: These data differ in coverage and timing from the overall banking data incorporated in the international transactions accounts. Line 1 is an average of daily data reported to the Federal Reserve by U.S. banking offices. Line 2 is an average of daily data. Line 3 is an average of daily data for the overnight component and an average of Wednesday data for the term component.

Recorded net official purchases of U.S. assets were a moderate \$1.7 billion in November,

. Partial data from the Federal Reserve Bank of New York indicate official G-10 holdings in the United States rose by about \$6 billion in December. For the fourth quarter as a whole, recorded foreign official inflows amounted to about \$20 billion.

Newly released data on U.S. international transactions in the third quarter show that foreign direct investment in the United States is continuing at a record pace -- the total for the first three quarters of 1987 exceeded the near-record total for 1986. (See line 7 of the Summary Table.) U.S. direct investment abroad is running at about its 1986 pace. These data, however, include earnings reinvested abroad which reflect the positive influence of the lower dollar, suggesting a fall off in the underlying rate of investment abroad.

For the year as a whole, several trends are now apparent. Private net foreign purchases of U.S. securities, which amounted to about one-half of the U.S. current account deficit in 1986 and a third of the deficit in the first three quarters of 1987, diminished in importance and may have produced a small net capital outflow in the fourth quarter. Capital inflows through banking transactions increased in importance and may have reached \$50 billion for the year. Foreign direct investment in the United States accelerated while U.S. direct investment abroad was little changed from the 1986 pace. Direct official inflows have

increased and likely amounted to about one-quarter of the 1987 current account deficit.

### Merchandise Trade

U.S. merchandise trade data for November showed a substantial decline in the deficit, not seasonally adjusted, from October. On a seasonally adjusted basis, shown in the table below, the November improvement remains. Nonetheless, for October-November combined the merchandise trade deficit widened slightly from its third-quarter rate.

U.S. MERCHANDISE TRADE  
(Billions of dollars, annual rates, BOP basis, seasonally adjusted)

	Exports			Imports			Balance
	Total	Ag.	Nonag.	Total	Oil	Non-oil	
1984	220	38	182	332	57	275	-112
1985	216	30	186	338	50	288	-122
1986	224	27	197	369	34	335	-144
1987 <sup>1</sup>	249	30	219	407	43	364	-158
1986-1	216	28	187	355	41	314	-140
-2	228	25	202	362	31	332	-135
-3	226	27	200	375	32	343	-149
-4	228	28	200	383	32	350	-154
1987-1	228	26	202	383	35	348	-155
-2	240	29	211	399	40	359	-158
-3	261	34	227	420	51	370	-159
O/N	273	32	241	434	47	387	-161
----- Monthly BOP data - official use only -----							
Oct. <sup>2</sup>	260	32	228	440	50	390	-180
Nov. <sup>2</sup>	285	30	255	430	45	385	-145

1. Through November, at an annual rate
2. Preliminary data, subject to revision.

Nonagricultural exports increased at an annual rate of \$14 billion in October-November from the third quarter. Much of this strength is

attributable to exports of machinery, particularly for communications and business uses. Increases were also recorded in the value of industrial supplies, most noticeably for chemicals. Growth in these areas more than offset a decline, on a seasonally adjusted basis, in exports of civilian aircraft. The bulk of the increase in nonagricultural exports was in shipments to Canada and Western Europe.

The decline in agricultural exports, \$2 billion at an annual rate, reflected a slowdown in exports of grains and soybeans from the third quarter that dominated a substantial increase in cotton exports. However, prospects for agricultural exports remain promising due to large sales of wheat to the Soviet Union and China. The strong third-quarter pace of agricultural exports may well be repeated in the first half of 1988.

Non-oil imports rose at an annual rate of \$17 billion in October-November over the third quarter, with increases concentrated in industrial supplies, capital goods, and automotive imports from Canada. Imports of non-durable industrial supplies and steelmaking materials showed exceptional growth in value terms, although much of this increase reflected higher prices (see discussion below). Across regions, increases in imports from Canada and Western Europe were only partially offset by decreases in imports from newly industrialized countries in Asia.

Oil imports fell at an annual rate of more than \$3 billion in October-November from the third quarter as both prices and volumes declined. The downward movement in prices, due in part to increases in

production by Arab Gulf producers, may have led to a slowing of inventory accumulation and the decline in volume.

