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## THE LABOUR FORCE

OTTAWA - CANADA

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## FEBRUARY 1968

In the week ended February 17, 1968, the Canadian labour force was estimated at 7,589,000. This total included 7,107,000 persons employed for all or part of the week and 482,000 persons unemployed for the whole week. Between January and February, there were increases of 25,000 in the labour force and of 18,000 in the unemployed; there was little change over the month in the number employed. Compared with February 1967, the labour force, the employed and the unemployed were higher by $213,000,127,000$ and 86,000 , respectively.

Employment in nonagricultural industries increased by 30,000 between January
and February; in agriculture there was a dew cline of 23,000 . Nonagricultural industries accounted for all the increase in total employment from a year earlier. Among women, employment increased by 15,000 from January, while there was little change in the number of men employed. There were 21,000 more men and 106,000 more women employed in February 1968 than in February 1967.

In February, the unemployment rate, expressed as a percentage of the labour force, was 6.4 compared with rates of 6.1 in January 1968 and 5.4 in February 1967. Seasonally adjusted, the February 1968 rate was 4.5 .


Beginning in July 196\%, labour force data relating to families in which someone was unemployed have been tabulated at quarterly intervals and published usually twice a year. Since the most recent publication (in the August 1967 report), data refering to the weeks ended October 14,1967 , and January 13, 1968, have been cormpiled. These statistics are included in the folluwing tables along with previously pu-
blished data for January, April and July 1967. Comments on the January 1968 estimates and on seasonal parterns follow.

Of the 464,000 persons unemployed in January 1968 , 209 , 000 ( $45 \%$ ) were heads of famlly units, 210,000 ( $45 \%$ ) were sons, daughters or other relatives of family heads, and 45,(100 ( $10 \%$ ) were not members of family units.

The 419, 0 (r) unemployed members of famlifes were distributed throughout 376,100 family units. In 221 , 000 ( $59 \%$ ) of these units, the membership of the unit included, in addition to the unemployed member or members, at least one person who was employed.
 for which the data are available. Notably, thas propurtion of the unemployed who were heads of households hus been lowest in July ( $31-39 \%$ ) and highest in January and April $(45-51 \%)$. On the other hand, the proportion of the unem ployed who were single sons and daughters of heads of familles has been highest in July ( $40-50 \%$ ), when many students are available for summer jobs, and lowest in January and April (3i. 33\%). The proportion of familles having one or more employed members, in addition the unmployed member or members, ranged from 49 to 59 per cent in January and Aprill and from 59 to 73 per cent in July and October.

Further detail for Jonuary 1968 is presented in the following tables, along with estimates for the four preceding reference periods. Table 1 refers to unemployed persons. Tables 2 and 3 refer to family units in which one or more persons were unemployed.

Unemployed Persons

| Table 1 <br> Classified as heads, other members, or non-members of family units, Canada | Unemployed persons |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Members of family units(1) |  |  |  | ```Non-members of family units(1)``` |
|  | unemployed | Total | Head of units | Single sons or daughters | Other relatives |  |
| Nuaber (in thousands) |  |  |  |  |  |  |
| January 13, 1968 | 464 | 419 | 209 | 144 | 66 | 45 |
| October 14,1967 | 254 | 233 | 98 | 94 | 41 | 21 |
| July 22, 1967 | 284 | 264 | 94 | 133 | 37 | 20 |
| sipril 22,1967 | 365 | 333 | 165 | 115 | 53 | 32 |
| January 14, 1967 | 381 | 347 | 179 | 114 | 54 | 34 |
| Percent distribution |  |  |  |  |  |  |
| January 13, 1968 | 100 | 90 | 45 | 31 | $1 \%$ | 10 |
| October 14, 1967 | 100 | 92 | 39 | 37 | 16 | 8 |
| July 22, 1967 | 1 cm | 93 | 33 | 47 | 13 | 7 |
| April 22. 1967 | 100 | 91 | 45 | 32 | 14 | 9 |
| January 14, 1967 | 100 | 91 | 47 | 30 | 14 | 9 |

