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## THE LABOUR FORCE

JUNE 1970

In the week ended June 20, 1970, the Canadian labour force was estimated at $8,677,000$. Of this total, $8,148,000$ persons were employed for all or part of the week and 529,000 were unemployed for the whole week. Between May and June, the labour force increased by 212,000 , the employed by 196,000 and the unemployed by 16,000 . Compared with June 1969, the labour force, the employed and the unemployed were higher by $274,000,128,000$ and 146,000 , respectively.

Most of the increase in total employment between May and June occurred in nonagricultural industries. Nonagricultural
employment was 139,000 higher while employment in agriculture was 11,000 lower than in June 1969. Men accounted for 165,000 and women for 31,000 of the May-toJune employment increase, Employment was higher than in June 1969, by 32,000 for men and by 96,000 for women.

Expressed as a percentage of the labour force, the unemployment rate was 6.1 in June. In May the rate was 6.1 and in June last year it was 4.6. Seasonally adjusted, the unemployment rate in June 1970 was 6.6 .


## Regional Employment and Unemployment

Total employment in Canada increased by 1,910,000 between 1959 and 1969. For men, the increase during this period was 909,000 and for women it was 1,001,000. Employment was substantially higher at the end than at the beginning of the period in all regions. Percentage gains were as follows: Atlantic 25.5, Quebec 31.6, Ontario 33.6, Prairies 25.1, British Columbia 52.6.

## Distribution of Employment by Region

|  | 1969 |  | 1959 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 000's | \% | 000's | \% |
| Canada | 7,780 | 100.0 | 5,870 | 100.0 |
| Atlantic | 605 | 7.8 | 482 | 8.2 |
| Quebec | 2,132 | 27.4 | 1,620 | 27.6 |
| Ontario | 2,936 | 37.7 | 2,198 | 37.4 |
| Prairies | 1,312 | 16.9 | 1,049 | 17.9 |
| B.C. | 795 | 10.2 | 521 | 8.9 |

In 1969, Ontario and Quebec together accounted for almost two-thirds of all persons employed. Changes in the regional distribution of the employed between 1959 and 1969 were small.

Agricultural employment continues to be concentrated in the Prairies, Ontario and Quebec. The Atlantic region and British Columbia together account for less than ten per cent of the Canada total.

Employment in Agriculture and Percentage Distribution by Region, 1969

|  | $\left(000^{\prime} \mathrm{s}\right)$ | $\%$ |
| :--- | ---: | ---: |
| Canada | 535 |  |
| Atlantic | 26 | 100 |
| Quebec | 107 | 5 |
| Ontario | 136 | 20 |
| Prairies | 243 | 25 |
| B.C. | 23 | 45 |
|  |  | 4 |

During the period under review, employ= ment in agriculture declined by 165,000 . Most of this decrease occurred in Quebec, Ontario and the Prairies.

## Agricultural Employment

$$
\frac{1969}{\left(000^{\prime} \mathrm{s}\right)} \quad \frac{1959}{\left(000^{\prime} \mathrm{s}\right)} \frac{\text { Decrease }}{\left(000^{\prime} \mathrm{s}\right)} \%
$$

| Canada | 535 | 700 | 165 | 24 |
| :---: | :---: | :---: | ---: | :---: |
| Quebec | 107 | 155 | 48 | 31 |
| Ontario | 136 | 177 | 41 | 23 |
| Prairies | 243 | 289 | 46 | 16 |

Employment in non-agricultural industries in Canada rose by $2,075,000$ or 40.1 per cent
between 1959 and 1969. The increases for the regions ranged between 36 per cent in the Atlantic and 56 per cent in British Columbia.


Non-farm employment of men rose by 30 per cent during the 1959-1969 period. Rates of increase ranged between 23 per cent in the Atlantic region and 41 per cent in British Columbia. For women, the Canada increase was 67 per cent with British Columbis experienc. ing the largest expansion, 98 per cent and Quebec the smallest, 61 per cent.