OIL IMPORTS  
(BOP basis, seasonally adjusted, value at annual rate)

	1986		1987				
	1986	Q4	Q1	Q2	Q3	O/N	N
Value (Bil. \$)	33.76	32.04	34.80	39.91	50.57	47.34	44.93
Price (\$/BBL)	14.18	12.75	15.64	17.32	18.06	17.55	17.58
Volume (mbd.)	6.52	6.89	6.09	6.31	7.67	7.39	7.00

Import and Export Prices

BLS data on prices of imports (excluding oil) and exports, shown in the top half of the table below, exhibit an accelerating pattern in the fourth quarter. This acceleration brought the rate of increase in prices in the fourth quarter somewhat above those experienced in the first half of 1987.

For imports, the fourth-quarter reversal of the third-quarter slowdown is most apparent in the prices of capital goods, automobiles and parts, and consumer goods. In addition, the continued strength in prices of industrial supplies was maintained by a strong fourth-quarter surge in prices of nondurable supplies. These patterns parallel the movements in the dollar exchange rate: steady decline during the first and second quarters, a leveling off in the third quarter, and a further decline in the fourth quarter.

After falling for three years, prices of exports rose 6.9 percent on average in 1987. The pattern of a fourth-quarter rebound from the third quarter is mostly explained by changes in the prices of exports of foods, feeds, and beverages; in particular by rising prices of wheat, corn, and rice.



**IMPORT AND EXPORT PRICE MEASURES**  
(percentage change from previous period, annual rates)

	1986	1987				1987Q4
	Q4	Q1	Q2	Q3	Q4	1986Q4
----- BLS Prices <sup>1</sup> -----						
Imports, Total	10.4	28.7	17.2	6.4	8.1	14.8
Oil	90.5	102.3	49.1	15.9	-7.4	48.3
Non-oil	14.6	10.2	10.7	5.3	12.5	9.6
Food, Feed, Bev.	-10.6	-15.5	7.5	3.4	9.2	0.6
Industrial Supplies	-1.7	8.7	15.7	12.5	13.0	12.4
Nondurables	9.0	12.5	15.8	4.5	16.4	12.2
Capital Goods	4.8	17.7	9.0	1.4	14.6	10.5
Business Mach.	-0.7	3.6	13.8	2.8	8.4	7.1
Autos and Parts	9.9	7.6	5.8	-0.3	5.7	4.7
Consumer Goods	1.8	14.1	11.7	5.6	10.5	10.4
Exports, Total	4.7	4.2	11.6	1.2	10.8	6.9
Food, Feed, Bev.	15.4	-7.4	27.5	-17.3	52.8	10.5
Industrial Supplies	6.6	15.1	21.5	11.3	8.6	14.0
Durables	3.1	8.4	18.4	27.0	7.8	15.1
Capital Goods	2.2	2.2	1.8	1.4	3.3	2.2
Business Mach.	-3.9	-6.5	-0.1	-2.2	0.4	-2.2
Autos and Parts	3.7	0.4	0.7	1.4	0.4	0.7
Consumer Goods	4.7	4.6	0.8	1.5	2.3	2.3
----- Prices in the GNP Accounts -----						
Fixed-Weighted						
Exports, Total	-1.3	4.3	4.7	3.8	2.5	3.8
Imports, Total	11.4	14.6	13.6	9.4	4.3	10.4
Imports, Non-oil	7.3	3.8	8.4	8.0	7.2	6.8
Deflators						
Exports, Total	-3.1	3.6	1.7	1.6	-2.4	0.9
Imports, Total	13.6	14.1	9.3	-0.6	5.4	6.8
Imports, Non-oil	5.0	2.4	6.5	2.7	5.1	4.2

1. Not seasonally adjusted, surveyed last month of each quarter.

A fourth-quarter slackening in the prices of exports of durable industrial supplies helped explain a similar movement in industrial supplies as a whole. Over the year, prices in these two categories moved in tandem with their counterparts on the import side. The same cannot be said of prices of exports of business machines. These prices declined, while prices of imports of business machines rose. Consumer goods and automobiles and parts recorded price increases in the fourth quarter that were consistent with their slow rate of price increase over the entire year.

Alternative measures of prices of U.S. imports and exports, including the implicit deflator and fixed-weighted price indexes reported in the GNP accounts, showed a much smaller increase in prices of imports and exports in the fourth quarter (see the bottom half of the table.) The GNP price series for the fourth quarter were released before the BLS price data were available and it is likely that the GNP export prices will be revised up somewhat in light of the BLS data. The GNP data also differ substantially from the BLS data due to different treatments of prices of raw materials, intermediate goods, and especially business machines. We anticipate that even after revisions to take into account the fourth-quarter BLS data, the GNP price measures will continue to show substantially smaller increases in overall prices of imports and exports through the fourth quarter, as compared to the BLS data.

