CATALOGUE No.

71-001

MONTHLY

C. ~

Vol. 25-No. 9

17,000.

DOMINION BUREAU OF STATISTICS

OTTAWA - CANADA

Published by Authority of the Minister of Trade and Commerce.

THE LABOUR FORCE

SEPTEMBER 1969

OCT 22 1959e: \$2.00 per year

LIBRARY

1 500 m m 500 m

The Canadian labour force was estimated at 8,126,000 in the week ended September 20, 1969. Of the total labour force, 7,847,000 persons were employed for all or part of the week and 279,000 were unemployed for the whole week. Reflecting the return to school of students from summer employment, the labour force decreased by 363,000 between August and September; employment and unemployment decreased by 324,000 and 39,000, respectively. In September 1969, the labour force was 155,000 higher than a year earlier; employment was higher by 138,000 and unemployment by

Nonagricultural industries accounted for 269,000 of the decline in total employment from

August and agriculture for 55,000. Compared with September 1968, nonagricultural employment was 162,000 higher and employment in agriculture 24,000 lower. Between August and Semptember, employment decreased by 286,000 for men and 38,000 for women. Compared with a year earlier, employment was higher by 65,000 for men and 73,000 for women.

Expressed as a percentage of the labour force, the unemployment rate in September was 3.4, compared with rates of 3.7 in August this year and 3.3 in September 1968. Seasonally adjusted, the unemployment rate in September 1969 was 5.0.



October 1969 9712-505

The contents of this document may be used freely but DBS should be credited when republishing all or any part of it.

Special Surveys Division

The Unemployed by Occupation and Industry

3rd Quarter 1969

The Labour Force Survey provides information about the occupation and industry attachments of members of the labour force. For the employed, current occupation and industry are reported. The unemployed are identified with the industries in which they last worked and the occupations which they last followed. From these data, unemployment rates for broad occupation and industry groups are calculated by expressing the number unemployed as a percentage

of the labour force classified in each group. In addition, percentage distributions have been made according to occupation and industry groups. Unemployment rates and percentage distributions for the third quarter of 1969, with comparative data for the first two quarters of 1969 and the two last quarters of 1968, are shown in the following tables - in Table 1 by occupation group, and in Table 2 by industry group.

Contract of the second	Percen	tage dist (quar	ribution of terly aver	f the unemp ages)	ployed	Unemployment rates(1) (quarterly averages)					
Table 1 Occupation group	1969			1968		1969			1968		
	3rd quar.	2nd quar.	lst quar.	4th quar,	3rd quar.	3rd quar,	2nd quar.	lst quar.	4th quar,	3rd quar.	
All occupations	100	100	100	100	100	3.8	4.9	5.9	4.2	3.9	
Office and profes-	Ection Commission										
sional(2)	21	17	16	18	19	1.9	1 9	2.2	1 7	1.8	
Transportation	5	6	6	5	4	3.9	5.8	7 8	4 5	3 7	
Service and recreation	12	10	11	12	12	3.8	3.9	5 2	4.0	3.8	
Primary(3)	6	8	11	10	7	2.4	4.6	8.3	4.0	2 7	
Craftsmen, production process and related	Billion				10.1					£ • '	
workers	27	31	35	33	26	3.9	5.9	8.0	5.4	4.0	
Labourers(4)	11	12	14	14	12	8.5	12.7	19.4	13.2	9.4	
Never worked(5)	19	17	6	8	19	N/A	N/A	N/A	N/A	N/A	
Total unemployed(000's)	315	400	463	333	317						

