

Copy 2

one copy 3

CATALOGUE No.

71-001

MONTHLY

DOMINION BUREAU OF STATISTICS

OTTAWA - CANADA

Published by Authority of the Minister of Trade and Commerce

Dept. of Manpower & Immig.
 of Trade and Commerce

FEB 24 1970

Price: \$2.00 per year

LIBRARY SERIALS

Vol. 26 No. 1

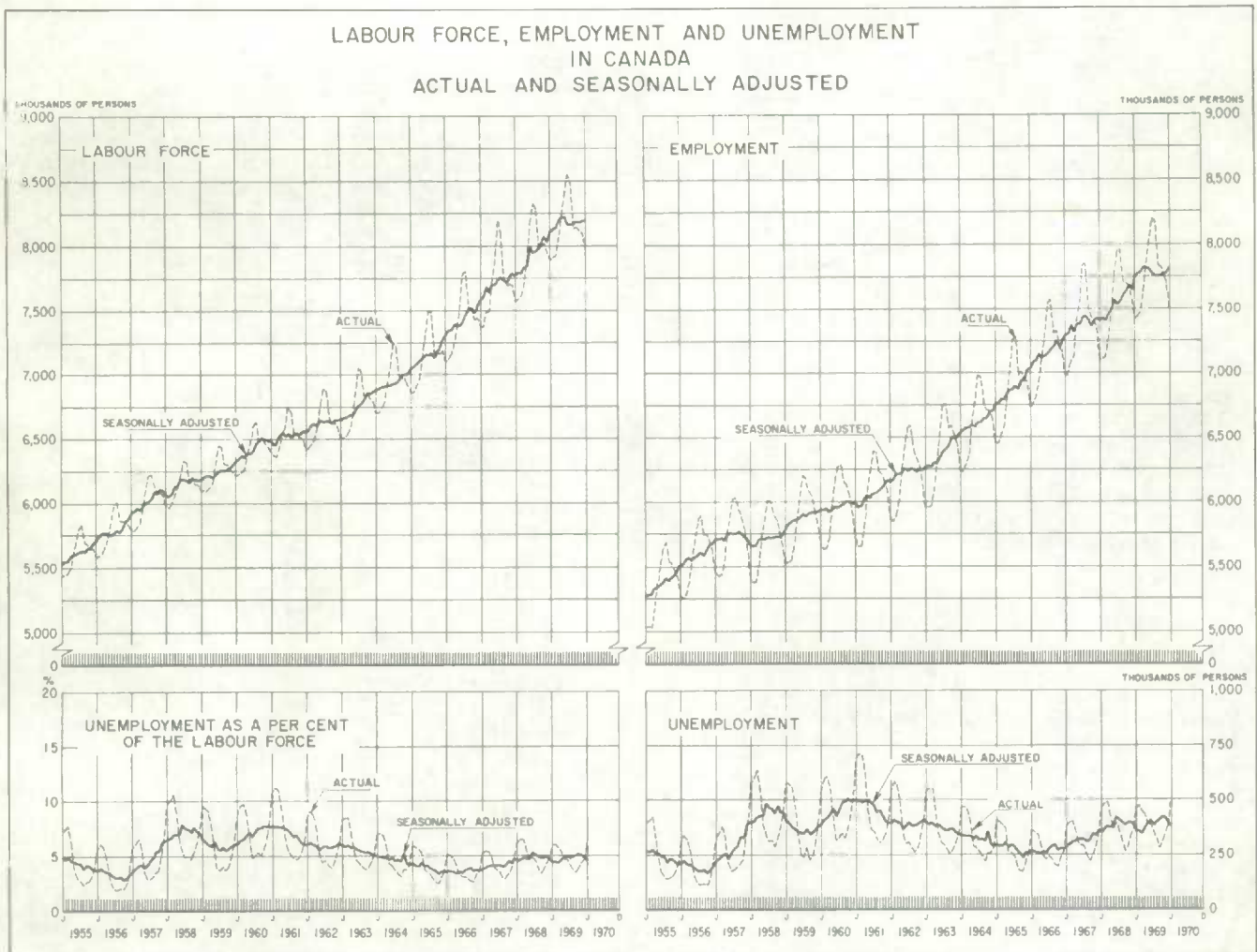
THE LABOUR FORCE JANUARY 1970

The Canadian labour force was estimated at 7,984,000 in the week ended January 17, 1970. This total included 7,499,000 persons employed for all or part of the week and 485,000 persons unemployed for the whole week. The labour force decreased by 111,000 from December; the employed decreased by 213,000 while the unemployed increased by 102,000. Compared to January last year, the January 1970 estimates were higher by 93,000 for the labour force, by 75,000 for the employed and by 18,000 for the unemployed.

industries. Nonagricultural employment was 104,000 higher than in January 1969 and employment in agriculture was 29,000 lower. From December, employment declined by 137,000 among men and by 76,000 among women. Men accounted for 30,000 of the year-to-year increase in employment and women for 45,000.