Data on U.S. international transactions in the third quarter, released last month, showed nearly a \$10 billion (SAAR) increase in the current account deficit from the second quarter, with the trade deficit

about unchanged. The bulk of the increase was due to a decline in net investment income payments, which turned negative for the first time since before 1960. The drop in net investment income reflected both a deterioration in the net portfolio position of the U.S. and, due to a larger stock of foreign direct investment in the U.S., an increase in direct investment payments.

U.S. bank lending to foreigners.

The (nominal) dollar value of U.S.-chartered banks' claims on foreigners increased \$3.9 billion in the third quarter of 1987. The average foreign exchange value of the dollar in terms of other G-10 currencies rose 0.4 percent during the period. After adjustment for the effect of exchange rate changes on nondollar claims, total claims on foreigners are estimated to have increased by about \$4 billion.

The nominal value of claims on non-OPEC developing countries declined \$2.4 billion in the third quarter. This included a decline of \$700 million in claims on Latin American countries, of which \$200 million was accounted for by a decrease in claims on Mexico. Beginning in September, Mexican private sector borrowers made settlements on their own bank debt at significant discounts. Overall, such transactions were estimated to have totalled about \$3.5 billion in the third and fourth quarters combined, and took place at an average discount of 50 percent of the face value of debts repurchased--approximately the secondary market "price" of Mexican public sector debt.

The decline in claims on Asia and Africa of \$1.7 billion was mainly accounted for by declines in claims on Taiwan (about \$700 million) and

Claims on Foreigners of U.S.-Chartered Banks  
(billions of dollars)

	Changes (no sign = increase)					Outstanding 9/30/87
	1985 Year	1986 Year	1987			
			Q1	Q2	Q3	
Total, all countries	-13.8	-1.9	9.3	-11.0	3.9	392.2
Non-OPEC developing countries	-6.7	-5.4	0.5	-0.5	-2.4	97.3
of which:						
(Latin America)	-3.1	-1.1	0.3	-0.4	-0.7	71.7
(Asia and Africa)	-3.6	-4.3	0.2	-0.1	-1.7	25.6
OPEC countries	-3.3	-2.0	0.8	-1.2	0.1	19.3
Eastern Europe	-0.2	-1.0	-0.1	0.3	0.0	3.4
Smaller developed countries	-3.2	-4.3	-0.1	-0.3	1.2	26.9
G-10 countries	0.4	9.1	7.5	-6.3	-2.4	156.4
Offshore banking centers	-0.2	-1.4	2.0	-2.6	4.0	67.4
Miscellaneous	-0.4	2.9	-1.2	-0.5	3.3	21.4
Memorandum:						
Total, adjusted for exchange rate changes (staff estimates)	-29	-11	-1	-10	4	

Korea (about \$550 million). In the third quarter, Taiwan was attempting to reduce commercial bank dollar borrowings that had increased in the second quarter in anticipation of domestic currency appreciation against the dollar. Korea continued to pursue a policy of reducing external debt, which has contributed to a steady decline in U.S. bank claims on that country since the first half of 1984.

In the fourth quarter, press announcements indicate that 20 of the largest 50 bank holding companies announced additions to loan loss reserves of approximately \$2.3 billion linked to claims on developing countries. As a whole, the group that announced reserving actions raised their average of announced reserves against developing country exposure to around 55 percent. This figure, however, should be regarded

BANK HOLDING COMPANIES' ADDITIONS TO LOAN LOSS RESERVES  
AND WRITE-OFFS OF LDC DEBT IN 1987 Q4  
(Millions of dollars)

Category announcing bank holding company	Number announcing change	Gross additions to loan loss reserves (total)	Announced write- offs (total)	Memo: sales of LDC loans (total) <sup>1</sup>
Total, all bank holding companies announcing change	31	2,670	558	628
of which:				
Top 50 bank <sub>2</sub> holding companies	20	2,250	489	380
Multinational				
New York	2	450	0	0
Other	7	1,389	214	0
Regional	11	411	275	380
All others	11	420	69	248

1. Face value of loans sold.

2. Ranked according to asset size. Multinational/regional breakdown provided by Board staff. There are 18 multinational companies (of which 9 are located in New York) and 32 regional companies in the top 50.

Source: Staff review of public announcements and press reports relating to actions to increase reserves in the fourth quarter.

as an upper bound for this group of banks, since most banks do not include trade-related credits as problem loans. Moreover, in establishing reserves for financial accounting purposes, individual banks do not necessarily use the same list of developing countries with debt service

problems. Banks that announced reserving actions also announced \$558 million in write-offs of developing country debt and \$628 million in loan sales.