Family Units(1)

| $\qquad$ <br> By number of employed persons in unit, Canada | Family units with one or more persons unemployed |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total units | No person in unit employed | One or more persons in unit employed |  |  |  |
|  |  |  | Total | $\stackrel{1}{\text { emplayed }}$ | $\stackrel{2}{\text { employed }}$ | 3 or more employed |
| Number (in thousands) |  |  |  |  |  |  |
| January 13,1968 | 376 | 155 | 221 | 140 | 53 | 28 |
| October 14, 1967 | 215 | 73 | 142 | 80 | 39 | 23 |
| July 22, 1967 | 243 | 72 | 171 | 93 | 48 | 30 |
| April 22, 1967 | 3 (1) | 125 | 175 | 109 | 45 | 21 |
| January 14, 1967 | 315 | 131 | 184 | 117 | 45 | 22 |
| Percent distribution |  |  |  |  |  |  |
| Jamuacy 13, 1968 | L(w) | 41 | 59 | 37 | 14 | 8 |
| October 14, 1967 | 101 | 34 | 66 | 37 | 18 | 11 |
| July 22, 1967 | 101 | 30 | 7:1 | 38 | 20 | 12 |
| Aptil 22, 1967 | 10\%) | 42 | 58 | 36 | 15 | 7 |
| January 14, 1967 | 100 | 42 | 58 | 37 | 14 | 7 |

(1) The family unit used in these tables is defined as "a group of two or mose persons who are living together in the same dwelling and who are related by blood, marriage or adoprion". A person living alone or who is related to no one else ia the dwelling where he lives is classified under "Non-members of family units".
The head of a family unlt is defined generally as the person who is mainly responsible for the maintenance of the unit However, in familles consisting of husband and wife (with or whthout unmarried children), the husband is always desigresad as the head. In families composed of parent and unmarried child (or children), the parent invariably is recorded as tia head of the unit.
(continued on page b)

## 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 speciflc 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 Northwes 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 (page 4 and 5).
Tables 1 to 3 refer to the labour force, employment and unemployment and contain labour force participation and unembloyment 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 Avallable - 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 10 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 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.
l'ersons who had jobs but did not work during the zeference 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, 1.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 sultable work was avallable in the community; or
(b) were temporarily laid off for the full week, 1.e., were walting to be called back to a job from which they had been laid off for less than 30 days.

No: in the Labout 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: golng to school; keeping house; too old or otherwise unable to work; and voluntarily idle or retired. Housewives, stum dents and others who worked part-time are classified as employed. If they laoked for work they are classified as unemployed.

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.

| $\frac{\text { Table } 1}{\text { Summary }}$ | $\begin{aligned} & \text { S.D. } \\ & (1) \end{aligned}$ | 1968 |  | 1967 |  | 1966 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Feb. } \\ 17 \end{gathered}$ | $\begin{gathered} \text { Jan. } \\ 13 \end{gathered}$ | $\begin{gathered} \text { Feb. } \\ 18 \end{gathered}$ | $\begin{gathered} \text { Jan. } \\ 14 \end{gathered}$ | $\begin{gathered} \text { Feb. } \\ 19 \end{gathered}$ | Jan. 15 |
| Total |  |  |  |  |  |  |  |
| Population 14 years of age and over(2) |  | 14,115 | 14,086 | 13,717 | 13,680 | 13,334 | 13,305 |
| Labour force | a | 7,589 | 7,564 | 7,376 | 7,364 | 7,122 | 7,093 |
| Employed | a | 7,107 | 7,100 | 6,980 | 6,983 | 6,766 | 6,734 |
| Agriculture | d | 436 | 459 | 437 | 451 | 469 | 460 |
| Non-agriculture | a | 6,671 | 6,641 | 6,543 | 6,532 | 6,297 | 6,274 |
| Unemployed | d | 482 | 464 | 396 | 381 | 356 | 359 |
| Not in the labour force | a | 6,526 | 6,522 | 6,341 | 6,316 | 6,212 | 6,212 |
| Participation rate (3) | a | 53.8 | 53.7 | 53.8 | 53.8 | 53.4 | 53.3 |
| Unemployment rate (4) Actual | d | 6.4 | 6.1 | 5.4 | 5.2 | 5.0 | 5.1 |
| Seasonally adjusted |  | 4.5 | 4.4 | 3.8 | 3.7 | 3.5 | 3.6 |
| Men |  |  |  |  |  |  |  |
| Population 14 years of age and over(2) |  | 6,994 | 6,980 | 6,798 | 6,780 | 6,608 | 6,593 |
| Labour force | a | 5,228 | 5,217 | 5,127 | 5,144 | 5,032 | 4,998 |
| Employed | a | 4,825 | 4,833 | 4,804 | 4,831 | 4,732 | 4,696 |
| Agriculture | d | 401 | 418 | 397 | 404 | 424 | 412 |
| Non-agriculture | a | 4,424 | 4,415 | 4,407 | 4,427 | 4,308 | 4,284 |
| Unemployed | d | 403 | 384 | 323 | 313 | 300 | 302 |
| Not in the labour force | b | 1,766 | 1,763 | 1,671 | 1,636 | 1,576 | 1,595 |
| Participation rate (3) | a | 74.7 | 74.7 | 75.4 | 75.9 | 76.2 | 75.8 |
| Unemployment rate (4) | d | 7.7 | 7.4 | 6.3 | 6.1 | 6.0 | 6.0 |
| Women |  |  |  |  |  |  |  |
| Population 14 years of age and over(2) |  | 7,121 | 7,106 | 6,919 | 6,900 | 6,726 | 6,712 |
| Labour force | b | 2,361 | 2,347 | 2,249 | 2,220 | 2,090 | 2,095 |
| Employed | , | 2,282 | 2,267 | 2,176 | 2,152 | 2,034 | 2,038 |
| Agriculture | e | 35 | 41 | 40 | 47 | 45 | 48 |
| Non-agriculture | b | 2,247 | 2,226 | 2,136 | 2,105 | 1,989 | 1,990 |
| Unemployed | e | 79 | 80 | 73 | 68 | 56 | 57 |
| Not in the labour force | a | 4,760 | 4,759 | 4,670 | 4,680 | 4,636 | 4,617 |
| Participation rate (3) | b | 33.2 | 33.0 | 32.5 | 32.2 | 31.1 | 31.2 |
| Unemp loyment rate (4) | e | 3.3 | 3.4 | 3.2 | 3.1 | 2.7 | 2.7 |