Expressed as a percentage of the labour force, the unemployment rate was 6.1, compared with rates of 4.7 in December and 5.9 in January 1969. Seasonally adjusted, the unemployment rate in January 1970 was 4.5.

Most of the decrease in employment between December and January occurred in nonagricultural



Fourth Quarter Review of the Labour Force
1968-1969

In the fourth quarter of 1969, the labour force was 134,000 higher than in the fourth quarter 1968, employment was 117,000 higher and unemployment 17,000 higher.

Fourth Quarter Averages
(000's)

	<u>1969</u>	<u>1968</u>
Labour Force	8,117	7,983
Employed	7,767	7,650
Unemployed	350	333

As indicated in the table below, the year-over-year increase in the labour force narrowed considerably between the first and second half of 1969. Both men and women experienced a slowing down in the rate of growth. Among men, the rate of growth was reduced for all age groups. The most conspicuous drop from the first half of the year, among women, was for the group 45 years of age and over.

Year-to-Year Percentage Increases
in the Labour Force

	<u>1968-1969</u>					Average Annual Increase <u>1963-1968</u>
	<u>1st Qtr.</u>	<u>2nd Qtr.</u>	<u>3rd Qtr.</u>	<u>4th Qtr.</u>	<u>Calendar Year</u>	
Both Sexes	4.2	4.1	2.4	1.7	3.1	3.2
Men	3.1	2.6	1.5	1.4	2.1	2.2
Women	6.7	7.4	4.3	2.3	5.1	5.6

For the year as a whole, the total labour force averaged 8,162,000 in 1969 and 7,919,000 in 1968, an increase of 3.1 per cent. This compares with an annual average rate of increase of 3.2 per cent for the previous five years, a period of rapid expansion. In 1969, the labour force was 2.1 per cent higher than a year earlier for men and 5.1 per cent for women. For women the year-to-year increase was somewhat lower than the five-year average of 5.6 per cent.

In the fourth quarter of 1969, total employment was 1.5 per cent higher than in the corresponding quarter of 1968; male employment was higher by 1.3 per cent and female employment by 1.9 per cent. For both men and women, year-to-year gains in employment in the second half of 1969 were substantially lower than in the first half of the year.

Employment in the fourth quarter was substantially higher in 1969 than in 1968 for British Columbia. In the other regions, there were relatively small increases or little change.

For the year as a whole, employment was higher in 1969 than in 1968 for all regions. The rates of increase were higher than the 1963-1968 average in Ontario and British Columbia; they were lower in the Atlantic region and in Quebec and about the same in the Prairies.

Percentage Change in Employment
Canada and Regions

	<u>4th Quarter</u>	<u>Calendar Year</u>	Average Annual Increase <u>1963-68</u>
	<u>1968-69</u>	<u>1968-69</u>	
Canada	+ 1.5	+ 3.2	3.3
Atlantic	+ 1.2	+ 1.5	2.7
Quebec	+ 1.5	+ 2.4	3.3
Ontario	+ 1.6	+ 3.7	3.4
Prairies	- 0.6	+ 2.5	2.4
B.C.	+ 5.4	+ 6.0	5.5

In the service-producing industries, employment was 141,000 higher in the fourth quarter of 1969 than in the corresponding quarter of 1968. Community, personal and other service accounted for more than sixty per cent of this increase. In the goods-producing sector, employment was lower than a year earlier in all industry groups except manufacturing.

The largest absolute increases in employment from a year earlier were in community, personal and other service for both men (+ 66,000) and women (+ 21,000).