Indicative prices for loans to Brazil fell nearly 50 percent from early December 1986 to recently recorded lows in September and October of 1987. Data for the third week of January 1988, however, indicate that prices have risen more than 15 percent from the lows in 1987. The

INDICATIVE PRICES FOR BANK LOANS TO  
HEAVILY INDEBTED DEVELOPING COUNTRIES  
(Average of bid and offer price, expressed  
as a percentage of par value)

	12/2/86	6/29/87	9/21/87	12/31/87	1/20/88	Change from 9/21/87 to 1/20/88 (percent)
Argentina	66.0	48.0	37.5	34.5	32.0	-15
Brazil	75.5	61.5	39.5	46.5	46.5	+18
Chile	68.0	69.8	57.0	61.8	61.8	+8
Colombia	86.5	85.2	79.5	66.5	66.5	-16
Mexico	56.5	56.4	47.6	50.5	50.5	+6
Philippines	73.5	69.5	59.8	50.4	50.5	-16
Venezuela	74.5	70.5	54.5	58.0	55.0	+1

Source: Salomon Brothers.

pattern has been similar for Mexican debt: Indicative prices fell 15 percent from early December 1986 to lows in late-September 1987, but subsequently have risen approximately 6 percent. Since late September,

prices of Chilean debt also have risen, while prices of bank loans to Argentina, Colombia, and the Philippines have declined.

#### Developments in Foreign Industrial Countries

After strong growth of real GNP in the third quarter of 1987, economic activity in the major foreign industrial nations in the fourth quarter was mixed. Recent data on production, orders, and sales indicate that Japanese growth continued to be robust, as was also the case in the United Kingdom and Canada, but that the pace of economic expansion subsided in Germany, France, and Italy. Low inflation prevailed in foreign G-7 nations; however, rates of increase in prices have risen lately in the United Kingdom, Italy, and Japan.

External imbalances have persisted in several of the major foreign countries; Germany registered record trade and current account surpluses for 1987, and Japan's 1987 trade surplus was down only slightly from the previous year's record high while the current account edged up. Although the volume of German and Japanese imports has increased steadily, real exports have continued to rise in Germany while declining in Japan. The sustained strength of German export performance is to a degree the counterpart of the recent deterioration of the trade balances of its major European trading partners: France, the United Kingdom, and Italy. On January 2, President Reagan and Prime Minister Mulroney initialed the U.S.-Canadian Free Trade Agreement which, if approved by the legislatures of the two countries, will start to be implemented on January 1, 1989.

REAL GNP AND INDUSTRIAL PRODUCTION IN MAJOR INDUSTRIAL COUNTRIES  
(Percentage change from previous period, seasonally adjusted) 1/

	Q4/Q4 1986	Q4/Q4 1987	1987				1987					Latest 3 months from year ago 2/
			Q1	Q2	Q3	Q4	Aug.	Sept.	Oct.	Nov.	Dec.	
<u>Canada</u>												
GDP	1.8	n. a.	1.5	1.5	1.1	n. a.	*	*	*	*	*	4.1
IP	- .5	n. a.	1.7	1.6	2.4	n. a.	1.6	1.1	.2	.7	n. a.	8.2
<u>France</u>												
GDP	2.1	n. a.	- .0	1.0	1.2	n. a.	*	*	*	*	*	2.4
IP	- .3	n. a.	- .3	2.3	.6	n. a.	.0	1.0	.0	.0	n. a.	2.6
<u>Germany</u>												
GNP	2.4	n. a.	- .8	1.0	1.4	n. a.	*	*	*	*	*	1.4
IP	.5	1.3	-2.1	2.2	.5	.8	4.1	-2.2	.9	- .1	.5	1.3
<u>Italy</u>												
GDP	2.4	n. a.	- .1	1.8	.5	n. a.	*	*	*	*	*	2.4
IP	2.8	n. a.	3.0	2.0	-2.9	n. a.	-4.2	3.8	4.4	-1.7	n. a.	5.2
<u>Japan</u>												
GNP	2.0	n. a.	1.5	.0	2.0	n. a.	*	*	*	*	*	4.3
IP	- .5	9.0	1.4	- .2	3.6	3.9	-1.1	3.1	1.2	.8	1.4	9.0
<u>United Kingdom</u>												
GDP	4.2	n. a.	1.0	.9	2.1	n. a.	*	*	*	*	*	5.2
IP	2.6	n. a.	.9	.4	2.0	n. a.	.7	- .7	1.0	- .3	n. a.	3.5
<u>United States</u>												
GNP	2.2	3.8	1.1	.6	1.1	1.0	*	*	*	*	*	3.8
IP	1.0	5.6	.8	1.1	2.1	1.6	.5	- .2	1.1	.5	.2	5.6