	Perce	ntage dist (quar	ribution o terly aver	f the unem ages)	ployed	Unemployment rates(1) (quarterly averages)					
Table 2	1969			1968		1969			1968		
	3rd quar,	2nd quar.	lst quar.	4th quar,	3rd quar.	3rd quar.	2nd quar.	lst quar.	4th quar.	3rd quar.	
All industries	100	100	100	100	100	3.8	4.9	5.9	4.2	3.9	
Primary industries(6) Manufacturing Construction Transportation and other	7 21 12	11 21 15	13 21 20	11 23 17	8 20 12	2.5 3.4 6.5	5.2 4.3 11.4	8.1 5.2 18.2	4.5 4.2 10.3	2.6 3.4 6.8	
utilities(7) Trade Service(8) Never worked(5)	6 12 23 19	8 12 17 17	9 11 19 6	7 12 22 8	7 12 23 19	2.7 2.8 2.5 N/A	4.4 3.5 2.4 N/A	6.0 4.0 3.3 N/A	3.5 2.9 2.7 N/A	2.9 2.8 2.7 N/A	
Total unemployed(000's)	315	400	463	333	317		ana aya ana ata aya				

The unemployed in an occupation group or an industry group as a percentage of the labour force in that group.

(2) Includes managerial, professional and technical, clerical, sales, and communication occupations. (3) Includes farming, fishing, trapping, logging, and mining occupations

(4) Includes labourers and unskilled workers not farming, fishing, logging, or mining.

Comprises unemployed persons who never had a full-time civilian job lasting two weeks or make

Includes agriculture, forestry, fishing and trapping, and mines, quarries, oil wells. Includes transportation, storage, communication, and electric power, gas and water utilitiant. (6)

(8) Includes community, business and personal service, public administration, and finance, insu: suce, cost desets. Note: The statistics in these tables are based on the 1961 Census Classification of Occupations and the 1960 Standard Industrial Classification.

Technical Notes

Scope of Labour Force Survey

The statistics contained in this report are based on information obtained through a sample survey of households. Interviews are carried out in nearly 30,000 households chosen by area sampling methods across the country(1). The Labour Force Survey, started in November 1945, was taken at quarterly intervals until November 1952. Since then it has been carried out monthly. Estimates of employment, unemployment and non-labour force activity refer to the specific week covered by the survey each month.

The sample used in the surveys of the labour force has been designed to represent all persons in the population 14 years of age and over residing in Canada, with the exception of: residents of the Yukon and Northwest Territories, Indians living on

<u>Contents of the Tables</u> - The results of the survey are presented in the tables on pages 4 to 7 of this report.

> Canada, Labour Force (pages 4 and 5). Tables 1 to 3 refer to the labour force, employment and unemployment and contain labour force participation and unemployment rates. <u>Canada, Employed</u> (page 6). Tables 4 to 6 contain further detail on employment. <u>Canada, Unemployed</u> (page 7). Table 7 contains further detail on unemployment. <u>Regions, Labour Force</u> (page 7). Table 8 contains labour force data for the regions.

<u>Supplementary Data</u> - From time to time, additional data on particular aspects of the labour force or its components will be obtained. Such material, as it becomes available, will be either included in this report or released in separate reports.

Other Data Available - In addition to the published statistics, there is a considerable amount of data which can be obtained on request. Following is a list of material available.

Labour Force - The civilian labour force is composed of that portion of the civilian noninstitutional population 14 years of age and over who, during the reference week, were employed or unemployed.

Employed - The employed includes all persons who, during the reference week:

- (a) did any work for pay or profit;
- (b) did any work which contributed to the running of a farm or business operated by a related member of the household; or
- (c) had a job, but were not at work, because of bad weather, illness, industrial dispute, or vacation, or because they were taking time off for other reasons.

Persons who had jobs but did not work during the reference week and who also looked for work are included in the unemployed as persons without work and seeking work.

<u>Unemployed</u> - The unemployed includes all persons who, through the reference week:

reserves, inmates of institutions and members of the armed forces. These excluded categories amount to about three per cent of the total population 14 years of age and over.

Estimates derived from a sample survey are subject to sampling and non-sampling errors. Aspects of this subject in relation to the Labour Force Survey are reviewed under "Reliability of Estimates" on page 8.

 For a comprehensive description of the design of the Labour Force Survey, see Dominion Bureau of Statistics, <u>Canadian Labour Force</u> <u>Survey - Methodology</u>, Catalogue No. 71-504, Ottawa, 1965.