Employment by Industry

	<u>Fourth Quarter Averages</u>		<u>Year-to-Year Change</u>	
	<u>(000's)</u>	<u>(000's)</u>	<u>(000's)</u>	<u>%</u>
	<u>1969</u>	<u>1968</u>		
All industries	7,767	7,650	+ 117	+ 1.5
Goods-producing industries	2,988	3,012	- 24	- 0.8
Agriculture	499	522	- 23	- 4.4
Other primary industries	210	223	- 13	- 5.8
Manufacturing	1,794	1,772	+ 22	+ 1.2
Construction	485	495	- 10	- 2.0
Service producing industries	4,779	4,638	+ 141	+ 3.0
Transportation & other utilities	680	660	+ 20	+ 3.0
Trade	1,317	1,299	+ 18	+ 1.4
Finance	359	331	+ 28	+ 8.5
Community, personal & other service	1,967	1,880	+ 87	+ 4.6
Public administration	456	468	- 12	- 2.6

(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 about 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

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.

(1) For a comprehensive description of the design of the Labour Force Survey, see Dominion Bureau of Statistics, Canadian Labour Force Survey - Methodology, Catalogue No. 71-504, Ottawa, 1965.

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 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

- 4 -

(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 1 Summary	S.D. (1)	1970	1969		1968		1967
		Jan. 17	Dec. 13	Jan. 18	Dec. 14	Jan. 13	Dec. 9
<u>Total</u>							
Population 14 years of age and over(2)		14,841	14,809	14,470	14,435	14,086	14,053
Labour force	a	7,984	8,095	7,891	7,940	7,564	7,697
Employed	a	7,499	7,712	7,424	7,567	7,100	7,344
Agriculture	d	422	457	451	467	459	487
Non-agriculture	a	7,077	7,255	6,973	7,100	6,641	6,857
Unemployed	d	485	383	467	373	464	353
Not in the labour force	a	6,857	6,714	6,579	6,495	6,522	6,356

Participation rate (3)	a	53.8	54.7	54.5	55.0	53.7	54.8
Unemployment rate (4)							
Actual	d	6.1	4.7	5.9	4.7	6.1	4.6
Seasonally adjusted		4.5	4.8	4.4 ^r	4.8	4.5 ^r	4.7
<u>Men</u>							
Population 14 years of age and over(2)		7,355	7,339	7,173	7,156	6,980	6,965
Labour force	a	5,436	5,488	5,393	5,401	5,217	5,271
Employed	a	5,055	5,192	5,025	5,107	4,833	4,987
Agriculture	d	382	407	403	412	418	432
Non-agriculture	a	4,673	4,785	4,622	4,695	4,415	4,555
Unemployed	d	381	296	368	294	384	284
Not in the labour force	b	1,919	1,851	1,780	1,755	1,763	1,694

Participation rate (3)	a	73.9	74.8	75.2	75.5	74.7	75.7
Unemployment rate (4)	d	7.0	5.4	6.8	5.4	7.4	5.4
<u>Women</u>							
Population 14 years of age and over(2)		7,486	7,470	7,297	7,279	7,106	7,088
Labour force	b	2,548	2,607	2,498	2,539	2,347	2,426
Employed	b	2,444	2,520	2,399	2,460	2,267	2,357
Agriculture	e	40	50	48	55	41	55
Non-agriculture	b	2,404	2,470	2,351	2,405	2,226	2,302
Unemployed	e	104	87	99	79	80	69
Not in the labour force	a	4,938	4,863	4,799	4,740	4,759	4,662

Participation rate (3)	b	34.0	34.9	34.2	34.9	33.0	34.2
Unemployment rate (4)	e	4.1	3.3	4.0	3.1	3.4	2.8

(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.

^r Revised.