(1) "S.D." = Standard deviation. For explanation, see "Rellability of Estimates", page 8.
(2) Excludes inmates of institutions, members of the armed services, Indians living on reservas and residents of the Yukon and Northwest Territories.
(3) The labour force as a percentage of the population 14 yars of age and cuez.
(4) The unemployed as a percentage of the labour forct.

Note: With the exception of Tables 2 and 5, all statist:cs refer to a spocific week, the last ay 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.
Sie the March 1965 edition of this report, page 8.


| Age, sex, $\frac{\text { Table } 3}{\text { and marital status }}$ Week ended February 17, 1968 | Total | 14-19 <br> years <br> all <br> persons | 20-64 years |  |  |  | 65 years <br> and over <br> all <br> persons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Men |  | Women |  |  |
|  |  |  | Married | Other | Married | Other |  |
| Population 14 years of age and over(2) | 14,115 | 2,341 | 4,000 a | 1,111 b | 4,122 a | 1,051 c | 1,490 |
| Labour force | 7,589 a | 721 c | 3,802 a | 877 c | 1,248 c | 736 c | 205 d |
| Employed | 7,107 a | 634 c | 3,593 a | 759 c | 1,217 c | 710 c | 194 d |
| Unemployed | 482 d | 87 e | 209 d | 118 e | 31 ¢ | 26 f | 11 g |
| Not in the labour forc | 6,526 a | $1,620 \mathrm{~b}$ | 198 d | 234 d | 2,874 b | 315 d | 1,285 a |
| Participation rate (3)-1968 Feb. 17 | $\begin{aligned} & 53.8 \text { of } \\ & 53.7 \end{aligned}$ | $\begin{aligned} & 30.8 \mathrm{c} \\ & 30.5 \end{aligned}$ | $\begin{aligned} & 95.0 \mathrm{a} \\ & 95.2 \end{aligned}$ | $\begin{aligned} & 78.9 \mathrm{a} \\ & 79.5 \end{aligned}$ | $\begin{aligned} & 30.3 \mathrm{c} \\ & 30.1 \end{aligned}$ | $\begin{aligned} & 70.0 \text { b } \\ & 69.8 \end{aligned}$ | $\begin{aligned} & 13.8 \mathrm{~d} \\ & 13.5 \end{aligned}$ |
| Unemployment rate (4) - 1968 Feb .17 | 6.4 d | 12.1 e | 5.5 d | 13.5 e | $2.5 \mathrm{f}$ | $3.5 \mathrm{f}$ | $5.4 \mathrm{~g}$ |
| Jan. 13 | 6.1 | 12.3 | 5.3 | 12.6 |  |  |  |

