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Canadian Out-of-Employment Panel Survey 1995

Microdata User's Guide

Canadian Out-of-Employment Panel Survey 1995

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1.0 Introduction

The Canadian Out-of-Employment Panel Survey was conducted by Statistics Canada in 1995/96 on behalf of Human Resources Development Canada. This manual has been produced to facilitate the manipulation of the microdata file containing the survey data.

Any questions about the data set or its use should be directed to:

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2.0 Background

In 1993, Strategic Evaluation and Monitoring in HRDC first conducted a panel survey on people who had had a job separation or interruption in employment. The first survey was designed to evaluate the impact of Bill C-113 with respect to specific aspects of the Unemployment Insurance program as well as collecting information on individual and household demographics, job search activity and outcome, consumption level, assets, debts, job tenure, as well as utilization of Social Assistance. Two cohorts were interviewed three times in the year following their job separation.

The 1995 Canadian Out-of-Employment Panel Survey, conducted by Statistics Canada on behalf of Human Resources Development Canada, continues this work, but with modifications to evaluate the impact of Bill C-17 which was passed into law on May 31, 1994. Two new cohorts of individuals were interviewed twice in the 12 to 15 months following their job separation.

3.0 Objectives

The primary objective of the survey was to collect data which would contribute to Human Resources Development Canada's evaluation of the impact of Bill C-17. Bill C-17 introduced changes to the Unemployment Insurance (UI) system to strengthen the link between work effort and UI eligibility, while enhancing adequacy and fairness in the provision of income support. The survey collects key information to support evaluation of changes brought about by the legislation, as well as to provide a wide range of data to further study work patterns, interaction between work activity and income support programs and effects of job loss on household living standards.

Secondary objectives of the survey include the continuation of the type of information collected in the 1993 panels. This includes collection of background demographics on the individual and the household, as well as information on job search activities and outcomes, assets and debts, expenditures, and utilization of Unemployment Insurance and Social Assistance.

In addition to these objectives, which were primarily aimed at the evaluation of the UI legislation, the survey also allows analysts to look at areas such as:

- impact of job loss on displaced workers
- impact of layoffs on workers in seasonal industries/occupations
- time from job loss to start of next job
- financial coping strategies for households affected by job loss
- use of strategies such as re-training or relocating to find new jobs.

4.0 Concepts and Definitions

This chapter outlines concepts and definitions of interest to the users.

Job

Only “paid worker” jobs at which the respondent had worked for one week or longer were considered for this survey.

Industry and Occupation

The COEP Survey provides information about the occupation and industry attachment of employed persons. These statistics are based on the 1980 Standard Occupational Classification and the 1980 Standard Industrial Classification.

Full-time

A job is considered to be full-time if the person usually works 30 hours or more per week at this job.

Part-time

A job is considered to be part-time if the person usually works less than 30 hours per week at this job.

Unemployment Insurance (UI)

Unemployment Insurance is a federally run program which provides income to people who have recently had a job separation. UI eligibility is based on the number of insurable weeks of work and the unemployment rate in the area of resindence of the claimant. The benefit amount is a fixed rate of insurable earnings.

Social Assistance and Welfare

Social Assistance programs, which include welfare, are municipally run programs (provincially-run in Quebec) which provide income to households who have no other source of income. The eligibility criteria and benefit amounts vary depending on the circumstances of the household members. Only one member per household is allowed to receive welfare, and the amount received is for the entire household, not the individual.

Record of Employment

A record of employment is one of the forms which is used by the federal government to help it administer the UI program. In order to apply for UI, a person must have a Record of Employment form filled in by his/her former employer. This form records the essential information required to determine the person’s eligibility and benefit rate under the UI rules. When the form is completed by the employer, one copy is given to the former employee and another copy is sent to Human Resources Development Canada.

Job Separation

A job separation is any reason for leaving a job (see definition of “Job”) which would result in a Record of Employment being issued. This includes quitting, being fired, being laid off, as well as taking unpaid leave (eg. extended sick leave, maternity leave, etc.), retiring, and periods without work because of labour disputes. For this survey, only people with certain reasons for separation were selected (see Chapter 5). On the Record of Employment, the employer is required to select one of the categories provided to record the reason the job ended; an “Other” category is provided to cover any reason not specified in the list or if the employer is unsure as to the reason.

5.0 Survey Methodology

The Canadian Out-of-Employment Panel Survey (COEP) was administered in 1995/96 to a sample of persons selected from HRDC's admistrative file of Records of Employment (ROEs).

5.1 Population Coverage

The target population was composed of Canadians aged 15 to 64, living in the 10 provinces, who had a job separation either between January 29 and March 11, 1995 (Cohort 1) or between April 23 and June 3, 1995 (Cohort 2). Only certain reasons for separation were of interest for this survey: shortage of work, injury/illness, voluntary departure, and dismissal. In theory, the administrative file of ROEs covers the target population of paid employees with job separations. However, undercoverage can result from employers sending in ROE forms late (those individuals would not be on the administrative file at the time of sampling). Not all job separation will result in an ROE being issued; in particular, ROEs are seldom issued to part-time employees whose hours are known to be below the minimum required for UI claims. Both undercoverage and overcoverage can result from employers mis-coding the reason for job separation. To help minimize this problem, ROEs issued with the reason for separation recorded as "Other" were included in the sample. Screening questions were asked at the beginning of the interview to screen out those individuals whose reason for separation was not one of the reasons of interest for this survey. For the purpose of this survey, the target population was defined as those individuals who had an ROE issued in one of the target time periods and for one of the target reasons of separation.

5.2 Sample Design

A stratified random sample of individuals was selected from the ROE file maintained by Human Resources Development Canada. For each cohort, ROEs falling into the required range for "job separation date" and the eligible categories for "reason for job separation" were identified. These eligible ROEs were then stratified by province and reason for separation. Individuals with multiple ROEs within the date range were inspected to identify which ROE to use as the reference job, based on the larger value of insurable weeks of work × insurable earnings. Because of small sample sizes in the Yukon and Northwest Territories, Yukon was combined with British Columbia and NWT was combined with Quebec for the purpose of sampling. As a result, it is not possible to produce separate estimates for the two territories.