1. Asterisk indicates that monthly data are not available.
2. For quarterly data, latest quarter from year ago.



CONSUMER AND WHOLESALE PRICES IN MAJOR INDUSTRIAL COUNTRIES  
(Percentage change from previous period) 1/

	Q4/Q4 1986	Q4/Q4 1987	1986		1987				1987			1988 Jan.	Latest 3 months from year ago
			Q3	Q4	Q1	Q2	Q3	Q4	Oct.	Nov.	Dec.		
<u>Canada</u>													
CPI	4.3	4.2	1.2	1.0	.9	1.4	1.2	.7	.4	.4	.1	n. a.	4.2
WPI	.3	n. a.	.3	.6	.5	1.3	1.4	n. a.	.3	.4	n. a.	n. a.	4.0
<u>France</u>													
CPI	2.1	3.2	.6	.7	1.2	.9	.6	.5	.2	.1	.1	n. a.	3.2
WPI	-3.4	n. a.	-.7	-.7	.7	.5	.7	n. a.	*	*	*	*	1.2
<u>Germany</u>													
CPI	-1.0	1.0	-.5	-.3	-.6	.4	-.0	-.0	.2	-.0	.2	.2	.9
WPI	-9.0	-.7	-2.9	-1.6	-.2	.0	-.4	-.2	.4	-.2	.0	n. a.	-.7
<u>Italy</u>													
CPI	4.7	5.2	.6	1.2	1.3	1.0	1.1	1.7	.9	.3	.2	.5	5.1
WPI	-2.4	n. a.	-.8	.7	1.5	1.0	.8	n. a.	.4	.3	n. a.	n. a.	4.5
<u>Japan</u>													
CPI	.1	1.1	-.5	.0	-.3	1.2	-.2	-.4	.1	-.4	.1	-.2	1.1
WPI	-10.5	-.0	-2.8	-1.5	-.5	-.5	1.3	-.4	.0	-.3	-.5	n. a.	-.0
<u>United Kingdom</u>													
CPI	3.4	4.1	.1	1.3	1.2	1.5	.2	1.1	.5	.5	-.1	n. a.	4.1
WPI	4.2	3.9	.4	.8	1.2	1.1	.5	1.0	.6	.3	.2	n. a.	3.9
<u>United States</u>													
CPI (SA)	1.3	4.4	.6	.7	1.3	1.2	1.0	.9	.4	.3	.1	n. a.	4.4
WPI (SA)	-1.8	2.4	-.1	.7	.7	1.1	.6	-.1	-.2	.0	-.3	n. a.	2.4

1. Asterisk indicates that monthly data are not available.

TRADE AND CURRENT ACCOUNT BALANCES OF MAJOR INDUSTRIAL COUNTRIES 1/  
(Billions of U.S. dollars, seasonally adjusted except where otherwise noted)

	1986	1987	1986		1987				1987				
			Q3	Q4	Q1	Q2	Q3	Q4	Sept.	Oct.	Nov.	Dec.	
<u>Canada</u>													
Trade	7.5	n. a.	1.7	1.8	1.4	1.5	1.1	n. a.	.7	.8	.6	n. a.	
Current account	-6.7	n. a.	-1.5	-2.1	-1.3	-1.3	-2.0	n. a.	*	*	*	*	
<u>France</u>													
Trade	.1	-5.3	.0	.4	-1.0	-2.2	-1.1	-1.1	-.4	-.8	-.1	-.2	
Current account	3.0	n. a.	1.1	.7	-.3	-1.2	-1.3	n. a.	*	*	*	*	
<u>Germany</u>													
Trade (NSA)	52.5	65.8	14.1	16.2	15.1	15.4	15.2	20.1	6.3	5.6	6.5	8.0	
Current account (NSA)	37.7	44.6	8.6	13.8	10.9	10.7	7.4	15.6	3.6	3.9	6.1	5.5	
<u>Italy</u>													
Trade	-1.6	n. a.	.7	.1	-1.4	-4.5	-1.2	n. a.	-.5	-.5	-.7	n. a.	
Current account (NSA)	3.7	n. a.	5.4	1.2	-2.8	-.9	2.8	n. a.	*	*	*	*	
<u>Japan</u>													
Trade	82.5	79.6	23.6	22.5	23.6	19.0	18.3	18.6	6.2	6.6	5.3	6.7	
Current account 2/	85.5	86.4	23.8	24.3	24.9	21.1	19.9	20.5	7.7	6.0	6.6	7.9	
<u>United Kingdom</u>													
Trade	-12.4	-16.4	-4.3	-3.7	-1.7	-3.9	-5.0	-5.8	-1.1	-1.5	-2.1	-2.2	
Current account	-1.5	-3.9	-1.3	-1.4	1.0	-.3	-2.0	-2.6	-.0	-.5	-1.1	-1.1	
<u>United States</u>													
Trade 2/	-144.3	n. a.	-37.1	-35.6	-38.8	-39.6	-39.8	n. a.	*	*	*	*	
Current account	-141.4	n. a.	-36.6	-38.0	-36.8	-41.2	-43.4	n. a.	*	*	*	*	

