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BUREAU OF THE CENSUS

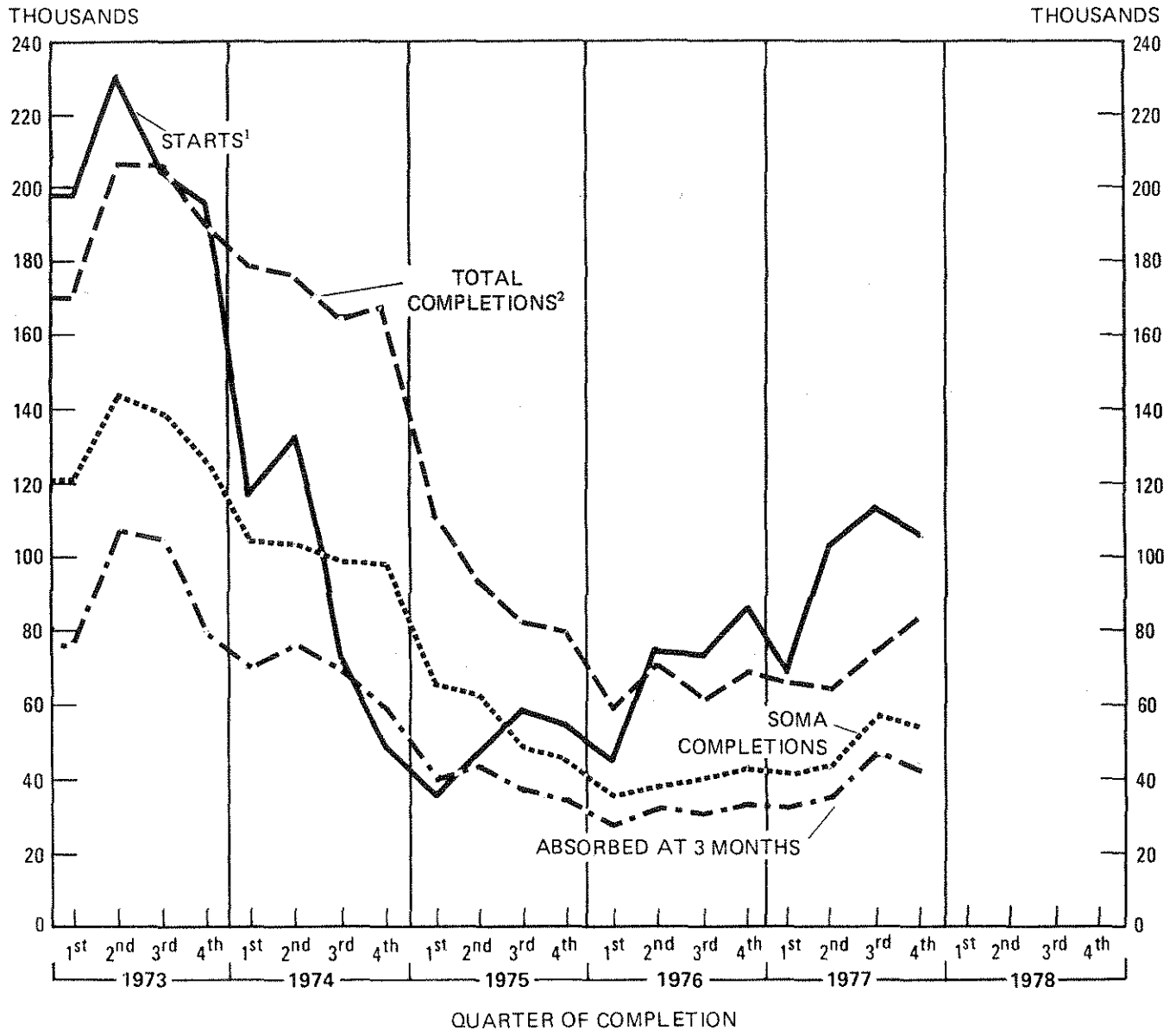
U.S. Department of Housing  
and Urban Development

H-130-78-Q1  
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# Market Absorption of Apartments

First Quarter 1978 Absorptions  
(Completions in Fourth Quarter 1977)

**Figure 1. Units in Apartment Buildings Started, Completed, and Absorbed: 1973 to 1978**



Note: Limited to buildings with five units or more in permit-issuing places

1. Source: Construction Report, C-20-78-2 (February 1978) Table 3.
2. Source: Construction Report, C-22-78-2 (February 1978) Table 1.