The number of paid workers in Canada was $6,720,000$ in 1969 compared with $4,735,000$ in 1959. This increase was distributed among the regions as follows:

## Employed Paid Workers by Region

$$
\frac{1969-1959}{\left(000^{\prime} \mathrm{s}\right)\left(000^{\prime} \mathrm{s}\right)} \frac{\text { Increase }}{\left(000^{\prime} \mathrm{s}\right)}
$$

| Canada | 6,720 | 4,735 | 1,985 | 42 |
| :--- | ---: | ---: | ---: | ---: |
| Atlantic | 530 | 387 | 143 | 37 |
| Quebec | 1,858 | 1,335 | 523 | 39 |
| Ontario | 2,624 | 1,869 | 755 | 40 |
| Prairies | 994 | 700 | 294 | 42 |
| B.C. | 714 | 445 | 269 | 60 |

The proportion of paid workers to total employment was 86 per cent in 1969 compared to 81 per cent in 1959. In 1969, the ratio of paid workers to total employment was more than 85 per cent in all regions except the Prairies where there are relatively large numbers of self-employed and unpaid family workers in agriculture.
(continued on page

## 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 Eorce (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 con-
talns further detall 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 avallable.

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 1 n labour force.

## Definitions and Explanations

Labour Eorce - The civilian labour force is composed of that portion of the civilian nonins= titutional 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 111, 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 (exclustve 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.

| $\frac{\text { Table } 1}{\text { Summery }}$ | $\begin{aligned} & \text { S.D. } \\ & \text { (1) } \end{aligned}$ | 1970 |  | 1969 |  | 1968 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | June 20 | May | June <br> 21 | $\begin{array}{r} \text { May } \\ 24 \end{array}$ | June 22 | $\begin{gathered} \text { May } \\ 18 \end{gathered}$ |
| Total <br> Population 14 years of age and over(2) |  |  |  |  |  |  |  |
|  |  | 15,000 | 14,970 | 14,619 | 14,592 | 14,249 | 14,213 |
| Labour force | a | 8,677 | 8,465 | 8,403 | 8,248 | 8,158 | 7,871 |
| Employed | a | 8,148 | 7,952 | 8,020 | 7,862 | 7,763 | 7,505 |
| Agriculture | d | 569 | 550 | 580 | 592 | 591 | 584 |
| Non-agriculture | a | 7,579 | 7,402 | 7,440 | 7,270 | 7,172 | 6,921 |
| Unemployed | d | 529 | 513 | 383 | 386 | 395 | 366 |
| Not in the labour force | a | 6,323 | 6,505 | 6,216 | 6,344 | 6,091 | 6,342 |
| Participation rate (3) | a | 57.8 | 56.5 | 57.5 | 56.5 | 57.3 | 55.4 |
| Unemployment rate (4) <br> Actual <br> Seasonally adjusted | d | $\begin{aligned} & 6.1 \\ & 6.6 \end{aligned}$ | $\begin{aligned} & 6.1 \\ & 6.2 \end{aligned}$ | $\begin{aligned} & 4.6 \\ & 4.9 \end{aligned}$ | $\begin{aligned} & 4.7 \\ & 4.8 \end{aligned}$ | $\begin{aligned} & 4.8 \\ & 5.3^{r} \end{aligned}$ | 4.6 4.8 |
| Population 14 years of age and over(2) |  |  |  |  |  |  |  |
|  |  | 7,433 | 7,419 | 7,246 | 7,233 | 7,062 | 7,045 |
| Labour force | a | 5,885 | 5,733 | 5,743 | 5,622 | 5,637 | 5,444 |
| Employed | a | 5,501 | 5,336 | 5,469 | 5,333 | 5,349 | 5,158 |
| Agriculture | d | 487 | 468 | 493 | 502 | 510 | 511 |
| Non-agriculture | a | 5,013 | 4,867 | 4,976 | 4,831 | 4,839 | 4,647 |
| Unemployed | d | 384 | 397 | 274 | 289 | 288 | 286 |
| Not in the labour force | b | 1,548 | 1,686 | 1,503 | 1,611 | 1,425 | 1,601 |
| Participation rate (3) | a | 79.2 | 77.3 | 79.3 | 77.7 | 79.8 | 77.3 |
| Unemployment rate (4) | d | 6.5 | 6.9 | 4.8 | 5.1 | 5.1 | 5.3 |
| Women <br> Population 14 years of age and over(2) |  |  |  |  |  |  |  |
|  |  | 7,567 | 7,551 | 7,373 | 7,359 | 7,187 | 7,168 |
| Labour force | b | 2,792 | 2,732 | 2,660 | 2,626 | 2,521 | 2,427 |
| Employed Agriculture | b | 2,647 | 2,616 | 2,551 | 2,529 | 2,414 | 2,347 |
|  | e | 81 | 81 | 87 | 90 | 81 | 73 |
| Non-agricultureUnemployed | $b$ | 2,565 | 2,535 | 2,464 | 2,439 | 2,333 | 2,274 |
|  | e | 145 | 116 | 109 | 97 | 107 | 80 |
| Not in the labour force | a | 4,775 | 4,819 | 4,713 | 4,733 | 4,666 | 4,741 |
| Participation rate (3) | b | 36.9 | 36.2 | 36.1 | 35.7 | 35.1 | 33.9 |
| Unemployment rate (4) | e | 5.2 | 4.2 | 4.1 | 3.7 | 4.2 | 3.3 |