5.3 Sample Size

The following table shows the number of respondents on the microdata file, by province, for each of the sampled cohorts. The total sample selected was 19,195

individuals; of these, 7,818 responded to the first interview and 6,178 responded to the follow-up interview. The microdata file contains only those 6,178 individuals who responded to both the first interview and the follow-up interview. The table below shows the distribution of these 6,178 respondents, by the province in which the respondent was living at the time the ROE was issued.

SAMPLE SIZE (NUMBER OF RESPONDENTS)

PROVINCE	COHORT 1	COHORT 2	TOTAL
Newfoundland	76	88	164
Prince Edward Island	35	16	51
Nova Scotia	113	133	246
New Brunswick	123	127	250
Quebec and Northwes Territories	875	992	1,864
Ontario	1,152	928	2,080
Manitoba	77	75	152
Saskatchewan	82	85	167
Alberta	283	303	586
British Columbia and Yukon	304	311	615
CANADA	**3,120**	**3,058**	**6,178**

6.0 Data Collection

For each cohort, data collection was done in two phases, or waves. The dates are given in the table below.

	Date of job loss (ROE date)	Wave 1 interview	Wave 2 interview
Cohort 1	January 29, 1995 to March 11, 1995	October 17, 1995 to December 07, 1995	April 17, 1996 to May 10, 1996
Cohort 2	April 23, 1995 to June 03, 1995	December 07, 1995 to February 22, 1996	May 24, 1996 to June 14, 1996

Data was collected using a Computer-Assisted Telephone Interviewing (CATI) system. All interviews were conducted from Statistics Canada's head office facilities in Ottawa.

6.1 Interviewing for the COEP Survey

Statistics Canada interviewers were hired and trained specifically to carry out the COEP survey. Approximately 50 interviewers worked on the first wave collection and 25 worked on the second wave collection.

Interviewing was conducted over the telephone from Statistics Canada's head office facilities. The person to be interviewed was identified at the outset, and that person was required to be traced and contacted. Proxy interviews were not accepted. Survey participants were informed that their participation in the survey was voluntary, and that non-participation would not affect any benefits or services they receive (UI or otherwise). They were also informed as to the purpose of the survey, the participating departments, and how the data would be used. To satisfy the provisions of "informed consent", at the end of the interview, respondents were informed that their data would be shared with HRDC and that HRDC would be linking these data to other administrative files; respondents were asked if they agreed to this arrangement. Only respondents who agreed to share their data appear on the data file.

At the end of the first wave interview, respondents were asked to provide a contact person's name and phone number to facilitate tracing in the event they moved (or changed telephone number) before the wave 2 interview. This method was used successfully in other panel surveys conducted by Statistics Canada (such as Labour Market Activity Survey and the National Graduates Survey).

6.2 Supervision and Control

All interviewers were under the supervision of a staff of supervisors who were responsible for ensuring that interviewers were familiar with the concepts and procedures of the COEP survey. These supervisors regularly monitored each interviewer using monitoring facilities which permitted them to listen in on both ends of the telephone conversation as well as see what data was being entered into the CATI system. Monitoring was also done periodically by members of the project team responsible for developing and managing the survey.

6.3 Non-response to the COEP Survey

Interviewers were instructed to make all reasonable attempts to obtain an interview with the selected person. For individuals who at first refused to participate in the survey, a second call was made by another interviewer who was adept at refusal conversions. For cases in which the timing of the interviewer's call was inconvenient, an appointment was arranged to call back at a more convenient time. For cases in which there was no one home, numerous call backs were made.

The sample file (for the wave 1 interview) contained both address and telephone number for about 65% of the individuals; the remaining 35% had only addresses. Interviewers attempted to contact the specified individual at the phone number provided, if there was one. If there was no phone number, or if that number was incorrect, an attempt was made to trace the individual using the Canada phone book and/or Directory Assistance.

The COEP Survey was concerned only with individuals whose ROE job ended for specific reasons. If, when the person was interviewed, he/she reported that the job ended for another reason, this person was coded as “out of scope”, and the interview ended immediately.

For the wave 2 interview, an attempt was made to re-contact all wave 1 respondents. If the person had moved, interviewers attempted to trace him/her using the contact person’s name and phone number collected during the first interview; if this was unsuccessful, Directory Assistance was contacted.

More detailed information on response rates is presented in Chapter 8 (Data Quality).

7.0 Data Processing

The main output of the Canadian Out-of-Employment Panel Survey is a “clean” microdata file. This section presents a brief summary of the processing steps involved in producing this file.

7.1 Data Capture

Since data collection was done using a CATI system, data capture occurs as part of the collection process. Inter-field edits, range checks and validity edits were incorporated into the programming, wherever feasible. This minimized the occurrence of “outlier” values.

7.2 Editing

The first stage of survey processing was to replace the collection non-response codes with the standardized code set used by Special Surveys Division (see Table 7.2). In most questions, a response of “Refused” or “Don’t know” was permitted if the respondent was unable to provide an estimate, or was unable or unwilling to answer the question.

The second stage of survey processing was to assign specific codes to unanswered questions to indicate whether or not the respondent was eligible to answer the question (see Table 7.2 for codes). The “Valid skip” code is assigned if the person does not belong in the target population for that question. A “Not stated” code is assigned if (a) it is uncertain whether the person belongs to the target population for the question or (b) the person belongs to the target population for the question, but the question was not answered. A type (a) “Not stated” situation occurs when a respondent answers “Don’t know” or “Refused” to a question which is used to determine if a subsequent question should be asked; to ensure that the interview flows well, this subsequent question will usually be skipped since it is uncertain if it is applicable or not. A type (b) “Not stated” situation occurs when a specification or programming error associated with the collection application causes a question to be missed for some portion of the target population.

Table 7.2 Non-Response Code Set

Non-response Type	Non-response Code	Meaning
“Valid Skip”	6, 96, 996, etc.	The question does not apply to this person.
“Don’t know”	7, 97, 997, etc.	The question was asked, but the respondent was unable to provide an answer.
“Refused”	8, 98, 998, etc.	The question was asked, but the respondent was unwilling to provide an answer.
“Not stated”	9, 99, 999, etc.	Due to responses of “Don’t know” or “Refused” in previous questions, it is uncertain if this question applies to the respondent or not.