Privately financed apartments completed during the October-December 1977 quarter were absorbed after 3 months following completion at an estimated seasonally adjusted rate of 82 percent. This is about the same as the seasonally adjusted rate of 79 percent for apartments completed during the third quarter of 1977 (see table 3). The nonseasonally adjusted rate of 78 percent does not significantly differ from the seasonally adjusted rate. The median asking rent for these units was \$238. Apartments which have been on the market for 9 months (those completed during April-June 1977) were 98 percent rented.

Apartments renting for less than \$150 accounted for 2 percent of the fourth quarter completions. Apartments renting for \$250 or more accounted for 41 percent of the completions.

The data are based on a sample survey and consequently the figures cited above are subject to sampling variability. As shown in table 3, the 82 and 98 percent figures are subject to sampling errors (i.e., standard errors) of 2.1 and 0.8 percentage points, respectively. This means that there are about 2 chances out of 3 that a complete count would be in the range of  $82 \pm 2.1$  percentage points and  $98 \pm 0.8$  percentage

points. Sampling errors for the figures that follow are indicated in parentheses.<sup>1</sup>

A total of 83,900 ( $\pm 2,100$ ) apartments were completed during the fourth quarter of 1977. Of this total, some 54,600 ( $\pm 1,850$ ) or 65 percent ( $\pm 2.1$ ) were the type covered by the Survey of Market Absorption (SOMA), i.e., privately financed, unfurnished rental units built without Federal subsidy in buildings with 5 or more apartments.

Of the remaining 35 percent ( $\pm 2.1$ ), cooperatives and condominiums account for 17 percent ( $\pm 1.6$ ) of the total with a 3-month absorption rate of 76 percent ( $\pm 4.4$ )—see table 4. Furnished rental units account for 7 percent ( $\pm 1.1$ ). Also excluded from the survey are units in federally subsidized properties built under these programs of the Department of Housing and Urban Development: Senior Citizens Housing direct loans (Section 202), FHA below market interest rate mortgages (Section 236), and all units in buildings containing apartments in the FHA rent supplement program, which together account

<sup>1</sup> See Reliability of Estimates on page 4.