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, 1946-1969		S.D. (1)	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959		
Population 14 years of age and over (2)			14,638	14,264	13,874	13,475	13,128	12,817	12,536	12,280	12,053	11,831	11,605		
Labour force		a	8,162	7,919	7,694	7,420	7,141	6,933	6,748	6,615	6,521	6,411	6,242		
Employed		a	7,780	7,537	7,379	7,152	6,862	6,609	6,375	6,225	6,055	5,965	5,870		
Agriculture		d	535	546	559	544	594	630	649	660	681	683	700		
Non-agriculture		a	7,245	6,992	6,820	6,609	6,268	5,979	5,726	5,565	5,374	5,282	5,170		
Unemployed		d	382	382	315	267	280	324	374	390	466	446	372		
Not in the labour force		a	6,475	6,344	6,179	6,055	5,986	5,884	5,787	5,665	5,531	5,420	5,363		
Participation rate(3)		a	55.8	55.5	55.5	55.1	54.4	54.1	53.8	53.9	54.1	54.2	53.8		
Unemployment rate (4)		d	4.7	4.8	4.1	3.6	3.9	4.7	5.5	5.9	7.1	7.0	6.0		
			1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946
Population 14 years of age and over (2)			11,388	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			6,137	6,008	5,782	5,610	5,493	5,397	5,324	5,223	5,163	5,055	4,988	4,942	4,829
Employed			5,706	5,731	5,585	5,364	5,243	5,235	5,169	5,097	4,976	4,913	4,875	4,832	4,666
Agriculture			718	748	777	819	878	858	891	939	1,018	1,077	1,096	1,122	1,186
Non-agriculture			4,988	4,983	4,808	4,546	4,365	4,377	4,278	4,158	3,958	3,837	3,779	3,711	3,480
Unemployed			432	278	197	245	250	162	155	126	186	141	114	110	163
Not in the labour force			5,250	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)			53.9	54.0	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)			7.0	4.6	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 January 17, 1970	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)	14,841	2,459	4,211 a	1,173 b	4,308 a	1,134 c	1,556
Labour force	7,984 a	706 c	3,983 a	910 c	1,441 c	757 c	187 d
Employed	7,499 a	604 c	3,793 a	795 c	1,399 c	729 c	179 d
Unemployed	485 d	102 e	190 d	115 e	42 f	28 f	8 g
Not in the labour force	6,857 a	1,753 b	228 d	263 d	2,867 b	377 d	1,369 a
Participation rate (3) - 1970 Jan. 17	53.8 a	28.7 c	94.6 a	77.6 a	33.4 c	66.8 b	12.0 d
1969 Dec. 13	54.7	30.8	95.0	78.5	34.2	66.6	12.6
Unemployment rate (4) - 1970 Jan. 17	6.1 d	14.4 e	4.8 d	12.6 e	2.9 f	3.7 f	4.3 g
1969 Dec. 13	4.7	10.4	3.9	9.1	2.5	2.8	4.6

(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)	1970	1969		1968		1967
		Jan. 17	Dec. 13	Jan. 18	Dec. 14	Jan. 13	Dec. 9
Total employed	a	7,499	7,712	7,424	7,567	7,100	7,344
Agriculture	d	422	457	451	467	459	487
Non-agriculture	a	7,077	7,255	6,973	7,100	6,641	6,857
Employed, non-agriculture	a	7,077	7,255	6,973	7,100	6,641	6,857
Usually work 35 hours or more	a	6,250	6,347	6,174	6,248	5,965	6,125
At work 35 hours or more	a	5,624	5,900	5,600	5,769	5,344	5,641
At work less than 35 hours, or not at work	c	626	447	574	479	621	484
Due to economic reasons(2)	e	92	73	77	80	79	73
Due to other reasons(3)	c	534	374	497	399	542	411
Usually work less than 35 hours	c	827	908	799	852	676	732

Table 5 Industry	S.D. (1)	1970	1969		1968		1967
		Jan. 17	Dec. 13	Jan. 18	Dec. 14	Jan. 13	Dec. 9
Total employed	a	7,499	7,712	7,424	7,567	7,100	7,344
Agriculture	d	422	457	451	467	459	487
Other primary industries	d	207	206	202	219	208	227
Manufacturing	c	1,749	1,757	1,764	1,765	1,658	1,712
Construction	c	416	461	431	466	401	452
Transportation and other utilities	c	674	687	646	675	649	657
Trade	c	1,250	1,347	1,267	1,314	1,205	1,287
Finance, insurance, real estate	d	361	358	336	331	320	319
Community, personal, other service	c	1,965	1,971	1,858	1,873	1,768	1,769
Public administration	c	455	468	469	457	432	434

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.

Table 6 Class of worker, agriculture and non-agriculture, and sex Week ended January 17, 1970	Total	Paid workers	Own account workers	Employers	Unpaid family workers
Total employed	7,499 a	6,521 a	531 c	297 c	150 d
Agriculture	422 d	56 e	254 d	24 f	88 e
Non-agriculture	7,077 a	6,465 a	277 d	273 d	62 e
Men	5,055 a	4,266 a	448 c	269 c	72 d
Agriculture	382 d	49 e	248 d	24 f	61 e
Non-agriculture	4,673 a	4,217 a	200 d	245 d	11 f
Women	2,444 b	2,255 b	83 e	28 e	78 d
Agriculture	40 e	7 f	6 g	- g	27 e
Non-agriculture	2,404 b	2,248 b	77 e	28 e	51 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.