Note that the specific values of the non-response codes depend on the length of the variable. A variable of length 1 will use codes (6, 7, 8 and 9); a variable of length 2 will use codes (96, 97, 98, and 99).

7.3 Coding of Open-ended Questions

Industry and occupation descriptions were recorded by interviewers in an open-ended format. These descriptions were then converted into 1980 SIC and SOC codes using a combination of automated and manual coding. Only 2-digit industry and occupation codes were produced for this survey.

7.4 Creation of Derived Variables

A number of data items on the microdata file have been derived by combining items on the questionnaire in order to facilitate data analysis. This is one of the most important stages of the survey processing as it allows users of the data to do their analysis using a common set of definitions and concepts.

Some examples of derived variables include wage and salary rates converted to a common annual wage, job duration calculated in weeks, and “Mark all that apply” questions converted to a series of “Yes/No” questions.

7.5 Weighting

The principle behind estimation in a probability sample such as COEP 1995 is that each person in the sample “represents”, besides himself or herself, several other persons not in the sample. For example, in a simple random 2% sample of the population, each person in the sample represents 50 persons in the population.

The weighting phase is a step which calculates, for each record, what this number is. This weight appears on the microdata file, and must be used to derive meaningful estimates from the survey. For example, if the number of individuals whose job ended due to a layoff is to be estimated, it is done by selecting the records referring to those individuals in the sample with that characteristic and summing the weights entered on those records.

Details of the method used to calculate these weights are presented in Chapter 11.

7.6 Suppression of Confidential Information

It should be noted that the "public use" microdata file described above differs in a number of important respects from the survey "master" files held by Statistics Canada. These differences are the result of actions taken to protect the anonymity of individual survey respondents. Users requiring access to information excluded from the microdata files may purchase custom tabulations. Estimates generated will be released to the user, subject to meeting the guidelines for analysis and release outlined in Chapter 9 of this document.

Suppression of Geographic Identifiers

The survey master data file includes explicit geographic identifiers for province at the time of the job separation (ROE date). However, the survey public-use microdata file does not contain province codes for respondents at the time of the first or second interview.

Age

Single years of age on the master data file have been collapsed into age group categories on the public-use microdata file.

Industry and Occupation Codes

Some industry and occupation groupings have been collapsed on the public-use microdata file. Unusual combinations of industry/occupation codes in different jobs for a single individual may also have been altered to protect the confidentiality of the individual.

Income, Expenditures, Assets and Debts

All fields containing dollar amounts have been rounded on the public-use microdata file. The rounding was usually done to the nearest thousand, however some fields used different rounding strategies. For each variable, the value used for rounding is stated explicitly.

Dates

All fields containing dates have had their DAY value recoded to 01. Calculations of derived variables such as duration of job in weeks or time between ROE job and first job were all done using the original date values, and then rounded.

8.0 Data Quality

The estimates derived from this survey are based on a sample of persons. Somewhat different figures might have been obtained if a complete census had been taken using the same questionnaire, interviewers, supervisors, processing methods, etc. as those actually used. The difference between the estimates obtained from the sample and the results from a complete count taken under similar conditions is called the sampling error of the estimate.

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 questionnaire and errors may be introduced in the processing and tabulation of the data. These are all examples of non-sampling errors.

Over a large number of observations, randomly occurring errors will have little effect on estimates derived from the survey. However, errors occurring systematically will contribute to biases in the survey estimates. Considerable time and effort was made to reduce non-sampling errors in the survey. Quality assurance measures were implemented at each stage to monitor the quality of the data.

Some of the main sources of sampling and non-sampling errors in surveys are discussed in the sections below. The final section in this chapter discusses measures of sampling error which can be calculated and used to assess the quality of estimates produced from the COEP 1995 survey.

8.1 Frame Quality

The frame was provided by HRDC. It consisted of a list of all Records of Employment (ROEs) issued in the period of interest in each of the two cohorts. The first step in the frame validation process was to unduplicate the records by SIN. If there was more than one ROE issued in a given period for a SIN, then the record kept on the frame was the one with the highest combination of earnings and weeks worked. The second step, which was done only for Cohort 2, was to flag the SINs which had also been on the frame in Cohort 1. This was used as a stratification variable in Cohort 2. The third step was to assign a province code to every record on the frame. This was done based on the address information on the record, failing that using the area code, and failing that using the postal code of the employer. If it was not possible to assign a province to a record then that record was dropped from the frame, and was therefore not eligible for sampling. The table below shows for each cohort the number of records at each step in the frame validation process.

	Cohort 1	Cohort 2
Initial ROE file	45,157	43,936
After removal of duplicate SINs	43,705	42,291
Number of SINs in both cohorts	N/A	3,092
After removal of cases with no province code	41,070	39,173
Sample size selected	9,217	9,978

The frame was further stratified by the reason for the job separation, a code assigned by the employer when completing the ROE. There were no missing values for this variable on the frame. The distribution of reason codes on the frame is shown for both cohorts in the table below.

Reason for job separation	Cohort 1	Cohort 2
Shortage of work	50%	45%
Injury or illness	5%	4%
Voluntary departure	21%	25%
Other	19%	21%
Dismissal	5%	5%
Total	100%	100%

8.2 Data Collection

Interviewers were monitored throughout the data collection phases of this survey. The monitoring consisted of listening in to the conversation between the interviewer and the respondent to ensure (1) that the question wording was being followed, (2) that the interviewer was correctly explaining survey concepts, and (3) to ensure that procedures were being followed when dealing with non-response or potential non-response. Interviewers were given feedback on their performance at least once per week. Any serious problems with understanding survey concepts or procedures were dealt with immediately.

8.3 Data Processing

No imputation was done to correct for item non-response. All questions had the possibility of entering a response of “Don’t know” or “Refused”, and these responses were retained on the microdata file. Questions which were skipped were assigned

either a code of “Valid skip” (if the question was not applicable) or a code of “Not stated” (if it was unclear whether or not the respondent belonged to the target population for that question).