**Table 1. CHARACTERISTICS OF APARTMENTS COMPLETED DURING THE FOURTH QUARTER OF 1977 AND RENTED WITHIN 3 MONTHS**

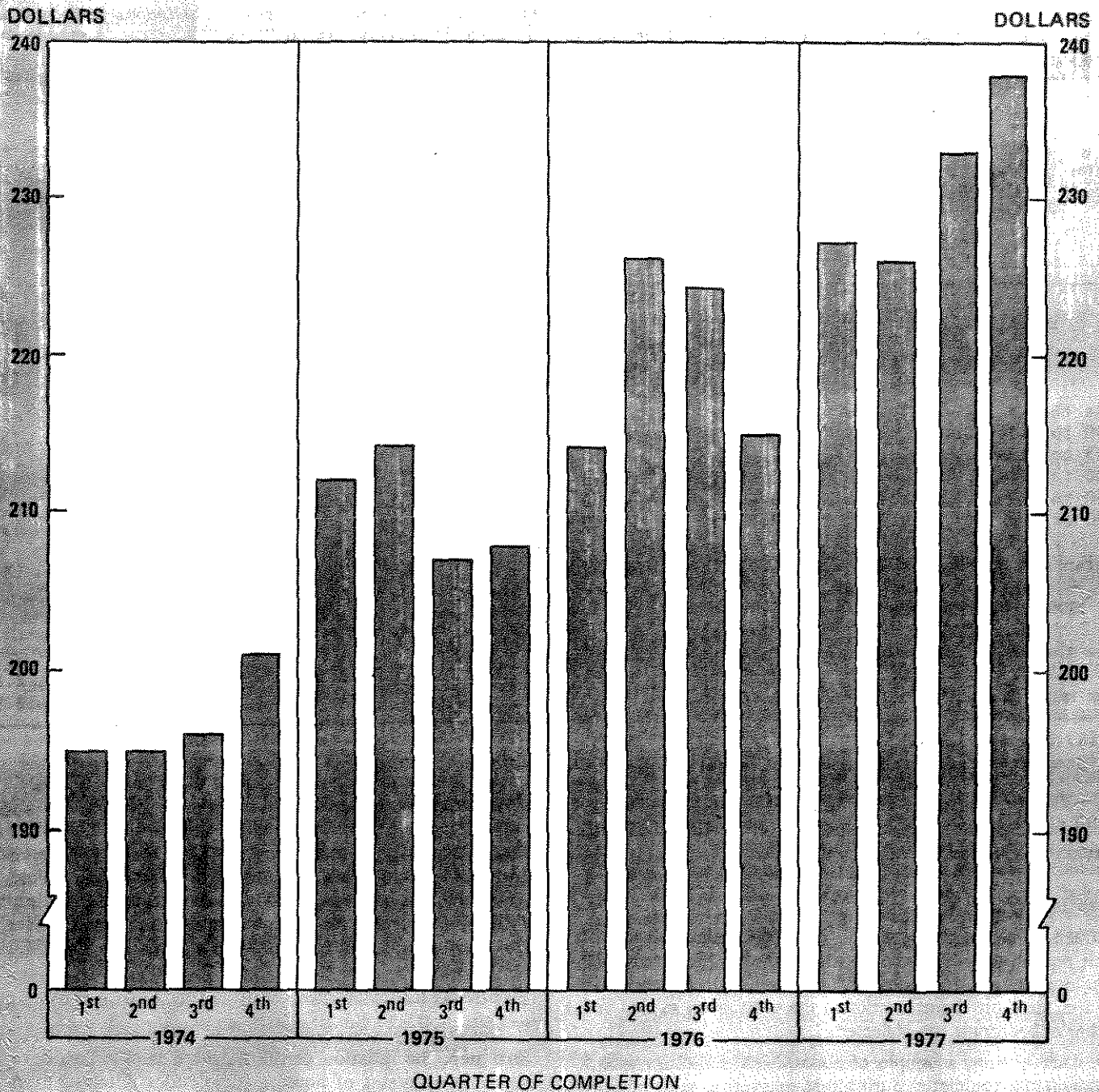
(Privately financed, nonsubsidized, unfurnished apartments. Data regarding number of bedrooms and asking rent are collected at the initial interview, i.e., 3 months following completion. Data not seasonally adjusted.)

Item	Total units completed		Percent of total units		Percent rented within 3 months	
	Number	Sampling error*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
Total.....	54,600	1,850	100	(X)	78	2.2
<b>RENT CLASSES</b>						
Less than \$150.....	1,100	410	2	0.8	99	3.8
\$150 to \$174.....	2,800	660	5	1.2	87	8.0
\$175 to \$199.....	8,500	1,110	16	2.0	69	6.3
\$200 to \$249.....	19,700	1,580	36	2.6	80	3.6
\$250 to \$299.....	13,700	1,370	25	2.3	79	4.4
\$300 or more.....	8,800	1,130	16	2.0	72	6.0
Median asking rent.....	\$238	\$3.73	(X)	(X)	(X)	(X)
<b>NUMBER OF BEDROOMS</b>						
Less than 2.....	24,500	1,700	45	2.7	78	3.3
2.....	27,600	1,760	50	2.7	77	3.2
3 or more.....	2,600	630	5	1.2	82	9.5

(X) Not applicable.

\*Standard error within range of about 2 chances out of 3.

**Figure 2. Median Rent of Apartments Completed in the United States: 1974 to 1977**



Note: Limited to buildings with five units or more in permit-issuing places.

for 9 percent ( $\pm 1.2$ ). The remainder are excluded for other reasons, including turnkey housing (privately built and sold to local public housing authorities subsequent to completion). The data, however, include privately-owned housing subsidized by State and local governments.

#### REVISIONS TO THE SERIES

Revisions have been made to the estimates of housing units completed for the period January 1972 through December 1977. These revisions reflect a recalculation of the data to

**Table 2. CHARACTERISTICS OF APARTMENTS COMPLETED DURING THE THIRD QUARTER OF 1977 AND RENTED WITHIN 3 MONTHS (REVISED)**

(Privately financed, nonsubsidized, unfurnished apartments. Data regarding number of bedrooms and asking rent are collected at the initial interview, i.e., 3 months following completion. Data not seasonally adjusted.)