Labour Force Statistics

For Canada only:

- 1. Age and sex distributions.
- 2. Marital status and sex distributions.
- 3. Employed -
 - (a) Reasons for working less than full-time.
 (b) Hours worked by sex for total employed, agriculture and non-agriculture, and for paid workers, non-agriculture.
 - (c) Industry and occupation groups, by sex for total employed and for paid workers.
- 4. Persons not in the labour force by category.

For regions:

 Labour force: by age; by sex, agricultural and nonagricultural.
 Employed: by age.

For individual provinces of Atlantic and Prairie regions:

 Population 14 years of age and over and labour force: by sex. Total employed, total unemployed, and total persons not in labour force.

Definitions and Explanations

- (a) were without work and seeking work, i.e., did not work during the reference week and were looking for work; or would have been looking for work except that they were temporarily ill, were on indefinite or prolonged layoff, or believed no suitable work was available in the community; or
- (b) were temporarily laid off for the full week, i.e., were waiting to be called back to a job from which they had been laid off for less than 30 days.

Not in the Labour Force - Those not in the labour force include all civilians 14 years of age and over (exclusive of institutional population) who are not classified as employed or unemployed. This category includes those: going to school; keeping house; too old or otherwise unable to work; and voluntarily idle or retired. Housewives, students and others who worked part-time are classified as employed. If they looked for work they are classified as unemployed.

Canada, Labour Force

(Estimates in thousands)

Note: Due to the introduction of revised weighting factors in March 1965, small adjustments have been made to estimates published before that time. See the March 1965 edition of this report, page 8.

		,		1	I-O-		
		19	969	19	68	19	67
Table 1 Summary	(1)	Sept. 20	August 23	Sept. 21	August 24	Sept. 16	August 19
Total						POINT OF	
Population 14 years of age and over(2		14,719	14,687	14,349	14,316	13,963	13,931
Lebour force		8 126	8 / 89	7 071	8 284	7 720	9 101
Employed	a	7 8/.7	8 171	7,711	7 045	7,730	0,1UI 7 05/
Agrículturo	a	591	626	605	1,900	635	7,004
Non apriculture	a	7 266	7 5 2 5	7 10/	7 212	6 0 7 6	705
Non-agriculture	a	1,200	1,030	7,104	1,312	6,8/6	7,149
Unemployed	d	219	318	262	319	219	247
Not in the labour force	а	6,593	6,198	6,378	6,032	6,233	5,830
Participation rate (3)	a	55.2	57.8	55.6	57.9	55.4	58.2
Unemployment rate (4)	-			200			
Actual	d	3.4	3.7	3.3	3.9	2.8	3.0
Seasonally adjusted		5.0	4.9	4.8	5.0	4.1	4.0
Men							
Population 14 years of age and over(2)		7,295	7,279	7,113	7,096	6,921	6,905
Labour force	a	5.513	5.833	5,440	5.741	5.335	5.652
Employed	a	5.323	5,609	5 258	5 515	5 183	5 470
Agriculture	d	483	531	505	558	532	596
Non-agriculture		4 840	5 078	1 753	4 957	6 651	6 976
Unemployed	d	100	226	102	7,721	4,051	4,0/4
onemproyed	a	190	224	102	220	152	102
Not in the labour force	Ъ	1,782	1,446	1,673	1,355	1,586	1,253
Participation rate (3)	a	75.6	80.1	76.5	80.9	77.1	81.9
Unemployment rate (4)		2 /	2.0	2.0			01.07
	a	3.4	3.0	3.3	3.9	2.8	3.2
Women							
Population 14 years of age and over(2)		7,424	7,408	7,236	7,220	7,042	7,026
Labour force	ь	2,613	2,656	2,531	2,543	2,395	2,449
Employed	b	2,524	2,562	2,451	2,450	2,328	2,384
Agriculture	е	98	105	100	95	103	109
Non-agriculture	b	2,426	2,457	2,351	2,355	2.225	2,275
Unemployed	е	89	94	80	93	67	65
Not in the labour force	a	4,811	4,752	4,705	4,677	4,647	4,577
Participation rate (3)	b	35.2	35.9	35.0	35.2	34.0	34.9
Unemployment rate (4)	е	3.4	3.5	3.2	3.7	2.8	2.7

(1) "S.D." = Standard deviation. For explanation, see "Reliability of Estimates", page 8.