Because the data collection was computer-assisted, errors in the question specifications can lead to programming errors, resulting in a full or partial loss of data. This occurred for a few questions in the COEP 1995 survey. The affected items are listed below.

FJ_QG27 to FJ_QG34 (Reason job ended and conditions of ending)

Due to a specification error on the questionnaire, these questions were not asked of everyone in the target population. Respondents with W1_PATH=2 (subsequent unemployment spell) skipped the questions. THE DATA FROM THESE QUESTIONS SHOULD BE USED WITH CAUTION. Only respondents with W1_PATH=4 (currently employed in another job) were actually asked the questions.

W1_QJ38 (re-application for credit after initally being turned down)

Due to a specification error on the questionnaire, this question was not asked of everyone in the target population. THE DATA FROM THIS QUESTION SHOULD NOT BE USED IN ANALYSIS, or should be used with extreme caution.

8.4 Non-response

A major source of non-sampling errors in surveys is the effect of non-response on the survey results. The extent of non-response varies from partial non-response (failure to answer just one or some questions) to total non-response.

8.4.1 Survey Non-response and Response Rates

Total non-response occurred because the interviewer was either unable to locate or contact the respondent, or the respondent refused to participate in the survey. Total non-response was handled by adjusting the weight of individuals who responded to the survey to compensate for those who did not respond. The following table summarizes the response rates to the Canadian Out-of-Employment Panel Survey of 1995.

	COHORT 1	COHORT 2	TOTAL
Individuals sampled	9,217	9,978	19,195
Respondents	3,120	3,058	6,178
Completed, but didn’t agree to share data	171	207	378
Out of scope	835	671	1,506
Refusal	1,033	946	1,979
Other non-response	1,421	2,496	3,917

Unable to trace	2,637	2,600	5,237
Estimated number of eligible individuals	7,575	8,541	16,116
Estimated out-of-scope rate	18%	14%	16%
Refusal rate	11%	9%	10%
Other non-response rate (excluding not traced)	19%	29%	25%
Not traced rate	29%	26%	27%
Response rate[1]	41%	36%	38%

The quality of the address and telephone information on the frame had a significant impact on the response rate. Contact information on the frame came from administrative records, sometimes as old as 1991. Where the contact information from the frame was not successful in reaching the selected person, tracing was attempted. The table below shows for each cohort the source of the address information for sampled persons.

Date of address info	Cohort 1 sample count	Cohort 1 sample %	Cohort 2 sample count	Cohort 2 sample %
1991	36	0.4%	55	0.6%
1992	92	1.0%	108	1.0%
1993	2,673	29.0%	3,190	32.0%
1994	6,416	69.6%	6,625	66.4%
Total	9,217	100.0%	9,978	100.0%

Unfortunately, there is very little information on the ROE file which can be used to profile the sampled individuals who were untraced or who were non-respondents for other reasons.

8.4.2 Item Non-response

In most cases, partial non-response to the survey occurred when the respondent refused to answer a question, or could not recall the requested information. Most of the item non-response occurred in the questions dealing with income, expenditures, assets and debts. Some of this non-response was due to unwillingness of respondents to give details on their finances, but the majority of the non-response was because the respondent was not well enough informed about the finances of the

[1] Response rate is number of responding individuals as a percentage of number of eligible individuals. Eligible individuals were estimated by applying out-of-scope rates for individuals who were interviewed to individuals who were not contacted or whose status was not determined in the interview.

whole household. This occurred particularly when the respondent was an adult living at home with his/her parents.

(Table showing item non-response for money variables.)

8.5 Measures of Sampling Error

Since it is an unavoidable fact that estimates from a sample survey are subject to sampling error, sound statistical practice calls for researchers to provide users with some indication of the magnitude of this sampling error. This section of the documentation outlines the measures of sampling error which Statistics Canada commonly uses and which it urges users producing estimates from this microdata file to use also.

The basis for measuring the potential size of sampling errors is the standard error of the estimates derived from survey results.

However, because of the large variety of estimates that can be produced from a survey, the standard error of an estimate is usually expressed relative to the estimate to which it pertains. This resulting measure, known as the coefficient of variation (C.V.) of an estimate, is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate.

For example, suppose that, based upon the survey results, one estimates that 8.3% of Canadians with paid worker jobs had at least one absence from work in the previous year due to illness, accident or pregnancy, and this estimate is found to have standard error of .003. Then the coefficient of variation of the estimate is calculated as:

$$\left(\frac{.003}{.083}\right) \times 100\% \text{ ' } 3.6\%$$

9.0 Guidelines for Tabulation, Analysis and Release

This section of the documentation outlines the guidelines to be adhered to by users tabulating, analyzing, publishing or otherwise releasing any data derived from the survey microdata tapes. With the aid of these guidelines, users of microdata should be able to produce the same figures as those produced by Statistics Canada and, at the same time, will be able to develop currently unpublished figures in a manner consistent with these established guidelines.

9.1 Rounding Guidelines

In order that estimates for publication or other release derived from these microdata tapes correspond to those produced by Statistics Canada, users are urged to adhere to the following guidelines regarding the rounding of such estimates:

(a) Estimates in the main body of a statistical table are to be rounded to the nearest hundred units using the normal rounding technique. In normal rounding, if the first or only digit to be dropped is 0 to 4, the last digit to be retained is not changed. If the first or only digit to be dropped is 5 to 9, the last digit to be retained is raised by one. For example, in normal rounding to the nearest 100, if the last two digits are between 00 and 49, they are changed to 00 and the preceding digit (the hundreds digit) is left unchanged. If the last digits are between 50 and 99 they are changed to 00 and the preceding digit is incremented by 1.

(b) Marginal sub-totals and totals in statistical tables are to be derived from their corresponding unrounded components and then are to be rounded themselves to the nearest 100 units using normal rounding.