(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 Table 2 all statistics refer to a specific week, the 1 ast day of whels is indicated. The sums of individual items may not always enual the totals because of rounding.

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 3 <br> Age, sex, and marita! status Week ended June 20, 1970 | Tocal | ```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) | 15,000 | 2,485 | 4,211 a | $1,233 \mathrm{~b}$ | 4,320 a | $1,181 \mathrm{c}$ | 1,569 |
| Labour force | 8,677 a | 1,017 c | 4,047 a | 1,081 c | 1,495 c | 827 c | 210 d |
| Employed | 8,148 a | 836 c | 3,904 a | 955 c | 1,457 c | 791 c | 204 d |
| Unempl oyed | 529 d | 180 e | 144 d | 126 e | 39 f | 36 f | 6 g |
| Not in the labour force | 6,323 a | 1,469 b | 164 f | 152 d | 2,824 b | 355 d | 1,360 a |
| $\begin{aligned} & \text { Participation rate(3) - 1970, June } 20 \\ & \text { May } 23 \end{aligned}$ | 57.8 a 56.5 | $\begin{aligned} & 40.9 \mathrm{c} \\ & 34.4 \end{aligned}$ | $\begin{aligned} & 96.1 \text { a } \\ & 95.6 \end{aligned}$ | $\begin{aligned} & 87.7 \text { a } \\ & 85.3 \end{aligned}$ | $\begin{aligned} & 34.6 c \\ & 35.0 \end{aligned}$ | $\begin{aligned} & 70.0 \text { b } \\ & 69.5 \end{aligned}$ | $\begin{aligned} & 13.4 \mathrm{~d} \\ & 14.0 \end{aligned}$ |
| $\begin{array}{r} \text { Unemployment rate(4) }-1970, \text { June } 20 \\ \text { May } 23 \end{array}$ | 6.1 d 6.1 | $\begin{aligned} & 17.7 \text { e } \\ & 12.8 \end{aligned}$ | $\begin{aligned} & 3.6 \mathrm{~d} \\ & 4.5 \end{aligned}$ | $\begin{aligned} & 11.7 \text { e } \\ & 12.8 \end{aligned}$ | $\begin{aligned} & 2.6 \mathrm{f} \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 4.4 \mathrm{f} \\ & 4.6 \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 4.1 \end{aligned}$ |

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

Aote: 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.

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.

| $\frac{\text { Table } 4}{\text { Summary }}$ | $\underset{(1)}{S . D .}$ | 1970 |  | 1969 |  | 1968 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { June } \\ 20 \end{gathered}$ | $\begin{gathered} \text { May } \\ 23(2) \end{gathered}$ | June 21 | $\begin{gathered} \text { May } \\ 24(2) \end{gathered}$ | $\begin{gathered} \text { June } \\ 22 \end{gathered}$ | $\begin{aligned} & \text { May } \\ & 18 \end{aligned}$ |
| Total employed Agriculture Non-agriculture | $j$ | 8,148 569 7,579 | 7,952 550 7,402 | 8,020 580 7,440 | 7,862 592 7,270 | 7,763 591 7,172 | $\begin{array}{r} 7,505 \\ 584 \\ 6,921 \end{array}$ |
| Employed, non-agriculture | a | $\overline{7}, \overline{579}-\overline{7}, \overline{4} 0 \overline{2}$ |  | ${ }^{7,7,4 \overline{4} 0^{-}-\overline{3}, \overline{2} 70^{-}}$ |  | ${ }^{-7,172}{ }^{-}=-{ }^{-9,921}$ |  |
| Usually work 35 hours or more | a | 6,705 | 6,460 | 6,665 | 6,463 | 6,472 | 6,177 |
| At work 35 hours or more | a | 6,142 3,463 |  | 6,049 | 3,112 | 5,935 | 5,741 |
| At work less than 35 hours, or not at work | c | 563 | 2,397 | 616 | 2,951 | 537 | 436 |
| Due to economic reasons (3) | e | 89 | 80 | 103 | 83 | 70 | 79 |
| Due to other reasons( 4 ) | c | 474 | 2,916 | 513 | 2,868 | 467 | 357 |
| Usually work less than 35 hours | c | 873 | 943 | 775 | 807 | 700 | 744 |