Table 7 Unemployed	S.D. (1)	1970	1969		1968		1967
		Jan. 17	Dec. 13	Jan. 18	Dec. 14	Jan. 13	Dec. 9
Total unemployed	d	485	383	467	373	464	353
Without work and seeking work	d	423	350	429	343	417	326
Seeking full-time work	d	401	328	408	320	400	312
Seeking part-time work	f	22	22	21	23	17	14
On temporary layoff up to 30 days	f	62	33	38	30	47	27

Without work and seeking work	d	423	350	429	343	417	326
Seeking under 1 month	d	108	106	124	110	134	116
Seeking 1-3 months	d	194	149	185	142	195	135
Seeking 4-6 months	e	67	49	58	47	51	42
Seeking more than 6 months	e	54	46	62	44	37	33

Table 8 Regional distributions Week ended January 17, 1970		Canada	Atlantic region	Quebec	Ontario	Prairie region	British Columbia
Population 14 years of age and over		14,841	1,376	4,250	5,311	2,400	1,504
Men		7,355	682	2,097	2,620	1,209	747
Women		7,486	694	2,153	2,691	1,191	757
Labour force		7,984 a	623 b	2,232 b	2,982 a	1,306 b	841 b
Men		5,436 a	429 b	1,549 a	2,000 a	893 a	565 b
Women		2,548 b	194 c	683 c	982 c	413 c	276 d
Employed		7,499 a	561 b	2,054 b	2,858 a	1,246 b	780 b
Men		5,055 a	375 b	1,407 b	1,906 a	845 b	522 b
Women		2,444 b	186 c	647 c	952 c	401 c	258 d
Agriculture		422 d	19 e	84 e	106 e	194 d	19 f
Non-agriculture		7,077 a	542 b	1,970 b	2,752 b	1,052 c	761 c
Paid workers		6,521 a	496 c	1,792 b	2,566 b	969 b	698 c
Men		4,266 a	327 c	1,206 b	1,669 b	609 b	455 b
Women		2,255 b	169 c	586 c	897 c	360 c	243 d
Unemployed		485 d	62 e	178 e	124 e	60 e	61 e
Men		381 d	54 e	142 e	94 e	48 e	43 e
Women		104 e	8 f	36 f	30 e	12 g	18 f
Not in the labour force		6,857 a	753 b	2,018 b	2,329 b	1,094 b	663 c
Men		1,919 b	253 c	548 c	620 c	316 c	182 c
Women		4,938 a	500 b	1,470 b	1,709 b	778 b	481 c

Employed	1970 January 17	7,499 a	561 b	2,054 b	2,858 a	1,246 b	780 b
	1969 December 13	7,712	595	2,104	2,927	1,290	796
	1969 January 18	7,424	563	2,034	2,836	1,256	735
	1968 December 14	7,567	588	2,069	2,852	1,286	772
	1968 January 13	7,100	548	1,970	2,684	1,196	702
	1967 December 9	7,344	596	2,044	2,749	1,226	729
Unemployed	1970 January 17	485 d	62 e	178 e	124 e	60 e	61 e
	1969 December 13	383	46	152	95	44	46
	1969 January 18	467	63	187	111	53	53
	1968 December 14	373	45	152	87	45	44
	1968 January 13	464	67	166	120	52	59
	1967 December 9	353	42	126	91	45	49

(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.



1010520607

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 comparable 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 occurring 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 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 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 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.

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 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% -

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.

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.

Fourth Quarter Review of the Labour Force, 1968-1969 (continued from page 2)

Total unemployment averaged 350,000 in the fourth quarter of 1969, an increase of 17,000 from the fourth quarter of 1968. Unemployed persons comprised 4.3 per cent of the labour force compared with 4.2 per cent a year earlier.

Comparing fourth quarters, the unemployed as a percentage of the labour force was higher in 1969 than in 1968 in Quebec and the Prairies. In the other regions, there was little change in the unemployment rate.

Unemployment and Unemployment Rates by Sex
Fourth Quarter Averages

	Unemployment (000's)		Unemployment Rates %	
	1969	1968	1969	1968
Total	350	333	4.3	4.2
Men	258	253	4.7	4.7
Women	93	80	3.6	3.1

Unemployment Rates by Region
Fourth Quarter Averages

	1969	1968
Canada	4.3	4.2
Atlantic	6.2	6.2
Quebec	6.3	6.0
Ontario	2.8	2.7
Prairies	2.9	2.6
British Columbia	5.3	5.4