(2) Excludes inmates of institutions, members of the armed services, Indians living on reserves and residents of the Yukon and Northwest Territories.

(3) The labour force as a percentage of the population 14 years of age and over.

(4) The unemployed as a percentage of the labour force.

Note: With the exception of Tables 2 and 5, all statistics refer to a specific week, the last day of which is indicated.

- 4 -

Note: Due to the introduction of revised weighting factors in March 1965, small adjustments have been made to estimates published before that time. See the March 1965 edition of this report, page 8.

Table 2 Annual averages, 1946-1968	S.D. (1)	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958
Population 14 years of age and over (2)		14,264	13,874	13,475	13,128	12,817	12,536	12,280	12,053	11,831	11,605	11,388
Labour force Employed Agriculture Non-agriculture Unemployed	a d a d	7,919 7,537 546 6,992 382	7,694 7,379 559 6,820 315	7,420 7,152 544 6,609 267	7,141 6,862 594 6,268 280	6,933 6,609 630 5,979 324	6,748 6,375 649 5,726 374	6,615 6,225 660 5,565 390	6,521 6,055 681 5,374 466	6,411 5,965 683 5,282 446	6,242 5,870 700 5,170 372	6.137 5,706 718 4,988 432
Not in the labour force	a	6,344	6,179	6,055	5,986	5,884	5,787	5,665	5,531	5,420	5,363	5,250
Participation rate(3)	a	55.5	55.5	55.1	54.4	54.1	53.8	53.9	54.1	54.2	53.8	53.9
Unemployment rate (4)	d	4.8	4.1	3.6	3.9	4.7	5.5	5.9	7.1	7.0	6.0	7.0
	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946
Population 14 years of age and over (2)	11,123	10,807	10,597	10,391	10,164	9,956	9,732	9,615	9,268	9,141	9,007	8,779
Labour force Employed Agriculture Non-agriculture Unemployed	6,008 5,731 748 4,983 278	5,782 5,585 777 4,808 197	5,610 5,364 819 4,546 245	5,493 5,243 878 4,365 250	5,397 5,235 858 4,377 162	5,324 5,169 891 4,278 155	5,223 5,097 939 4,158 126	5,163 4,976 1,018 3,958 186	5,055 4,913 1,077 3,837 141	4,988 4,875 1,096 3,779 114	4,942 4,832 1,122 3,711 110	4,829 4,666 1,186 3,480 163
Not in the labour force	5,115	5,025	4,987	4,898	4,767	4,632	4,509	4,453	4,213	4,153	4,065	3,950
Participation rate(3)	54.0	53.5	5 52.9	52.9	53.1	53.5	53.7	53.7	54.5	54.6	54.9	55.0
Unemployment rate (4)	4.6	3.4	4.4	4.6	3.0	2.9	2.4	3.6	2.8	2.3	2.2	3.4

- 5 -

		14.10		20-64	years	65 years	
Age, sex, and marital status	Total	years	Men		Women	and over all	
week ended september 20, 1909		persons	Married	Other	Married Other	persons	
Population 14 years of age and over(2)	14,719	2,439	4,176 a	1,163 b	4,267 a 1,130 c	1,544	
Labour force Employed Unemployed	8,126 a 7,847 a 279 d	774 c 710 c 64 e	3,994 a 3,906 a 88 d	928 c 867 c 61 e	1,449 c 1,419 c 30 f 27 f	214 d 205 d 9 g	
Not in the labour force	6,593 a	1,665 b	182 d	235 d	2,818 b 363 d	1,330 a	
Participation rate (3) - 1969, Sept. 2 Aug. 2	55.2 a 57.8	31.7 c 44.9	95.6 a 96.2	79.8 a 88.2	34.0 c 67.9 b 32.2 69.5	13.9 d 13.8	
Unemployment rate (4) - 1969, Sept. 2 Aug. 2	3.4 d 3.7	8.3 e 7.4	2.2 d 2.6	6.6 e 6.6	2.1 f 3.5 f 2.5 3.0	4.2 g 3.8	

(1)(2)(3)(4) See footnotes on opposite page.