(c) Averages, proportions, rates and percentages are to be computed from unrounded components (i.e. numerators and/or denominators) and then are to be rounded themselves to one decimal using normal rounding. In normal rounding to a single digit, if the final or only digit to be dropped is 0 to 4, the last digit to be retained is not changed. If the first or only digit to be dropped is 5 to 9, the last digit to be retained is increased by 1.

(d) Sums and differences of aggregates (or ratios) are to be derived from their corresponding unrounded

components and then are to be rounded themselves to the nearest 100 units (or the nearest one decimal) using normal rounding.

(e) In instances where, due to technical or other limitations, a rounding technique other than normal rounding is used resulting in estimates to be published or otherwise released which differ from corresponding estimates published by Statistics Canada, users are urged to note the reason for such differences in the publication or release document(s).

(f) Under no circumstances are unrounded estimates to be published or otherwise released by users. Unrounded estimates imply greater precision than actually exists.

9.2 Guidelines for Tabulation (How to Use the Sampling Weight)

The sample design used for the Canadian Out-of-Employment Panel Survey was not self-weighting. When producing simple estimates, including the production of ordinary statistical tables, users must apply the proper sampling weight.

If proper weights are not used, the estimates derived from the microdata files cannot be considered to be representative of the survey population, and will not correspond to those produced by Statistics Canada.

Users should also note that some software packages may not allow the generation of estimates that exactly match those available from Statistics Canada, because of their treatment of the weight field.

Sections 9.2.1 to 9.2.3 give examples of how to use the sampling weight to produce estimates from different types of variables on the COEP 1995 microdata file.

9.2.1 Definitions of Types of Estimates: Categorical vs. Quantitative

Before discussing how the Canadian Out-of-Employment Panel Survey data can be tabulated and analyzed, it is useful to describe the two main types of point estimates of population characteristics which can be generated from the microdata file for the Canadian Out-of-Employment Panel Survey.

Categorical Estimates

Categorical estimates are estimates of the number, or percentage of the surveyed population possessing certain characteristics or falling into some defined category. The number of paid workers who experienced at least one absence from work in the reference year or the proportion of absences which were due to illness are examples of such estimates. An estimate of the number of persons possessing a certain characteristic may also be referred to as an estimate of an aggregate.

Examples of Categorical Questions:

Q: Did you work as a paid employee?
R: Yes / No

Q: Was the last period (of absence) due to illness, accident or pregnancy?
R: Illness / Accident / Pregnancy

Quantitative Estimates

Quantitative estimates are estimates of totals or of means, medians and other measures of central tendency of quantities based upon some or all of the members of the surveyed population. They also specifically involve estimates of the form X/Y where X is an estimate of surveyed population quantity total and Y is an estimate of the number of persons in the surveyed population contributing to that total quantity.

An example of a quantitative estimate is the average number of weeks for which unemployment insurance was collected for absences due to illness. The numerator is an estimate of the total number of weeks for which unemployment insurance was collected for all persons experiencing an absence due to illness, and its denominator is the number of persons reporting an absence due to illness.

Examples of Quantitative Questions:

Q: How many consecutive weeks was this last absence?
R: |_|_| Weeks

Q: How many separate periods of 2 or more weeks were you unable to work due to your own illness, accident or pregnancy?
R: |_|_| Periods

9.2.2 Tabulation of Categorical Estimates

Estimates of the number of people with a certain characteristic can be obtained from the microdata file by summing the final weights of all records possessing the characteristic(s) of interest. Proportions and ratios of the form X/Y are obtained by:

(a) summing the final weights of records having the characteristic of interest for the numerator (X),
(b) summing the final weights of records having the characteristic of interest for the denominator (Y), then
(c) dividing the numerator estimate by the denominator estimate.

9.2.3 Tabulation of Quantitative Estimates

Estimates of quantities can be obtained from the microdata file by multiplying the value of the variable of interest by the final weight for each record, then summing this quantity over all records of interest. For example, to obtain an estimate of the total number of weeks of unemployment insurance received by people whose last absence was due to pregnancy, multiply the value reported in Q17B (weeks received UI) by the final weight for the record, then sum this value over all records with Q14=4 (last absence due to pregnancy).

To obtain a weighted average of the form X/Y, the numerator (X) is calculated as for a quantitative estimate and the denominator (Y) is calculated as for a categorical estimate. For example, to estimate the average number of weeks UI was received by people whose last absence was due to pregnancy,

(a) estimate the total number of weeks as described above,
(b) estimate the number of people in this category by summing the final weights of all records with Q14=4, then
(c) divide estimate (a) by estimate (b).

9.3 Guidelines for Statistical Analysis

The Canadian Out-of-Employment Panel Survey is based upon a complex sample design, with stratification, multiple stages of selection, and unequal probabilities of selection of respondents. Using data from such complex surveys presents problems to analysts because the survey design and the selection probabilities affect the estimation and variance calculation procedures that should be used. In order for survey estimates and analyses to be free from bias, the survey weights must be used.

While many analysis procedures found in statistical packages allow weights to be used, the meaning or definition of the weight in these procedures differ from that which is appropriate in a sample survey framework, with the result that while in many cases the estimates produced by the packages are correct, the variances that are calculated are poor. Variances for simple estimates such as totals, proportions and ratios (for qualitative variables) are provided in the accompanying Sampling Variability Tables.

For other analysis techniques (for example linear regression, logistic regression and analysis of variance), a method exists which can make the variances calculated by the standard packages more meaningful, by incorporating the unequal probabilities of selection. The method rescales the weights so that there is an average weight of 1.

For example, suppose that analysis of all male respondents is required. The steps to rescale the weights are as follows:

- select all respondents from the file who reported SEX=male
- Calculate the AVERAGE weight for these records by summing the original person weights from the microdata file for these records and then dividing by the number of respondents who reported SEX=male
- for each of these respondents, calculate a RESCALED weight equal to the original person weight divided by the AVERAGE weight
- perform the analysis for these respondents using the RESCALED weight.

However, because the stratification and clustering of the sample's design are still not taken into account, the variance estimates calculated in this way are likely to be under-estimates.

The calculation of truly meaningful variance estimates requires detailed knowledge of the design of the survey. Such detail cannot be given in this microdata file because of confidentiality. Variances that take the complete sample design into

account can be calculated for many statistics by Statistics Canada on a cost-recovery basis.

