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THE LABOUR FORCE

NOVEMBER 1967

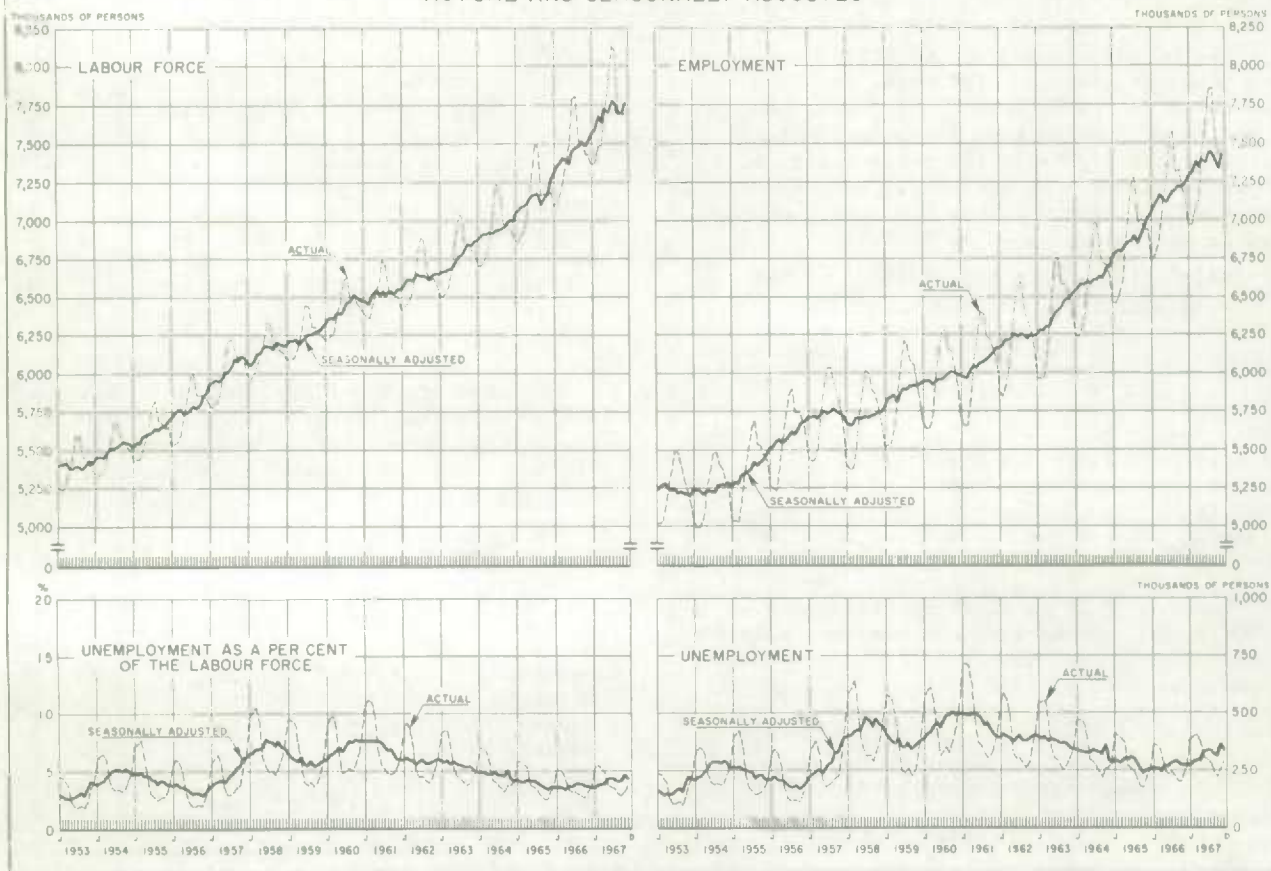
In the week ended November 11, 1967, the Canadian labour force was estimated at 7,698,000. This total included 7,409,000 persons employed for all or part of the week and 289,000 persons unemployed for the whole week. Employment decreased by 28,000 between October and November, while unemployment increased by 35,000. Compared with November 1966, the labour force was higher by 270,000, employment by 219,000 and unemployment by 51,000.