Note: a) The alphabetic symbol following each estimate in table 3 indicates its standard deviation.

For explanation, see "Reliability of Estimates", page 8.

b) Newfoundland included in estimates only from 1950.

Canada, Employed

(Estimates in thousands)

minor under under

<u>Note</u>: Due to the introduction of revised weighting factors in March 1965, small adjustments have been made to estimates published before that time. See the March 1965 edition of this report, page 8.

Set 1	S.D. (1)	19	69	19	68	1967	
Iable 4 Summary		Sept. 20	August 23	Sept. 21	August 24	Sept. 16	August 19
Total employed Agriculture Non-agriculture	a d a	7,847 581 7,266	8,171 636 7,535	7,709 605 7,104	7,965 653 7,312	7,511 635 6,876	7,854 705 7,149
Employed, non-agriculture	a	7,266	7,535	7,104	7,312	6,876	7,149
Usually work 35 hours or more	a	6,482	6,873	6,381	6,706	6,267	6,592
At work 35 hours or more	a	5,961	5,603	5,884	5,544	5,746	5,494
At work less than 35 hours, or not at work Due to economic reasons(2) Due to other reasons(3)	c e c	521 68 453	1,270 83 1,187	497 65 432	1,162 79 1,083	521 71 450	1,098 84 1,014
Usually work less than 35 hours	с	784	662	723	606	609	557

- 6 --

HUME Dignet		1969		19	68	1967	
Table 5 Industry	S.D. (1)	Sept. 20	August 23	Sept. 21	August 24	Sept. 16	August 19
Total employed	a	7,847	8,171	7,709	7,965	7,511	7,854
Agriculture	d	581	636	605	653	635	705
Other primary industries	d	218	243	235	249	237	243
Manufacturing	c	1,821	1,909	1,805	1,835	1,749	1,828
Construction	c	531	558	513	546	527	538
Transportation and other utilities	c	702	725	682	702	669	698
Trade	c	1,260	1,320	1,238	1,297	1,206	1,295
Finance, insurance, real estate	d	362	377	317	335	314	312
Community, personal, other services	c	1,927	1,906	1,858	1,860	1,733	1,761
Public administration	с	445	497	456	488	441	474

Note: Since late 1962, statistics in Table 5 have been published on a 3-month average basis. However since January 1966, it has been possible to provide monthly estimates of the employed by industry. Accordingly, beginning with the February 1968 report, the statistics in Table 5 refer to the monthly reference periods. Industry estimates on the 3-month average basis are available on request from the Special Surveys Division.

<u>Table 6</u> Class of worker, agriculture and non-agriculture, and sex Week ended September 20, 1969	Total	Paid workers	Own account workers	Employers	Unpaid family workers
Total employed	7,847 a	6,749 a	528 c	352 c	218 d
Agriculture	581 d	107 e	266 d	60 f	148 e
Non-agriculture	7,266 a	6,642 a	262 d	292 d	70 e
Men	5,323 a	4,454 a	455 c	326 c	88 d
Agriculture	483 d	88 e	259 d	57 f	79 e
Non-agriculture	4,840 a	4,366 a	196 d	269 d	9 f
Women	2,524 b	2,295 b	73 e	26 e	130 d
Agriculture	98 e	19 f	7 g	3 g	69 e
Non-agriculture	2,426 b	2,276 b	66 e	23 e	61 e

(1) "S.D." = Standard deviation. For explanation, see "Reliability of Estimates", page 8.