9.4 C.V. Release Guidelines

Before releasing and/or publishing any estimate from the Canadian Out-of-Employment Panel Survey, users should first determine the quality level of the estimate. The quality levels are acceptable, marginal and unacceptable. Data quality is affected by both sampling and non-sampling errors as discussed in Chapter 8. However for this purpose, the quality level of an estimate will be determined only on the basis of sampling error as reflected by the coefficient of variation as shown in the table below. Nonetheless users should be sure to read Chapter 8 to be more fully aware of the quality characteristics of these data.

First, the number of respondents who contribute to the calculation of the estimate should be determined. If this number is less than 30, the weighted estimate should be considered to be of unacceptable quality.

For weighted estimates based on sample sizes of 30 or more, users should determine the coefficient of variation of the estimate and follow the guidelines below. These quality level guidelines should be applied to weighted rounded estimates.

All estimates can be considered releasable. However, those of marginal or unacceptable quality level must be accompanied by a warning to caution subsequent users.

Quality Level Guidelines

Quality Level of Estimate	Guidelines
1. Acceptable	Estimates have: a sample size of 30 or more, and low coefficients of variation in the range 0.0% - 16.5%. No warning is required.
2. Marginal	Estimates have: a sample size of 30 or more, and high coefficients of variation in the range 16.6% - 33.3%. Estimates should be flagged with the letter M (or some similar identifier). They should be accompanied by a warning to caution subsequent users about the high levels of error, associated with the estimates.
3. Unacceptable	Estimates have: a sample size of less than 30, or very high coefficients of variation in excess of 33.3%. Statistics Canada recommends not to release estimates of unacceptable quality. However, if the user chooses to do so then estimates should be flagged with the letter U (or some similar identifier) and the following warning should accompany the estimates: “The user is advised that . . . (specify the data) . . . do not meet Statistics Canada’s quality standards for this statistical program. Conclusions based on these data will be unreliable, and most likely invalid. These data and any consequent findings should not be published. If the user chooses to publish these data or findings, then this disclaimer must be published with the data.”

10.0 Approximate Sampling Variability Tables

In order to supply coefficients of variation which would be applicable to a wide variety of categorical estimates produced from this microdata file and which could be readily accessed by the user, a set of Approximate Sampling Variability Tables has been produced. These "look-up" tables allow the user to obtain an approximate coefficient of variation based on the size of the estimate calculated from the survey data.

The coefficients of variation (C.V.) are derived using the variance formula for simple random sampling and incorporating a factor which reflects the multi-stage, clustered nature of the sample design. This factor, known as the design effect, was determined by first calculating design effects for a wide range of characteristics and then choosing from among these a conservative value to be used in the look-up tables which would then apply to the entire set of characteristics.

The table below shows the design effects, sample sizes and population counts by province which were used to produce the Approximate Sampling Variability Tables.

Table of Design Effects for COEP 1995

PROVINCE	DESIGN EFFECT	SAMPLE SIZE	POPULATION
Newfoundland	1.43	164	14,670
Prince Edward Island	1.49	51	4,740
Nova Scotia	1.47	246	21,720
New Brunswick	1.47	250	22,160
Quebec and Northwest Territories	1.34	1,867	206,550
Ontario	1.36	2,080	244,970
Manitoba	1.43	152	22,070
Saskatchewan	1.56	167	19,700
Alberta	1.34	586	77,420
British Columbia and Yukon	1.57	615	87,220
Canada	**1.30**	**6,178**	**721,170**

All coefficients of variation in the Approximate Sampling Variability Tables are approximate and, therefore, unofficial. Estimates of actual variance for specific variables may be obtained from Statistics Canada on a cost-recovery basis. The use of actual variance estimates would allow users to release otherwise unreleaseable estimates, i.e. estimates with coefficients of variation in the "unacceptable" range.

Remember: If the number of observations on which an estimate is based is less than 30, the weighted estimate should not be released regardless of the value of the coefficient of variation for this estimate. This is because the formulas used for estimating the variance do not hold true for small sample sizes.

10.1 How to Use the C.V. Tables for Categorical Estimates

The following rules should enable the user to determine the approximate coefficients of variation from the Sampling Variability Tables for estimates of the number, proportion or percentage of the surveyed population possessing a certain characteristic and for ratios and differences between such estimates.

Rule 1: Estimates of Numbers Possessing a Characteristic (Aggregates)

The coefficient of variation depends only on the size of the estimate itself. On the Sampling Variability Table for the appropriate geographic area, locate the estimated number in the left-most column of the table (headed "Numerator of Percentage") and follow the asterisks (if any) across to the first figure encountered. This figure is the approximate coefficient of variation.

Rule 2: Estimates of Proportions or Percentages Possessing a Characteristic

The coefficient of variation of an estimated proportion or percentage depends on both the size of the proportion or percentage and the size of the total upon which the proportion or percentage is based. Estimated proportions or percentages are relatively more reliable than the corresponding estimates of the numerator of the proportion or percentage, when the proportion or percentage is based upon a sub-group of the population. For example, the proportion of "paid workers who had at least one absence from work in the reference period" is more reliable than the estimated number of "paid workers with at least one absence from work in the reference period". (Note that in the tables the C.V.'s decline in value reading from left to right).

When the proportion or percentage is based upon the total population of the geographic area covered by the table, the C.V. of the proportion or percentage is the same as the C.V. of the numerator of the proportion or percentage. In this case, Rule 1 can be used.

When the proportion or percentage is based upon a subset of the total population (e.g. those in a particular sex or age group), reference should be made to the proportion or percentage (across the top of the table) and to the numerator of the proportion or percentage (down the left side of the table). The intersection of the appropriate row and column gives the coefficient of variation.