From October, employment in agriculture declined by 68,000; nonagricultural employment rose by 40,000 during the month. Employment was higher than in November last year

by 53,000 in agriculture and by 166,000 in nonagricultural industries. Between October and November, there was a decrease of 57,000 in employment of men but an increase of 29,000 in employment of women. Employment was higher than in November 1966 by 66,000 for men and 153,000 for women.

Unemployment amounted to 3.8 per cent of the labour force in November, compared with unemployment rates of 3.3 in October this year and 3.2 in November last year. Seasonally adjusted, the unemployment rate was 4.3 in November 1967.

LABOUR FORCE, EMPLOYMENT AND UNEMPLOYMENT
 IN CANADA
 ACTUAL AND SEASONALLY ADJUSTED



Employment and Unemployment by Region

Total employment in Canada rose by 1,567,000 between 1956 and 1966. For men, the increase during this period was 717,000 and for women it was 849,000. All regions shared in the growth in employment, gains ranging from 20 per cent in the Atlantic region to 39 per cent in British Columbia.

There were no appreciable changes in the regional distribution of the employed in the decade under consideration. In 1966, Ontario and Quebec continued to account for about two-thirds of total employment.

Distribution of Employment by Region

	1966		1956	
	(000's)	%	(000's)	%
Canada	7,152	100.0	5,585	100.0
Atlantic	586	8.2	489	8.8
Quebec	2,016	28.2	1,535	27.5
Ontario	2,651	37.1	2,096	37.5
Prairies	1,222	17.1	976	17.5
B.C.	678	9.5	489	8.8

The year-to-year increases in employment between 1956 and 1966 differed between regions. For all regions except the Prairies, the rate of increase in total employment was considerably higher in the second half of the period than in the first half. This was particularly the case for men. On the average, the increase in male employment between 1956 and 1961 did not exceed one per cent in any region; in the 1961-1966 interval, the rate of increase ranged between 1.2 per cent and 4.2 per cent. The rate of increase in female employment was higher in the second half of the period than in the first half for Quebec, Ontario and British Columbia but lower for the Atlantic and Prairie regions.

Annual Average Percentage Rate of Change in Employment by Region and Sex

	1961-1966			1956-1961		
	T	M	W	T	M	W
Canada	3.3	2.6	5.2	1.6	0.5	4.8
Atlantic	2.9	2.3	4.3	0.7	-0.7	5.4
Quebec	4.0	3.1	6.2	1.5	0.3	5.1
Ontario	3.1	2.5	4.5	1.6	0.8	3.6
Prairies	2.1	1.2	4.2	2.4	1.0	7.0
B.C.	5.0	4.2	7.2	1.5	0.5	4.6

Employment in agriculture declined by 233,000 during the period under review. Almost all of this decrease occurred in Quebec, Ontario and the Prairies.

Agricultural Employment

	1966	1956	Decrease	
	(000's)	(000's)	(000's)	%
Canada	544	777	233	30.0
Quebec	106	165	59	35.8
Ontario	140	214	74	34.6
Prairies	240	324	84	25.9

Agricultural employment continued to be concentrated in the Prairie region, Ontario and Quebec. The Atlantic region and British Columbia together accounted for only a little over 10 per cent in 1966.

Employment in Agriculture and Percentage Distribution by Region, 1966

	(000's)	%
Canada	544	100.0
Atlantic	32	5.9
Quebec	106	19.5
Ontario	140	25.7
Prairies	240	44.1
B.C.	25	4.6

The number of persons employed in nonagricultural industries averaged 6,609,000 in 1966. This represents a rise of 1,801,000, or 37.5 per cent, over 1956. The percentage increase for the regions ranged between 25.9 in the Atlantic region and 50.6 in the Prairies.

Non-farm employment of men rose by 27.7 per cent from 3,528,000 in 1956 to 4,507,000 in 1966. Rates of increase ranged between 14.5 per cent in the Atlantic and 38.9 per cent in the Prairie region. For women the increase was 64.2 per cent from 1,280,000 to 2,102,000. The Prairie region experienced the largest expansion, 79.7 per cent and Ontario the lowest, 49.5 per cent.