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

## Conada, 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.

| $\frac{\text { Table } 4}{\text { Summary }}$ | $\begin{aligned} & \text { S.D. } \\ & \text { (1) } \end{aligned}$ | 1968 |  | 1967 |  | 1966 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Feb } \\ 17 \end{gathered}$ | Jan. 13 | Feb. 18 | Jan. 14 | $\begin{gathered} \text { Feb. } \\ 19 \end{gathered}$ | $\begin{gathered} \text { Jan. } \\ 15 \end{gathered}$ |
| Total employed Agriculture Non-agriculture | a d a | $\begin{array}{r} 7,107 \\ 436 \\ 6,671 \end{array}$ | $\begin{array}{r} 7,100 \\ 459 \\ 6,641 \end{array}$ | $\begin{array}{r} 6,980 \\ 437 \\ 6,543 \end{array}$ | $\begin{array}{r} 6,983 \\ 451 \\ 6,532 \end{array}$ | $\begin{array}{r} 6,766 \\ 469 \\ 6,297 \end{array}$ | $\begin{array}{r} 6,734 \\ 460 \\ 6,274 \end{array}$ |
| Employed, non-agriculture | a | 6,671 | 6,641 | 6,543 | 6,532 | 6,297 | 6,274 |
| Usually work 35 hours or more | a | 5,938 | 5,965 | 5,931 | 5,917 | 5,702 | 5,689 |
| At work 35 hours or more | a | 5,454 | 5,344 | 5,429 | 5,497 | 5,312 | 5,272 |
| At work less than 35 hours, or not at work | $c$ | 484 | 621 | 502 | 420 | 390 | 417 |
| Due to economic reasons (2) | e | 75 | 79 | 73 | 68 | 54 | 67 |
| Due to other reasons(3) | c | 409 | 542 | 429 | 352 | 336 | 350 |
| Usually work less than 35 hours | c | 733 | 676 | 612 | 615 | 595 | 585 |


|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\frac{\text { Table } 5}{\text { Industry }}$ | $\begin{aligned} & \text { S.D. } \\ & (1) \end{aligned}$ | Feb. 17 | $\begin{gathered} \text { Jan. } \\ 13 \end{gathered}$ | Feb. 18 | Jan. 14 | Feb. $19$ | Jan. 15 |
| Total employed | a | 7,107 | 7,100 | 6,980 | 6,983 | 6,766 | 6,734 |
| Agriculture | d | 436 | 459 | 437 | 451 | 469 | 460 |
| Other primary industries | d | 204 | 208 | 208 | 209 | 209 | 216 |
| Manufacturing | c | 1,693 | 1,658 | 1,748 | 1,711 | 1,663 | 1,636 |
| Construction | $c$ | 385 | 401 | 415 | 437 | 434 | 446 |
| Transportation and other utilities | c | 644 | 649 | 629 | 641 | 580 | 584 |
| Trade | c | 1,205 | 1,205 | 1,168 | 1,186 | 1,135 | 1,128 |
| Einance, insurance, real estate | d | 331 | 320 | 298 | 304 | 300 | 292 |
| Community, personal, other services | c | 1,780 | 1,768 | 1,655 | 1,632 | 1,573 | 1,573 |
| Public administration | $c$ | 429 | 432 | 422 | 412 | 403 | 399 |

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 <br> Class of worker, agriculture <br> and non-agriculture, and sex <br> Week ended February 17, 1968 | Total | Pald <br> workers | Own <br> account <br> workers | Employers | Unpald <br> family <br> workers |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Total employed | $7,107 \mathrm{a}$ | $6,154 \mathrm{a}$ | 515 c | 289 c | 149 d |
| Agriculture | 436 d | 57 e | 261 d | 29 f | 89 e |
| Non-agriculture | $6,671 \mathrm{a}$ | $6,097 \mathrm{a}$ | 254 d | 260 d | 60 e |
| Men | $4,825 \mathrm{a}$ | $4,045 \mathrm{a}$ | 438 c | 265 c | 77 d |
| Agriculture | 401 d | 52 e | 258 d | 29 f | 62 e |
| Non-agriculture | $4,424 \mathrm{a}$ | $3,993 \mathrm{a}$ | 180 d | 236 d | 15 f |
| Women | $2,282 \mathrm{~b}$ | $2,109 \mathrm{~b}$ | 77 e | 24 e | 72 d |
| Agriculture | 35 e | 5 f | 3 g | -g | 27 e |
| Non-agriculture | $2,247 \mathrm{~b}$ | $2,104 \mathrm{~b}$ | 74 e | 24 e | 45 e |