(2) Economic reasons for not working 35 hours or more include short time, layoff for part of the week and termination or start of employment during the week.

(3) Other reasons for not working 35 hours or more include illness, bad weather, industrial dispute, vacation, and reasons such as a statutory holiday in the week.

Note: The alphabetic symbol following each estimate in table 6 indicates its standard deviation. For explanation, see "Reliability of Estimates", page 8.





Note: Due to the introduction of revised weighting factors in March 1965, small adjustments have been made to estimates published before that time. See the March 1965 edition of this report, page 8.

Canada, Unemployed and

Regions, Labour Force

(Estimates in thousands)

and the second s		19	69	19	968	19	967
Table 7 Unemployed	S.D. (1)	Sept. 20	August 23	Sept. 21	August 24	Sept. 16	August 19
Total unemployed	d	279	318	262	319	219	247
Without work and seeking work Seeking full-time work Seeking part-time work	d d f	265 249 16	298 275 23	249 234 15	300 275 25	206 194 12	228 210 18
On temporary layoff up to 30 days	f	14	20	13	19	13	19
Without work and seeking work		265	298	249	300	206	
Socking under 1 month	d	88	86	83	82	76	76
Seeking 1-3 months	d	100	115	91	131	73	98
Seeking 4-6 months	e	30	36	38	38	29	25
Seeking more than 6 months	e	47	61	37	49	28	29

<u>Table 8</u> Regional distributions Week ended September 20, 1959	Canada	Atlantic region	Quebec	Ontario	Prairie region	British Columbia
Population 14 years of age and ov	rer 14,719	1,367	4,220	5,263	2,383	1,486
Men	7,295	677	2,082	2,597	1,201	738
Women	7,424	690	2,138	2,666	1,182	748
Labour force	8,126 a	656 b	2,277 b	3,002 a	1,352 b	839 b
Men	5,513 a	454 b	1,568 a	2,007 a	922 a	562 b
Women	2,613 b	202 c	709 c	995 c	430 c	277 d
Employed	7,847 a	624 b	2,153 b	2,934 a	1,330 b	806 Ъ
Men	5,323 a	430 b	1,479 b	1,963 a	910 b	541 Ъ
Women	2,524 b	194 c	674 c	971 c	420 c	265 d
Agriculture	581 d	27 e	115 e	144 e	272 d	23 f
Non-agriculture	7,266 a	597 b	2,038 b	2,790 b	1,058 c	783 c
Paid workers	6,749 a	544 c	1,877 b	2,617 b	983 b	728 c
Men	4,454 a	368 c	1,268 b	1,709 b	629 b	480 b
Women	2,295 b	176 c	609 c	908 c	354 c	248 d
Unemployed	279 d	32 e	124 e	68 e	22 e	33 e
Men	190 d	24 e	89 e	44 e	12 e	21 e
Women	89 e	8 f	35 f	24 e	10 g	12 f
Not in the labour force	6,593 a	711 b	1,943 b	2,261 b	1,031 b	647 c
Men	1,782 b	223 c	514 c	590 c	279 c	176 c
Women	4,811 a	488 b	1,429 b	1,671 b	752 b	471 c
Employed 1969, September 20	7,847 a	624 b	2,153 b	2,934 a	1,330 b	806 b
August 23	8,171	651	2,257	3,056	1,381	826
1968, September 21	7,709	630	2,151	2,859	1,311	758
August 24	7,965	647	2,203	2,981	1,346	788
1967, September 16	7,511	622	2,124	2,763	1,262	740
August 19	7,854	645	2,237	2,903	1,309	760
Unemployed 1969, September 20	279 d	32 e	124 e	68 e	22 e	33 e
August 23	318	38	138	83	26	33
1968, September 21	262	28	99	73	26	36
August 24	319	35	124	89	31	40
1967, September 16	219	24	84	64	20	27
August 19	247	26	86	86	19	30

(1) "S.D." = Standard deviation. For explanation, see "Reliability of Estimates", page 8.
 Note: The alphabetic symbol following each estimate in table 8 indicates its standard deviation. For explanation, see "Reliability of Estimates", page 8.