Nonagricultural Employment Percentage Increase 1956 - 1966

	Total	Men	Women
Canada	37.5	27.7	64.2
Atlantic	25.9	14.5	65.3
Quebec	39.4	27.9	74.1
Ontario	33.3	26.8	49.5
Prairies	50.6	38.9	79.7
B.C.	40.5	29.3	76.8

The number of paid workers in Canada was 6,096,000 in 1966 compared with 4,389,000 in 1956. This increase of 1,707,000 was distributed among the regions as indicated in the following table.

Employed Paid Workers by Region

	1966	1956	Increase	
	(000's)	(000's)	(000's)	%
Canada	6,096	4,389	1,707	38.9
Atlantic	504	389	115	29.6
Quebec	1,750	1,241	509	41.0
Ontario	2,337	1,743	594	34.1
Prairies	909	597	312	52.3
B.C.	597	419	178	42.5

Note: The estimates of employment for 1956 and 1966 are twelve-month averages.

(continued on page 8)

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 35,000 households chosen by area sampling methods across the country. Percentages of total households selected for the sample were as follows: Atlantic region, 1.6 p.c.; Quebec, 0.5 p.c.; Ontario, 0.5 p.c.; Prairie region, 0.8 p.c.; British Columbia, 0.7 p.c. 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 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.

Labour Force Statistics

Contents of the Tables - 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.

Canada, Employed (page 6). Tables 4 to 6 contain further detail on employment.

Canada, Unemployed (page 7). Table 7 contains further detail on unemployment.

Regions, Labour Force (page 7). Table 8 contains labour force data for the regions.

Supplementary Data - 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.

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:

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

For individual provinces of Atlantic and Prairie regions:

6. 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

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.

Unemployed - The unemployed includes all persons who, through the reference week:

- (a) were without work and seeking work, i.e., did no 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)

- 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 1 Summary	S.D. (1)	1967		1966		1965	
		Nov. 11	Oct. 14	Nov. 12	Oct. 15	Nov. 13	Oct. 16
Total							
Population 14 years of age and over(2)		14,026	13,997	13,620	13,587	13,252	13,226
Labour force	a	7,698	7,691	7,428	7,519	7,159	7,179
Employed	a	7,409	7,437	7,190	7,324	6,939	7,008
Agriculture	d	535	603	482	561	523	632
Non-agriculture	a	6,874	6,834	6,708	6,763	6,416	6,376
Unemployed	d	289	254	238	195	220	171
Not in the labour force	a	6,328	6,306	6,192	6,068	6,093	6,047

Participation rate (3)	a	54.9	54.9	54.5	55.3	54.0	54.3
Unemployment rate (4)							
Actual	d	3.8	3.3	3.2	2.6	3.1	2.4
Seasonally adjusted		4.3	4.7	3.7	3.7	3.5	3.4
Men							
Population 14 years of age and over(2)		6,952	6,938	6,751	6,735	6,568	6,555
Labour force	a	5,283	5,305	5,173	5,207	5,047	5,057
Employed	a	5,060	5,117	4,994	5,070	4,879	4,931
Agriculture	d	470	515	433	487	466	540
Non-agriculture	a	4,590	4,602	4,561	4,583	4,413	4,391
Unemployed	d	223	188	179	137	168	126
Not in the labour force	b	1,669	1,633	1,578	1,528	1,521	1,498

Participation rate (3)	a	76.0	76.5	76.6	77.3	76.8	77.1
Unemployment rate (4)	d	4.2	3.5	3.5	2.6	3.3	2.5
Women							
Population 14 years of age and over(2)		7,074	7,059	6,869	6,852	6,684	6,671
Labour force	b	2,415	2,386	2,255	2,312	2,112	2,122
Employed	b	2,349	2,320	2,196	2,254	2,060	2,077
Agriculture	e	65	88	49	74	57	92
Non-agriculture	b	2,284	2,232	2,147	2,180	2,003	1,985
Unemployed	e	66	66	59	58	52	45
Not in the labour force	a	4,659	4,673	4,614	4,540	4,572	4,549

Participation rate (3)	b	34.1	33.8	32.8	33.7	31.6	31.8
Unemployment rate (4)	e	2.7	2.8	2.6	2.5	2.5	2.1

(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.