Rule 3: Estimates of Differences Between Aggregates or Percentages

The standard error of a difference between two estimates is approximately equal to the square root of the sum of squares of each standard error considered separately. That is, the standard error of a difference ($\hat{d} = \hat{X}_1 - \hat{X}_2$) is:

$$\sigma_{\hat{d}} \approx \sqrt{(\hat{X}_1 \cdot \sigma_1)^2 + (\hat{X}_2 \cdot \sigma_2)^2}$$

where $\hat{X}_1$ is estimate 1, $\hat{X}_2$ is estimate 2, and σ_1 and σ_2 are the coefficients of variation of $\hat{X}_1$ and $\hat{X}_2$ respectively. The coefficient of variation of $\hat{d}$ is given by $F_{\hat{d}}/\hat{d}$. This formula is accurate for the difference between separate and uncorrelated characteristics, but is only approximate otherwise.

Rule 4: Estimates of Ratios

In the case where the numerator is a subset of the denominator, the ratio should be converted to a percentage and Rule 2 applied. This would apply, for example, to the case where the denominator is the number of paid workers and the numerator is the number of "paid workers who had at least one absence from work in the reference period".

In the case where the numerator is not a subset of the denominator, as for example, the ratio of the number of "full-time paid workers who had at least one absence from work in the reference period" as compared to the number of "part-time paid workers who had at least one absence from work in the reference period", the standard deviation of the ratio of the estimates is approximately equal to the square root of the sum of squares of each coefficient of variation considered separately multiplied by R. That is, the standard error of a ratio ($R = \hat{X}_1 / \hat{X}_2$) is:

$$F_{\hat{R}} = \hat{R}\sqrt{\sigma_1^2 + \sigma_2^2}$$

where σ_1 and σ_2 are the coefficients of variation of $\hat{X}_1$ and $\hat{X}_2$ respectively. The coefficient of variation of $\hat{R}$ is given by $F_{\hat{R}}/\hat{R}$. The formula will tend to overstate the error, if $\hat{X}_1$ and $\hat{X}_2$ are positively correlated and understate the error if $\hat{X}_1$ and $\hat{X}_2$ are negatively correlated.

Rule 5: Estimates of Differences of Ratios

In this case, Rules 3 and 4 are combined. The C.V.'s for the two ratios are first determined using Rule 4, and then the C.V. of their difference is found using Rule 3.

10.1.1 Examples of Using the C.V. Tables for Categorical Estimates

The following 'real life' examples are included to assist users in applying the foregoing rules.

Example 1 : Estimates of Numbers Possessing a Characteristic (Aggregates)

Suppose that a user estimates that 1,060,333 paid workers had at least one absence from work in the reference period. How does the user determine the coefficient of variation of this estimate?

(1) Refer to the C.V. table for CANADA.

(2) The estimated aggregate (1,060,333) does not appear in the left-hand column (the "Numerator of Percentage" column), so it is necessary to use the figure closest to it, namely 1,120,000.

(3) The coefficient of variation for an estimated aggregate is found by referring to the first non-asterisk entry on that row, namely, 9.7%.

(4) So the approximate coefficient of variation of the estimate is 9.7%. The finding that there were 1,060,333 paid workers who had at least one absence from work in the reference period is publishable with no qualifications.

Example 2 : Estimates of Proportions or Percentages Possessing a Characteristic

Suppose that the user estimates that 509,227/1,060,333=48.0% of paid workers who had at least one absence from work in the reference period reported the reason for absence as sickness. How does the user determine the coefficient of variation of this estimate?

(1) Refer to the table for CANADA.

(2) Because the estimate is a percentage which is based on a subset of the total population (i.e., paid workers with an absence), it is necessary to use both the percentage (48.0%) and the numerator portion of the percentage (509,227) in determining the coefficient of variation.

(3) The numerator, 509,227, does not appear in the left-hand column (the “Numerator of Percentage” column) so it is necessary to use the figure closet to it, namely 560,000. Similarly, the percentage estimate does not appear as any of the column headings, so it is necessary to use the figure closest to it, 50.0%.

(4) The figure at the intersection of the row and column used, namely 9.8% is the coefficient of variation to be used.

(5) So the approximate coefficient of variation of the estimate is 9.8%. The finding that 48.0% of paid workers with an absence reported the reason for absence as sickness can be published with no qualifications.

Example 3 : Estimates of Differences Between Aggregates or Percentages

Suppose that a user estimates that 286,792/642,883=44.6% of female paid workers with an absence reported the reason for absence as sickness, while 222,435/417,450=53.3% of male paid workers with an absence reported the reason for absence as sickness. How does the user determine the coefficient of variation of the difference between these two estimates?

(1) Using the CANADA C.V. table for in the same manner as described in Example 2 gives the C.V. of the estimate for females as 15.1%, and the C.V. of the estimate for males as 13.8%.

(2) Using Rule 3, the standard error of a difference ($\hat{d} = \hat{X}_1 - \hat{X}_2$) is:

$$\sigma_{\hat{d}} = \sqrt{(\hat{X}_1 \sigma_{\hat{X}_1})^2 + (\hat{X}_2 \sigma_{\hat{X}_2})^2}$$

where $\bar{X}_1$ is estimate 1, $\bar{X}_2$ is estimate 2, and σ_1 and σ_2 are the coefficients of variation of $\bar{X}_1$ and $\bar{X}_2$ respectively.

That is, the standard error of the difference $\hat{d} = (.533-.446) = .087$ is:

$$\sigma_{\hat{d}} = \sqrt{[(.446)(.151)]^2 + [(.533)(.138)]^2}$$

$$= \sqrt{(.004535) + (.005410)}$$

$$= .100$$

(3) The coefficient of variation of $\hat{d}$ is given by $\sigma_{\hat{d}}/\hat{d} = .100/.087 = 1.15$.

(4) So the approximate coefficient of variation of the difference between the estimates is 115%. This estimate can not be released under any circumstances and should be deleted and replaced by dashes.

Example 4 : Estimates of Ratios

Suppose that the user estimates that 286,792 female paid workers with an absence reported the reason for absence as sickness, while 222,435 male paid workers with an absence reported the reason for absence as sickness. The user is interested in comparing the estimate of women versus that of men in the form of a ratio. How does the user determine the coefficient of variation of this estimate?