1. The current account includes goods, services, and private and official transfers. Asterisk indicates that monthly data are not available.
2. Annual data are subject to revisions and therefore may not be consistent with quarterly and/or monthly data.

The Japanese government has announced a mildly stimulative budget for the coming fiscal year. The German government, concerned about higher budget deficit projections for 1988, has proposed a fiscal correction for 1989. As a result of shifting financial market conditions, both Germany and France announced changes in the monetary aggregates that will be targeted in 1988.

Individual country notes. Data on real economic activity in Japan in the fourth quarter indicate continued strong and broad-based growth. In December, the industrial production index (s.a.) rose 1.4 percent attaining a level 8.5 percent above a year ago, while the unemployment rate (s.a.) declined again to 2.6 percent. Capacity utilization (s.a.) rose again in November but still remained below the peak level of mid-1985. Average total new machinery orders (s.a.) in October and November were 9 percent higher than in the third quarter; some of the rise in orders reflected increased government orders in connection with public works projects. Recent indicators of consumer spending also suggest continued strength. Average retail sales (s.a.) in October and November rose 1.2 percent from the third quarter while real consumption expenditures of working households (s.a.) increased 0.5 percent during this period. Housing starts (s.a.) rose 2.6 percent on average in October and November from the third quarter, slowing from the rapid growth of the second and third quarters.

Inflation, while higher than earlier in 1987, has remained low in recent months. In January, the Tokyo index of consumer prices (n.s.a.) was 1.2 percent above its year-earlier level. For 1987 as a whole,

consumer prices increased 0.4 percent. Wage gains have remained modest. In the upcoming spring wage round, unions plan to request a 6 to 7 percent nominal wage increase while employers intend to resist significant wage hikes. At the 1987 negotiations, workers settled for a record low 3.6 percent nominal increase.

In 1987, Japan registered a record high current account surplus of \$86.4 billion compared with a surplus of \$85.5 billion in 1986. Japan's trade surplus (s.a.) widened in December bringing the total for 1987 to \$79.6 billion compared with \$82.5 billion in 1986. In 1987, exports increased 9.6 percent and imports rose 18.2 percent in dollar terms. Volume estimates show that total exports declined 1.9 percent in 1987 while imports increased 8.2 percent.

The Japanese government has proposed a budget for FY 1988-89 (starting April 1) that appears to be more stimulative than recent budgets. The general account budget calls for outlays to increase 4.8 percent over the initial FY 1987-88 budget, the largest such increase since FY 1982-83. However, inclusion of the large July supplemental budget in the FY 1987-88 baseline reduces the increase in proposed FY 1988-89 general account expenditure to 0.9 percent. In FY 1988-89, budget expenditures excluding debt service costs and local revenue sharing are scheduled to increase 1.2 percent, the first increase in 6 years. Outlays in the off-budget Fiscal Investment and Loan Program (FILP), excluding portfolio management transactions, are slated to increase 6.8 percent.

Monetary conditions remain relaxed. The broad aggregate M2+CDs (n.s.a.) fell 0.1 percent in December resulting in a 12-month growth rate of 11.5 percent. For the first quarter of 1988, the Bank of Japan predicts that broad money will continue to grow at an annual rate of about 12 percent.

Economic activity in Germany in the final months of 1987 slowed considerably from the brisk third-quarter pace. The Federal Statistics Office estimated average real GNP growth in 1987 to be 1.7 percent, based on data through October. Data for the fourth quarter will not be released until March but are expected to show less than half the 5.7 percent (s.a.a.r.) growth rate recorded in the third quarter. Industrial production rose in December resulting in a fourth-quarter average 1.3 percent above that of the comparable period last year. The unemployment rate in December increased slightly to 9 percent. The volume of total new manufacturing orders declined again in November, as a result of declines in both foreign and domestic orders.