| $\frac{\text { Table } 5}{\text { Industry }}$ | $\begin{aligned} & \text { S.D. } \\ & \text { (1) } \end{aligned}$ | 1970 |  | 1969 |  | 1968 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | June 20 | $\begin{array}{r} \text { May } \\ 23 \end{array}$ | June 21 | $\begin{array}{r} \text { May } \\ 24 \end{array}$ | $\begin{gathered} \text { June } \\ 22 \end{gathered}$ | $\begin{aligned} & \text { May } \\ & 18 \end{aligned}$ |
| Total employed | a | 8,148 | 7,952 | 8,020 | 7,862 | 7,763 | 7,505 |
| Agriculture | d | 569 | 550 | 580 | 592 | 591 | 584 |
| Other primary industries | d | 238 | 220 | 257 | 223 | 245 | 220 |
| Manufacturing | c | 1,842 | 1.809 | 1,851 | 1,827 | 1,810 | 1,742 |
| Construction | c | 518 | 484 | 502 | 486 | 503 | 458 |
| Transportation and other utilities | c | 710 | 694 | 736 | 722 | 707 | 680 |
| Trade | c | 1,328 | 1,277 | 1,299 | 1,274 | 1,262 | 1,244 |
| Finance, insurance, real estate | d | 357 | 362 | 354 | 342 | 327 | 325 |
| Community, personal, other services | c | 2,083 | 2,980 | 1,944 | 1,922 | 1,844 | 1,806 |
| Public administration | c | 502 | 477 | 497 | 474 | 474 | 446 |

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 avallable on request from the Special Surveys Division.

| Table 6 <br> Class of worker, agriculture and non-agriculture, and sex Week ended June 20, 1970 | Total | $\begin{aligned} & \text { Paid } \\ & \text { workers } \end{aligned}$ | Own account workers | Employers | Unpald family workers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total employed Agriculture Non-agriculture | $\begin{array}{rl} \hline 8,148 & a \\ 569 & d \\ 7,579 & a \end{array}$ | $\begin{array}{rl} \hline 7,049 & a \\ 122 & e \\ 6,926 & a \end{array}$ | $\begin{array}{ll} 537 & c \\ 259 & d \\ 278 & d \end{array}$ | $\begin{array}{rr}346 & c \\ 55 & \mathrm{f} \\ 291 & \mathrm{~d}\end{array}$ | $\begin{array}{r} 215 \\ 133 \\ 82 \end{array}$ |
| Men <br> Agriculture Non-agriculture | $\begin{array}{rl} 5,501 & a \\ 487 & d \\ 5,013 & a \end{array}$ | $\begin{array}{rl} 4,631 & a \\ 101 & e \\ 4,530 & a \end{array}$ | $\begin{array}{ll} 460 & c \\ 252 & d \\ 209 & d \end{array}$ | $\begin{array}{rr} 312 & c \\ 54 & E \\ 259 & d \end{array}$ | 97 <br> 81 <br> 16 |
| Women <br> Agriculture <br> Non-agriculture | $\begin{array}{rl} 2,647 & b \\ 81 & e \\ 2,565 & b \end{array}$ | $\begin{array}{rr} 2,418 & b \\ 21 & f \\ 2,397 & b \end{array}$ |  | $\begin{array}{rr} 34 & e \\ 1 & g \\ 33 & e \end{array}$ | $118$ |