Item	Total units completed		Percent of total units		Percent rented within 3 months	
	Number	Sampling error*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
Total.....	56,000	1,610	100	(X)	83	2.0
<b>RENT CLASSES</b>						
Less than \$150.....	2,700	640	5	1.2	92	6.6
\$150 to \$174.....	4,000	780	7	1.4	97	3.4
\$175 to \$199.....	7,400	1,040	13	1.8	89	4.6
\$200 to \$249.....	20,900	1,580	37	2.6	84	3.2
\$250 to \$299.....	13,400	1,340	24	2.3	81	4.3
\$300 or more.....	7,700	1,050	14	1.8	71	6.5
Median asking rent.....	\$233	\$3.59	(X)	(X)	(X)	(X)
<b>NUMBER OF BEDROOMS</b>						
Less than 2.....	23,500	1,640	42	2.6	88	2.7
2.....	30,900	1,760	55	2.6	81	2.8
3 or more.....	1,600	500	3	0.9	73	13.9

(X) Not applicable.

\*Standard error within range of about 2 chances out of 3.

correct for response and data processing errors that had accumulated over a period of years.

### SAMPLE DESIGN

SOMA is designed to provide data concerning the rate at which nonsubsidized and unfurnished privately financed units in buildings with 5 or more units are rented (or absorbed). In addition, data on characteristics of the units, such as rent and number of bedrooms, are collected.

In each quarter, a sample of about 2,000 buildings with 5 or more units completed during that quarter, is selected. The sample is selected from buildings reported as completed in a sample of building permits in the Census Bureau's Housing Starts Survey.<sup>2</sup> Buildings completed in nonpermit-issuing areas are excluded from consideration in this survey.

Information is obtained for the units in the buildings selected in a given quarter in each of the next four quarters on the proportion of units occupied 3, 6, 9, and 12 months after completion.

<sup>2</sup>See "Housing Starts," Construction Reports Series C20, for the details of this survey.

An improved tabulating method effective with the data for year 1973 now permits the revision of the data for previous quarters of completion. Each quarter the absorption data for some buildings are received too late for inclusion in the report. With the new technique it is now possible to revise the data for the previous quarter to reflect these buildings. See table 2.

### ESTIMATION

The estimation procedure used in the survey involves, as a final step, the inflation of the weighted sample results to the quarterly estimates of housing completions obtained from the Housing Completions Survey. As the Housing Completions Survey is based on a larger sample than SOMA, it provides a more stable set of controls for estimates which can be obtained from both surveys. In addition to reducing the sampling variability of the estimates of totals from SOMA, the ratio estimation procedure, as a useful byproduct, produces estimates of the units completed in a given quarter which are consistent with the published figures from the Housing Completions series.<sup>3</sup>

<sup>3</sup>See "Housing Completions," Construction Reports, Series C22.

**Table 3. ABSORPTION RATES OF PRIVATELY FINANCED NONSUBSIDIZED UNFURNISHED APARTMENTS: 1974 TO 1977**

(Structures with five or more units)

Quarter of completion	Total units completed		Seasonally adjusted rented within 3 months		Not seasonally adjusted - rented within--							
					3 months		6 months		9 months		12 months	
	Number	Sampling error*	Per-cent	Sampling error* (per-centage points)	Per-cent	Sampling error* (per-centage points)	Per-cent	Sampling error* (per-centage points)	Per-cent	Sampling error* (per-centage points)	Per-cent	Sampling error* (per-centage points)
<b>1974<sup>†</sup></b>												
January-March.....	104,400	2,930	72	2.1	67	2.1	86	1.5	92	1.3	95	1.0
April-June.....	103,000	2,890	69	2.2	73	2.0	86	1.6	91	1.4	94	1.1
July-September.....	99,300	2,780	67	2.2	72	2.0	85	1.6	90	1.4	95	1.0
October-December...	98,800	2,780	65	2.3	60	2.3	78	2.0	88	1.5	93	1.2
<b>1975<sup>†</sup></b>												
January-March.....	65,600	2,320	66	2.8	61	2.8	80	2.3	90	1.7	93	1.5
April-June.....	62,100	1,930	68	2.8	72	2.7	86	2.1	91	1.7	94	1.2
July-September.....	49,800	1,910	69	3.1	75	2.8	86	2.3	92	1.5	97	1.0
October-December...	45,600	1,900	81	2.3	75	2.5	91	1.7	96	1.1	98	0.8
<b>1976<sup>†</sup></b>												
January-March.....	35,300	1,660	85	2.4	79	2.7	92	1.8	96	1.3	97	1.1
April-June.....	38,300	1,730	81	2.6	86	2.3	96	1.3	98	0.9	99	0.6
July-September.....	40,300	1,610	75	2.7	79	2.6	92	1.7	96	1.2	99	0.6
October-December...	43,200	1,750	84	2.2	78	2.5	92	1.7	98	0.9	99	0.6
<b>1977<sup>†</sup></b>												
January-March.....	41,700	1,730	81	2.4	77	2.6	92	1.7	97	1.1	97	1.0
April-June.....	43,100	1,670	78	2.5	83	2.3	97	1.0	98	0.8	(NA)	(NA)
July-September.....	56,000	1,680	79	2.2	83	2.0	93	1.4	(NA)	(NA)	(NA)	(NA)
October-December...	54,600	1,940	82	2.1	78	2.2	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