The trade surplus surged to \$8 billion (n.s.a.) in December bringing the total for 1987 to \$65.8 billion, compared with \$52.5 billion in 1986. Exports and imports (in DM) are estimated to have fallen 0.3 percent and 1.2 percent, respectively, during the year. In real terms, exports are estimated to have risen 2.4 percent while real imports rose 5 percent. The current account surplus fell slightly in December bringing the 1987 total to \$44.6 billion, compared with \$37.7 billion in 1986.

In January, Finance Minister Stoltenberg announced that the 1988 federal budget deficit could exceed DM40 billion, (or about 2 percent of GNP) higher than the DM29.5 billion figure projected last November when the budget was passed by the Bundestag. The DM10 billion difference in the federal deficit stems from a DM6 billion reduction in revenues and increased transfers to the European Community of about DM4 billion. The higher deficit will require the passage of a supplemental budget by the Bundestag during the summer. Stoltenberg also announced that the 1989 federal deficit will be reduced by the amount of the 1988 budget overrun through increased consumption taxes, reduced subsidies, and reduced government spending. He asserted that there was no room for advancing the tax cuts scheduled for 1990 to augment the DM14 billion tax cut that was put in effect January 1, 1988.

On January 21, the Bundesbank announced a target range of 3 to 6 percent growth for M3 between the fourth quarter of 1987 and that of 1988. This is the first time that the Bundesbank has announced a monetary target for M3; the Bundesbank had targeted central bank money (CBM) since 1975. For the last two years, growth in CBM exceeded target ranges set by the Bundesbank. In 1987, CBM grew 8.1 percent, above the 3 to 6 percent target range. Bundesbank officials noted that M3 growth during 1987 was within the 3 to 6 percent range--from the fourth quarter of 1986 to that of 1987, M3 grew 6 percent.

In France, industrial production stagnated in October and November while inflation remained low. In 1987, the trade balance worsened significantly, registering a \$5.3 billion deficit compared with a small

surplus last year. In December, the Bank of France announced a renewal of the 1987 target of 4 to 6 percent growth in M2 for 1988, but dropped the 3 to 5 percent target range for M3. Although the M2 target will likely be met in 1987, growth of M3 has been consistently above its target range. The rapid growth of M3 during 1987 was due in part to portfolio shifts associated with financial market reform in France.

Recent data suggest that real activity in the United Kingdom remains very strong. The average measure of real GDP increased by 8.8 percent (s.a.a.r.) in the third quarter. Industrial production declined slightly in November, but remained 3.5 percent above its year-earlier level. The unemployment rate declined to 9.4 percent (s.a.) in December, the 18th consecutive monthly decline. The 12-month rate of consumer price inflation declined to 3.7 percent in December. However, the estimated underlying rate of increase of average earnings rose in November for the second consecutive month, moving up to an annual rate of 8-1/4 percent.

Economic growth in Canada continued at a rapid pace; the index of industrial production (s.a.) rose in November to a level 8.8 percent above its year-earlier level and the unemployment rate fell to 8.1 percent in December, a six-year low. The initial phase of tax reform took effect January 1. The overall package will be phased in over the next two years and will lower income tax rates, substitute a three-bracket tax system for the current ten brackets, and introduce a comprehensive national sales tax.

Economic Situation in Major Developing Countries

Under a new finance minister, Brazil in early February made a voluntary \$350 million payment on overdue January interest to banks and announced its desire to normalize relations with the international financial community, including the IMF. The Mexican government implemented a comprehensive new anti-inflation program in mid-December. Also in December, Mexico announced a plan to retire some of its debt to foreign banks at a discount in exchange for new, marketable bonds. Monthly inflation in Argentina was 3.4 percent in December, down from 10.3 percent in November, but is estimated at 9 percent in January. The first auction under the new Argentine debt-equity conversion program was held in January. The Paris Club rescheduled all of Ecuador's obligations to its official creditors in January. Colombia and its creditor banks signed a \$1 billion loan on January 8.

Individual Country Notes. A new Brazilian Finance Minister, Mailson da Nobrega, was appointed in late December, after Bresser resigned because his fiscal proposals were not embraced by President Sarney. Nobrega, a career civil servant, has announced that Brazil wants to normalize relations with external creditors. Brazil has made a voluntary \$350 million payment on overdue January 1988 interest to the commercial banks from its reserves and is seeking agreement on a medium-term financing agreement with the banks. Further interest payments out of reserves may be contingent on the progress of those negotiations. Brazil has stated its intention to begin discussions with the IMF on its



economic policies, which could lead to a stand-by agreement with the Fund.