Reliability of Estimates

(a) Sampling Error

The estimates in this report are based on a sample of households. Somewhat different figures might have been obtained if a complete census had been taken using the same questionnaires, interviewers, supervisors, processing, etc. as those actually used in the Labour Force Survey. This difference is called the sampling error of the estimates. In the design and processing of the Labour Force Survey extensive efforts have been made to minimize the sampling error. The sampling error (expressed as a per cent of the estimate it refers to) is not the same for all estimates; of two estimates the larger one will likely have a smaller per cent sampling error and of two estimates of the same size the one referring to a characteristic more evenly distributed across the country will tend to have a smaller per cent sampling variability. Also, estimates relating to age and sex are usually more reliable than other estimates of expansible size.

(b) Non-sampling Errors

Errors, which are not related to sampling, may occur at almost every phase of a survey operation. Interviewers may misunderstand instructions, respondents may make errors in answering questions, the answers may be incorrectly entered on the questionnaires and errors may be introduced in the processing and tabulations of the data. All these errors are called non-sampling errors. Some of the non-sampling errors will usually balance out over a large number of observations but systematically occuring errors will contribute to biases. Non-sampling errors can be reduced by a careful design of questionnaires, intensive training and supervision of interviewers and a thorough control of the processing operation. In general, the more personal and more subjective inquiries are subject to larger errors. Also, data referring to persons with less stable labour force status will have relatively large non-sampling errors.

(c) Alphabetic Indicators of Standard Deviation

The sampling error, as described under (a) is not known. A quantity, called the <u>standard deviation</u>, can however be estimated from sample data itself. The standard deviation of an estimate is a <u>statistical measure</u> of its sampling error. It also partially measures the effect on non-sampling errors, but does not reflect any systematic biases in the data. The chances are about 68 out of 100 that the difference between a aample estimate and the corresponding census figure would be less than the standard deviation. The chances are about 95 out of 100 that the difference would be less than twice the standard deviation and about 99 out of 100 that it would be less than 2 1/2 times as large.

The standard deviations of the estimates, expressed as a per cent of the estimates, are indicated by letters. The letter "a" indicates that the standard deviation is smaller than 0.5% of the estimate, the letter "b" indicates that the atandard deviation is between 0.6% and 1.0% of the estimate and so on as shown in the table below.

Alphabetic designation of per cent standard deviations

Alphabetic	indicator	Per cent st	a	ndard deviation
a		0.0%	-	0.5%
b		0.6%	-	1.0%
с		1.1%	-	2.5%
d		2.6%	-	5.0%
е		5,1%	-	10.0%
£		10.1%	4	15.0%
g		15.1%		

The actual standard deviation of an estimate is not the same each month. Since the standard deviations of the current estimates are not available at the time when this report is published, the alphabetic indicators are based on the average standard deviations during the last year. They should, therefore, be interpreted only as indications of the order of magnitude of the standard deviations.

(d) Standard Deviation of Month-to-Month Changes

A rough upper limit for the standard deviation of the difference (change) between two estimates referring to two months up to a year apart may also be indicated using the table above. For most characteristics published in this report the standard deviation of the difference between two estimates is likely to be aomewhat smaller than the standard deviation of the smaller of the two estimates or in the immediately preceding range.

For example, suppose that a hypothetical estimate in May and June was 513,000 and 625,000 respectively and the per cent standard deviation of both estimates was indicated by the letter "c", i.e. it was between 1.1% and 2.5%. The difference between the May and June estimates (112,000) would, therefore, have a standard deviation which would likely be smaller than 2.5% of 513,000, i.e. it would likely be smaller than 12,800.

(e) Current Estimates of Standard Deviations

Standard deviations are computed monthly for several estimates and month-to-month changes. These are available usually in a few weeks after the publication of this report and can be obtained on request. Beginning with 1966, an annual report on the standard deviations during the last year will be released.