(NA) Not available. <sup>†</sup>Revised.  
 \*Standard error within range of about 2 chances out of 3.

The absorption rates assume that the absorption rates of units not included in the interviewed group or not accounted for are identical to rates for units where data were obtained. The noninterviewed and not accounted for cases comprise less than 2 percent of the sample housing units in this survey.

**RELIABILITY OF ESTIMATES**

The sample used for this survey is only one of a large number of possible samples of the same size that could have been selected using the same sample design, sample selection, and measurement procedures. Estimates derived from these samples would differ from each other.

The standard error of a survey estimate is a measure of the variation among the estimates from all possible samples and is, therefore, a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. As calculated for this report, the standard error also partially measures the effect of certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples, between the estimate and the desired value. The accuracy of a survey result depends upon the sampling and nonsampling errors, measured by the standard error, and the bias and other types of nonsampling error, not measured by the standard error.

The estimate and its associated standard error may be used to construct a confidence interval, that is, if all possible samples were selected, each of these surveyed under essentially the same general conditions and an estimate and its estimated standard error were calculated from each sample, then approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average value of all possible samples.

The average value of all possible samples may or may not be contained in any particular computed interval. But for a particular sample, one can say with specified confidence that the average of all possible samples is included in the constructed interval. Similarly, the chances are about two out of three that the survey estimate will differ from the average result of all possible samples by less than one standard error, and 99 out of 100 that the survey estimate will differ from the average result by less than 2 1/2 times the standard error. For example, the chances are 95 out of 100 that the number of two-bedroom apartments (27,600) would be no lower than 24,080 or no higher than 31,120 if the data were collected in a complete census. The conclusions stated in this report are considered significant at the 95 percent confidence level.

In addition to sampling error, sample surveys are subject to response and processing errors similar to those experienced in censuses. The data in this report are preliminary and subject to slight changes in the annual report.

**Table 4. COOPERATIVE AND CONDOMINIUM APARTMENTS: TOTAL COMPLETED, PERCENT OF ALL 5+ UNITS AND ABSORBED WITHIN 3 MONTHS: 1974 TO 1977**

(Privately financed, nonsubsidized apartments in buildings with five or more units.  
Data not seasonally adjusted.)

Quarter of completion	Total units completed		Percent of all 5+ units		Absorbed within 3 months--	
	Number	Sampling error*	Percent	Sampling error* (percentage points)	Percent	Sampling error* (percentage points)
1974 <sup>†</sup>						
January-March.....	42,700	2,280	25	1.6	64	3.5
April-June.....	38,300	2,190	22	1.5	64	3.7
July-September.....	37,000	2,150	23	1.6	58	3.7
October-December.....	40,900	2,250	24	1.6	41	3.6
1975 <sup>†</sup>						
January-March.....	30,300	1,960	26	1.9	40	4.2
April-June.....	17,200	1,530	19	1.9	46	5.6
July-September.....	22,300	1,670	26	2.3	49	5.1
October-December.....	14,900	1,420	19	2.1	41	6.0
1976 <sup>†</sup>						
January-March.....	13,700	1,340	23	2.1	56	5.2
April-June.....	11,000	1,230	17	1.8	53	6.0
July-September.....	9,500	1,150	15	1.8	48	6.6
October-December.....	12,000	1,280	17	1.8	54	5.8
1977 <sup>†</sup>						
January-March.....	10,200	1,200	15	1.7	74	5.5
April-June.....	9,200	1,140	15	1.8	77	5.5
July-September.....	9,700	1,180	13	1.5	59	6.2
October-December.....	13,900	1,390	17	1.6	76	4.6

<sup>†</sup>Revised.

\*Standard error within range of about 2 chances out of 3.