(1) "S.D." = Standard deviation. For explanation, see "Rellability of Estimates", page 8.
(2) Economic reasons for not working 35 hours or more include short time, layoff for part of the wetk 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 "Rellability of Estimates", page 8.

Note: Due to the introduction of revised weighting factors in March 1965, 3 mall adjustments have been made to estimates published before that time.

Regions, Labour Force See the March 1965 edition of this report, page 8.

| $\begin{aligned} & \text { S.D. } \\ & (1) \end{aligned}$ | 1968 |  | 1967 |  | 1966 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb. 17 | Jan. 13 | Feb. 18 | $\begin{gathered} \mathrm{Jan} \\ 14 \end{gathered}$ | Feb. 19 | $\begin{gathered} \mathrm{Jan}_{15} . \end{gathered}$ |
| d | 482 | 464 | 396 | 381 | 356 | 359 |
| d | 443 | 417 | 359 | 342 | 327 | 320 |
| d | 426 | 400 | 344 | 330 | 312 | 306 |
| f | 17 | 17 |  | 12 | 15 | 14 |
| f | 39 | 47 | 37 | 39 | 29 | 39 |
| d | $-A^{2}$ - <br> 443 -- <br> 99 134 <br> 222 195 <br> 79 51 <br> 43 37 |  | 359 342 <br> 96 127 <br> 177 153 <br> 57 36 <br> 29 26 |  | -7 - <br> 327 -- <br> 76 111 <br> 171 151 <br> 53 34 <br> 27 24 |  |
| d |  |  |  |  |  |  |
| d |  |  |  |  |  |  |
| e |  |  |  |  |  |  |
| e |  |  |  |  |  |  |


(1) "S.D." = Standard deviation. For explanation, see "Reliablifty 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.

## (a) Sampling Error

The estirates 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 uged 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 maller per cent sampling error and of two estimates of the same size the one referring to a characteristic more evenly distributed scross the country will tend to have a smaller per cent sampling variability. Also, estimates relating to age and sex are usually note reliable than other estimates of comparable size.

## (b) Non-sampling Etrors

Errors, which are not related to sampling, may occur at almost every phase of a survey operation. Lnumerators may misunderstand instructions, respondents may make errors in answertng questions, the answers may be incorrectly entered on the questionnalres and errors may be introduced in the processing and tabulations of the data. All these ertors 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 blases. Non-sampling errors can be reduced by a careful de51 gn of questionnalres, intensive training and supervibion 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 atable 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 $21 / 2$ 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 as:1mate, the letter "b" Indicates that the standerd deviation is between $0.6 \%$ and $1.0 \%$ of the estimate and so on as shom 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 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 magntude 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 ustimates 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", 1.e. it was between $1.1 \%$ and $2.5 \%$. The difference between the May and June estimates ( 112,003 ) would, therefore, have a standard deviation which would likely be smaller than $2.5 \%$ of 513,000 , 1.e. It would likely be swallet than 12,800 .

## (e) Current Estimates of Standard Deviations

Standard deviations are computed monthly for several estimates and month-to-month changes. These are avallable usually in 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 releaged.

| $\text { By size } \frac{\text { Table } 3}{\text { Of family unit, }} \begin{aligned} & \text { Canada } \end{aligned}$ | Family units with one or more persons unemployed |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total units | Size of frmily unit |  |  |  |
|  |  | 2-3persons | $4-5$ persons | 6-7 persons | 8 or more |
| Total (in thousands) |  |  |  |  |  |
| January 13, 1968 | 376 | 136 | 127 | 68 | 45 |
| October 14, 1967 | 215 | 79 | 68 | 40 | 28 |
| July 22, 1967 | 243 | 84 | 83 | 45 | 31 |
| April 22, 1967 | 300 | 112 | 100 | 49 | 39 |
| January 14, 1967 | 315 | 115 | 110 | 58 | 32 |

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