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, 1946-1966		S.D. (1)	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	
Population 14 years of age and over (2)			13,475	13,128	12,817	12,536	12,280	12,053	11,831	11,605	11,388	11,123	
Labour force	a		7,420	7,141	6,933	6,748	6,615	6,521	6,411	6,242	6,137	6,008	
Employed	a		7,152	6,862	6,609	6,375	6,225	6,055	5,965	5,870	5,706	5,731	
Agriculture	d		544	594	630	649	660	681	683	700	718	748	
Non-agriculture	a		6,609	6,268	5,979	5,726	5,565	5,374	5,282	5,170	4,988	4,983	
Unemployed	d		267	280	324	374	390	466	446	372	432	278	
Not in the labour force	a		6,055	5,986	5,884	5,787	5,665	5,531	5,420	5,363	5,250	5,115	
Participation rate(3)	a		55.1	54.4	54.1	53.8	53.9	54.1	54.2	53.8	53.9	54.0	
Unemployment rate (4)	d		3.6	3.9	4.7	5.5	5.9	7.1	7.0	6.0	7.0	4.6	
			1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946
Population 14 years of age and over (2)			10,807	10,597	10,391	10,164	9,956	9,732	9,615	9,268	9,141	9,007	8,779
Labour force			5,782	5,610	5,493	5,397	5,324	5,223	5,163	5,055	4,988	4,942	4,829
Employed			5,585	5,364	5,243	5,235	5,169	5,097	4,976	4,913	4,875	4,832	4,666
Agriculture			777	819	878	858	891	939	1,018	1,077	1,096	1,122	1,186
Non-agriculture			4,808	4,546	4,365	4,377	4,278	4,158	3,958	3,837	3,779	3,711	3,480
Unemployed			197	245	250	162	155	126	186	141	114	110	163
Not in the labour force			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)			53.5	52.9	52.9	53.1	53.5	53.7	53.7	54.5	54.6	54.9	55.0
Unemployment rate (4)			3.4	4.4	4.6	3.0	2.9	2.4	3.6	2.8	2.3	2.2	3.4

Table 3 Age, sex, and marital status Week ended November 11, 1967	Total	14-19 years all persons	20-64 years				65 years and over all persons
			Men		Women		
			Married	Other	Married	Other	
Population 14 years of age and over(2)	14,026	2,322	3,997 a	1,084 b	4,091 a	1,048 c	1,484
Labour force	7,698 a	757 c	3,835 a	873 c	1,276 c	742 c	215 d
Employed	7,409 a	689 c	3,727 a	811 c	1,254 c	720 c	208 d
Unemployed	289 d	68 e	108 e	62 e	22 f	22 f	7 g
Not in the labour force	6,328 a	1,565 b	162 d	211 d	2,815 b	306 d	1,269 a
Participation rate (3) - 1967, Nov. 11	54.9 a	32.6 c	95.9 a	80.5 a	31.2 c	70.8 b	14.5 d
Oct. 14	54.9	32.4	96.2	81.6	30.9	70.5	14.9
Unemployment rate (4) - 1967, Nov. 11	3.8 d	9.0 e	2.8 e	7.1 e	1.7 f	3.0 f	3.3 g
Oct. 14	3.3	8.1	2.4	5.9	1.7	3.0	2.7

(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)

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 4 Summary	S.D. (1)	1967		1966		1965	
		Nov. 11(2)	Oct. 14(2)	Nov. 12(2)	Oct. 15(2)	Nov. 13(2)	Oct. 16(2)
Total employed	a	7,409	7,437	7,190	7,324	6,939	7,008
Agriculture	d	535	603	482	561	523	632
Non-agriculture	a	6,874	6,834	6,708	6,763	6,416	6,376
Employed, non-agriculture	a	6,874	6,834	6,708	6,763	6,416	6,376
Usually work 35 hours or more	a	6,151	6,161	6,064	6,104	5,806	5,799
At work 35 hours or more	a	5,586	3,473	4,595	3,601	4,458	3,417
At work less than 35 hours, or not at work	c	565	2,688	1,469	2,503	1,348	2,382
Due to economic reasons(3)	e	76	73	60	52	59	49
Due to other reasons(4)	c	489	2,615	1,409	2,451	1,289	2,333
Usually work less than 35 hours	c	723	673	644	659	610	577