The Brazilian trade surplus remains strong with surpluses of over \$1 billion realized in November and December. The trade surplus for 1987 was \$11.2 billion, almost \$3 billion larger than the trade surplus in 1986. Inflation is accelerating; it was over 14 percent in December and over 16 percent in January. Inflation for 1987 (Dec./Dec.) was 365 percent.

The Mexican government implemented a comprehensive new anti-inflation program in mid-December as part of a social compact with labor and business that helped to avert a threatened general strike. The controlled peso was devalued by 18 percent, the maximum duty on imports was halved to 20 percent, the prior licensing requirement was eliminated for many imports, and the central bank mandated a 10 percent reduction in outstanding domestic bank loans from December 1987 to January 1988--approximately a 25 percent reduction in real terms. All wages were increased by 15 percent on December 15, and the minimum wage was raised by another 20 percent on January 1. Public sector prices were raised sharply in December to catch up with past inflation and were then frozen until March. The government hopes that the new program will result in lower inflation and, with it, lower interest rates and interest payments on domestic debt that will help reduce the overall fiscal deficit to 10 percent of GDP in 1988 from an estimated 17.4 percent in 1987.

In December, the CPI was 14.8 percent higher than November and 160 percent higher than a year earlier. The preliminary estimate for

January inflation is 12 to 16 percent. In the four weekly auctions held in January, the 28-day Treasury bill rate averaged 157 percent, 33 percentage points above the December average.

As the controlled peso has been held almost unchanged since the mid-December devaluation, the gain in international competitiveness stemming from that devaluation was rapidly lost. On February 1, Mexico announced a resumption of daily devaluations of the controlled peso, but only at a rate of 2.8 percent for the month of February.

On December 29, Mexico announced a plan to retire some of its debt to foreign banks at a discount in exchange for up to \$10 billion in new, marketable 20-year bonds paying 1-5/8 percent over LIBOR. The principal of the new bonds will be collateralized with U.S. Treasury zero-coupon bonds that Mexico will acquire with up to \$1.9 billion of its foreign exchange reserves. The deadline for bids in the auction to determine the exchange ratio is February 19, subject to a possible one-week extension by Mexican authorities. Bids will be accepted or rejected within five business days of the bid deadline.

Consumer price inflation in Argentina was 3.4 percent in December, down from 10.3 percent in November and 19.5 percent in October. The preliminary estimate for January inflation is 9 percent. Inflation from December 1986 to December 1987 was 175 percent, up from 82 percent in 1986. The Argentine Congress passed a package of revenue measures on January 8, including taxes on fuels and checking transactions and a forced savings scheme. Government authorities are projecting that the package will raise about 3 percent of GDP in new revenues. Also in

January, the first auction under the new debt-equity conversion program was held. Six projects, out of a total of 15 proposed projects, are expected to be approved soon. These six projects represent a total of \$54 million in external debt. The discounts at which the debt will be converted into australs range from 35 to 40 percent. The repatriation of capital from debt-equity conversions will be prohibited for 10 years, remittances of profits will be prohibited for 4 years.

An IMF mission visited Argentina in January to evaluate whether economic policy adjustments are sufficient to keep the stand-by arrangement on track. IMF Executive Board approval would release the third (SDR 165.5 million) tranche of the stand-by arrangement and is a precondition for the release of an additional \$550 million in new commercial bank loans. Argentina has been accumulating substantial interest arrears to external creditors in recent months and may experience cash flow problems in February when a \$440 million amortization of external bonds is due.

The Paris Club rescheduled \$275 million of Ecuador's obligations to its official creditors in January. All maturities falling due between January 1, 1988 and February 28, 1989 were rescheduled (including previously rescheduled debt) along with interest arrears. Commitments to the \$350 million commercial bank loan agreed to in October 1987 are currently being sought. An SDR 75.4 million stand-by arrangement and SDR 42.7 million CFF drawing were approved by the IMF Executive Board in early January; the CFF and the first (SDR 15.1 million) tranche of the stand-by were drawn in January as well.

The two front runners in Ecuador's first-round presidential elections on January 31 were center-left candidate Rodrigo Borja and radical Abdala Bucaram. Run-off elections will be held in May. Immediately following the elections, the sucre depreciated by approximately 14 percent from its pre-election level.

Colombia and its creditor banks signed a \$1 billion loan on January 8--\$60 million less than initially agreed upon. The Colombian authorities hope to raise the \$60 million balance through other means.