(1) "S.D." = Standard deviation, For explanation, see "Reliability of Estimates", page 8. (2) In May 1970 and 1969, an unusually large number worked less than 35 hours due to the Queen's Birthday being ir: the reference weeks. (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 no: 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, $\overline{s m a l l}$ adjustments have been made to estimates published before that time.
See the March 1965 edition of this report, page 8.
Regions, Labour Force
(Estimates in thousands)

| $\frac{\text { Table } 7}{\text { Unemployed }}$ | $\begin{aligned} & \text { S.D. } \\ & \text { (1) } \end{aligned}$ | 1970 |  | 1969 |  | 1968 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { June } \\ 20 \end{gathered}$ | $\begin{gathered} \text { May } \\ 23 \end{gathered}$ | $\begin{aligned} & \text { June } \\ & 21 \end{aligned}$ | $\begin{aligned} & \text { May } \\ & 24 \end{aligned}$ | June 22 | $\begin{aligned} & \text { May } \\ & 18 \end{aligned}$ |
| Total unemployed | d | 529 | 513 | 383 | 386 | 395 | 366 |
| Without work and seeking work | d | 507 | 478 | 367 | 3.52 | 381 | 347 |
| Seeking full-time work | d | 462 | 452 | 338 | 339 | 339 | 327 |
| Seeking part-time work | f | 44 | 26 | 29 | 23 | 42 | 20 |
| On temporary layoff up to 30 days | f | 23 | 35 | 16 | 24 | 14 | 19 |
| Without work and seeking work | d | 507 | 47.3 | 367 | $36, ?$ | 381 | 347 |
| Seeking under 1 month | d | 187 | 134 | 157 | 117 | 170 | 100 |
| Seeking 1-3 months | d | 1.57 | 130 | 10.4 | 103 | 109 | 108 |
| Seeking 4-6 months | e | 75 | 98 | 50 | 71 | 46 | 77 |
| Seeking more than 6 months | e | 88 | 96 | 63 | 71 | 55 | 62 |


(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.

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 questionnalres, interviewers, supervisors, pracessing, 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 etror. 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 wll likely have a smaller per cent sampling error and of two estimates of the same size the one referring to a characteristic more evenly distri. buted acrosa the country whll tend to have smaller per cent gampling variability. Alsa, estimates relating to age and sex are usually more reliable than other estimates of corparable 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 tabulstions of the data. All these errors are called non-sampling errars. Some of the non-bampling errors wlll usually balance out over a large number of observations but aystematically accuring errors will contribute to biases. Non-sampling errors can be reduced by a careful design of questionnalres, intensive training and supervision of interviewers and a thorough control of the processing opera tion. In general, the more personal and more subjective inquiries are sub\}ect to larger errors. Also, data referring to persons with less stable labour force status will have relatively large non-sampling errors.

## (c) Alphabetic Indicatorn of Standard Deviation

The sampling error, as described under (a) is not known. A quantity, called the standsrd deviation, can however be escimated from sample data 1tself. The standard deviation of an estimate 18 a statistic ${ }^{1}$ measure of its sampling error: It also partially messures the effect on non-sampling errors, but daes not reflect any systematic blases 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 $21 / 2$ 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 80 on as shown in the table below.

Alphabetic designation of per cent atandard deviations
Alphabetic indicator Per cent standard deviation

| a | $0.0 \%-0.5 \%$ |
| :--- | ---: |
| b | $0.6 \%=1.0 \%$ |
| $d$ | $1.1 \%-2.5 \%$ |
| e | $2.6 \%=5.0 \%$ |
| $f$ | $5.1 \%-10.0 \%$ |
| $g$ | $10.1 \%-15.0 \%$ |
|  | $15.1 \%-$ |

The actual standard deviation of an estimate is not the aame each month. Since the standard deviations of the current estimates are not avallable 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 IImit for the gtandard deviation of the difference (change) between two estimates referring to two months up to a year apatt 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 smeller 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 , 1.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.

## Regional Employment and Unemployment (continued from 2)

Unemployment in Canada averaged 382,000 in 1969 compared with 372,000 in 1959. In 1969, Quebec, which comprised 28 per cent of the total labour force accounted for 41 per cent of the total unemployed.

## Total Unemployment and Percentage Distribution by Region

$\frac{1969}{\underline{000} \text { 's }} \quad \frac{1959}{\underline{000} \text { 's }}$

| Canada | 382 | 100 | 372 | 100 |
| :--- | ---: | ---: | ---: | ---: |
| Atlantic | 49 | 13 | 59 | 16 |
| Quebec | 158 | 41 | 138 | 37 |
| Ontario | 95 | 25 | 103 | 28 |
| Prairies | 39 | 10 | 35 | 9 |
| B.C. | 42 | 11 | 36 | 10 |

During the 1959-1969 period, unemployment rates varied as economic conditions changed. In all regions, rates were highest in 1961 and lowest in 1965 or 1966. Throughout the period, rates have been consistently highest for the Atlantic region and lowest for the Prairie region.