Table 5 Industry	S.D. (1)	1967		1966		1965	
		Average Sept/Nov.	Average Aug/Oct.	Average Sept/Nov.	Average Aug/Oct.	Average Sept/Nov.	Average Aug/Oct.
Total employed	a	7,452	7,601	7,275	7,404	6,977	7,090
Agriculture	d	591	648	549	604	593	664
Other primary industries	d	229	236	229	235	247	269
Manufacturing	c	1,739	1,769	1,784	1,805	1,647	1,680
Construction	c	505	520	516	541	516	523
Transportation and other utilities	c	662	675	645	648	613	626
Trade	c	1,222	1,241	1,186	1,188	1,151	1,137
Finance, insurance, real estate	c	316	314	302	305	277	290
Community, personal, other services	c	1,746	1,745	1,650	1,655	1,539	1,488
Public administration	c	442	453	414	423	394	413

Note: From October 1962 to February 1966, the three-month averages in this table have been based on one-third of the records enumerated each month for the Labour Force Survey. Beginning with the three-month averages for January to March 1966, all of the records have been coded by industry each month and the averages are based on the full monthly surveys. Monthly estimates of employment by industry and occupation are available on request in the Special Tables series mentioned on page 3, "Other Data Available".

Table 6 Class of worker, agriculture and non-agriculture, and sex Week ended November 11, 1967	Total	Paid workers	Own account workers	Employers	Unpaid family workers
Total employed	7,409 a	6,335 a	562 c	334 c	178 d
Agriculture	535 d	82 e	297 d	41 e	115 e
Non-agriculture	6,874 a	6,253 a	265 d	293 d	63 e
Men	5,060 a	4,196 a	479 c	306 c	79 e
Agriculture	470 d	70 e	292 d	39 f	69 e
Non-agriculture	4,590 a	4,126 a	187 d	267 d	10 g
Women	2,349 b	2,139 b	83 e	28 e	99 d
Agriculture	65 e	12 f	5 g	2 g	46 e
Non-agriculture	2,284 b	2,127 b	78 e	26 e	53 e

- (1) "S.D." = Standard deviation. For explanation, see "Reliability of Estimates", page 8.
- (2) In the reference weeks of October 1965, 1966 and 1967, and of November 1965 and 1966, unusually large numbers worked fewer than 35 hours due to Thanksgiving Day and Remembrance Day holidays. Since Remembrance Day fell on a Saturday in 1967, its effect on number of hours worked in the November 1967 reference week was very much less than in 1965 or 1966.
- (3) 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.
- (4) 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.

Canada, Unemployed
and
Regions, Labour Force

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.

(Estimates in thousands)

Table 7 Unemployed	S.D. (1)	1967		1966		1965	
		Nov. 11	Oct. 14	Nov. 12	Oct. 15	Nov. 13	Oct. 16
		Total unemployed	d	289	254	238	195
Without work and seeking work	d	267	232	219	184	204	161
Seeking full-time work	d	253	219	203	167	188	152
Seeking part-time work	f	14	13	16	17	16	9
On temporary layoff up to 30 days	f	22	22	19	11	16	10

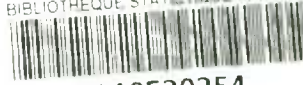
Without work and seeking work	d	267	232	219	184	204	161
Seeking under 1 month	e	106	91	87	73	90	64
Seeking 1-3 months	e	100	77	82	60	70	55
Seeking 4-6 months	e	33	35	24	24	24	22
Seeking more than 6 months	e	28	29	26	27	20	20

Table 8 Regional distributions Week ended November 11, 1967	Canada	Atlantic region	Quebec	Ontario	Prairie region	British Columbia
Population 14 years of age and over	14,026	1,319	4,042	4,986	2,290	1,389
Men	6,952	653	1,994	2,459	1,156	690
Women	7,074	666	2,048	2,527	1,134	699
Labour force	7,698 a	649 b	2,182 b	2,825 a	1,262 b	780 b
Men	5,283 a	455 b	1,514 a	1,912 a	879 a	523 b
Women	2,415 b	194 c	668 c	913 c	383 c	257 d
Employed	7,409 a	613 b	2,081 b	2,748 b	1,230 b	737 b
Men	5,060 a	424 b	1,436 b	1,856 a	853 b	491 b
Women	2,349 b	189 c	645 c	892 c	377 c	246 d
Agriculture	535 d	29 e	114 e	143 e	228 d	21 f
Non-agriculture	6,874 a	584 c	1,967 b	2,605 b	1,002 c	716 c
Paid workers	6,335 a	534 c	1,809 b	2,426 b	920 b	646 c
Men	4,196 a	363 b	1,224 b	1,600 b	585 b	424 c
Women	2,139 b	171 d	585 c	826 c	335 c	222 d
Unemployed	289 d	36 e	101 e	77 e	32 e	43 e
Men	223 d	31 e	78 e	56 e	26 f	32 e
Women	66 e	5 f	23 f	21 f	6 g	11 g
Not in the labour force	6,328 a	670 b	1,860 b	2,161 b	1,028 b	609 c
Men	1,669 b	198 c	480 c	547 c	277 c	167 c
Women	4,659 a	472 b	1,380 b	1,614 b	751 b	442 c

Employed - 1967, November 11	7,409 a	613 b	2,081 b	2,748 b	1,230 b	737 b
October 14	7,437	626	2,085	2,743	1,242	741
1966, November 12	7,190	592	2,045	2,660	1,207	686
October 15	7,324	610	2,076	2,690	1,249	699
1965, November 13	6,939	580	1,945	2,572	1,197	645
October 16	7,008	602	1,965	2,559	1,238	644
Unemployed 1967, November 11	289 d	36 e	101 e	77 e	32 e	43 e
October 14	254	27	96	72	19	40
1966, November 12	238	31	86	60	26	35
October 15	195	28	73	50	16	28
1965, November 13	220	29	93	49	24	25
October 16	171	23	75	37	13	23

(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.



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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, enumerators, 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 comparable size.

than 0.5% of the estimate, the letter "b" indicates that the standard 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 standard deviation
a	0.0% - 0.5%
b	0.6% - 1.0%
c	1.1% - 2.5%
d	2.6% - 5.0%
e	5.1% - 10.0%
f	10.1% - 15.0%
g	15.1% -

(b) Non-sampling Errors

Errors, which are not related to sampling, may occur at almost every phase of a survey operation. Enumerators 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 occurring errors will contribute to biases. Non-sampling errors can be reduced by a careful design of questionnaires, intensive training and supervision of enumerators 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.

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 somewhat smaller than the standard deviation of the smaller of the two estimates or in the immediately preceding range.

(c) Alphabetic Indicators of Standard Deviation

The sampling error, as described under (a) is not known. A quantity, called the standard deviation, can however be estimated from sample data itself. The standard deviation of an estimate is a statistical measure of its sampling error. It also partially measures the effect of 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 sample 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.

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.

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

Employment and Unemployment by Region (continued from page 2)

In all regions, the proportion of paid workers to total employment was higher in 1966 than in 1956. In the Prairies the ratio was about three out of four and in the other regions the proportions were 85 per cent or more.

The patterns of change in employment described above are reflected in the unemployment rates. Between 1956 and 1961, total employment grew at a slower rate than the labour force and the unemployment rate for Canada rose from 3.4 per cent to 7.1 per cent. In the period 1961-1966, the increase in employment was larger than for the labour force and the unemployment rate dropped to 3.6 per cent. Similarly, unemployment rates rose and fell in all regions.

Throughout the 1956-1966 interval, unemployment rates were higher than the Canada average for the Atlantic region, Quebec and (except for 1956) British Columbia.