(1) First of all, this estimate is a ratio estimate, where the numerator of the estimate (= $\bar{X}_1$) is the number of female paid workers with an absence reported the reason for absence as sickness. The denominator of the estimate (= $\bar{X}_2$) is the number of male paid workers with an absence reported the reason for absence as sickness.

(2) Refer to the table for CANADA.

(3) The numerator of this ratio estimate is 286,792. The figure closest to it is 280,000. The coefficient of variation for this estimate is found by referring to the first non-asterisk entry on that row, namely, 19.4%.

(4) The denominator of this ratio estimate is 222,435. The figure closest to it is 280,000. The coefficient of variation for this estimate is found by referring to the first non-asterisk entry on that row, namely, 19.4%.

(5) So the approximate coefficient of variation of the ratio estimate is given by Rule 4, which is,

$$\sigma_{\hat{R}} = \sqrt{\sigma_1^2 + \sigma_2^2}$$

where σ_1 and σ_2 are the coefficients of variation of $\bar{X}_1$ and $\bar{X}_2$ respectively.

That is,

$$\alpha_{\hat{R}} = \sqrt{(.194)^2 + (.194)^2}$$

$$= 0.274$$

The obtained ratio of women versus men paid workers with an absence who reported the reason for absence as sickness is 286,792/222,435 which is 1.29:1. The coefficient of variation of this estimate is 27.4%, which can be released with a warning to the user stating the high level or error associated with the estimate.

10.2 How to Use the C.V. Tables to obtain Confidence Limits

Although coefficients of variation are widely used, a more intuitively meaningful measure of sampling error is the confidence interval of an estimate. A confidence interval constitutes a statement on the level of confidence that the true value for the population lies within a specified range of values. For example a 95% confidence interval can be described as follows:

If sampling of the population is repeated indefinitely, each sample leading to a new confidence interval for an estimate, then in 95% of the samples the interval will cover the true population value.

Using the standard error of an estimate, confidence intervals for estimates may be obtained under the assumption that under repeated sampling of the population, the various estimates obtained for a population characteristic are normally distributed about the true population value. Under this assumption, the chances are about 68 out of 100 that the difference between a sample estimate and the true population value would be less than one standard error, about 95 out of 100 that the difference would be less than two standard errors, and about 99 out 100 that the differences would be less than three standard errors. These different degrees of confidence are referred to as the confidence levels.

Confidence intervals for an estimate, $\hat{X}$, are generally expressed as two numbers, one below the estimate and one above the estimate, as ($\hat{X}$-k, $\hat{X}$+k) where k is determined depending upon the level of confidence desired and the sampling error of the estimate.

Confidence intervals for an estimate can be calculated directly from the Approximate Sampling Variability Tables by first determining from the appropriate table the coefficient of variation of the estimate $\hat{X}$, and then using the following formula to convert to a confidence interval CI:

$$CI_X = [\hat{X} - t\hat{X}\alpha_{\hat{X}}, \hat{X} + t\hat{X}\alpha_{\hat{X}}]$$

where α_X is the determined coefficient of variation of $\hat{X}$, and

t = 1 if a 68% confidence interval is desired
t = 1.6 if a 90% confidence interval is desired
t = 2 if a 95% confidence interval is desired
t = 3 if a 99% confidence interval is desired.

Note: Release guidelines which apply to the estimate also apply to the confidence interval. For example, if the estimate is not releasable, then the confidence interval is not releasable either.

10.2.1 Example of using the C.V. tables to Obtain Confidence Limits

A 95% confidence interval for the estimated proportion of paid workers who had at least one absence from work in the reference period reported the reason for absence as sickness (from Example 2, Section 10.1) would be calculated as follows.

$\hat{X}$ = 48.0% (or expressed as a proportion = .480)

t = 2

$\alpha_{\hat{X}}$ = 9.8% (.098 expressed as a proportion) is the coefficient of variation of this estimate as determined from the tables

CI_X = {.480 - (2) (.480) (.098), .480 + (2) (.480) (.098)}

CI_X = {.480 - .094, .480 + .094}

CI_X = {.386, .574}

With 95% confidence it can be said that between 38.6% and 57.4% of paid workers who had at least one absence from work in the reference period had the reason for absence as sickness.

10.3 How to Use the C.V. Tables to do a t-test

Standard errors may also be used to perform hypothesis testing, a procedure for distinguishing between population parameters using sample estimates. The sample estimates can be numbers, averages, percentages, ratios, etc. Tests may be performed at various levels of significance, where a level of significance is the probability of concluding that the characteristics are different when, in fact, they are identical.

Let $\mathbf{X_1}$ and $\mathbf{X_2}$ be sample estimates for 2 characteristics of interest. Let the standard error on the difference $\hat{X}_1 - \hat{X}_2$ be $F_{\hat{d}}$.

If $t' \frac{\hat{X}_1 \& \hat{X}_2}{F_{\hat{d}}}$ is between -2 and 2, then no conclusion

about the difference between the characteristics is justified at the 5% level of significance. If however, this ratio is smaller than -2 or larger than +2, the observed difference is significant at the 0.05 level. That is to say that the characteristics are significant.

10.3.1 Example of using the C.V. tables to do a t-test

Let us suppose we wish to test, at 5% level of significance, the hypothesis that there is no difference between the proportion of female paid workers reporting a reason for absence as sickness and the proportion of male paid workers reporting a reason for absence as sickness. From Example 3, Section 10.1, the standard error of the difference between these two estimates was found to be = .100. Hence,

$$t \;=\; \frac{\hat{X}_1 \;-\; \hat{X}_2}{\mathrm{F}_{\hat{d}}} \;=\; \frac{.446 \;-\; .533}{.100} \;=\; \frac{-.087}{.100} \;=\; -0.87.$$

Since t = -0.87 is greater than -2, it must be concluded that there is no significant difference between the two estimates at the 0.05 level of significance.

10.4 Coefficients of Variation for Quantitative Estimates

For quantitative estimates, special tables would have to be produced to determine their sampling error. Since most of the variables for the Canadian Out-of-Employment Panel Survey are primarily categorical in nature, this has not been done.

As a general rule, however, the coefficient of variation of a quantitative total will be larger than the coefficient of variation of the corresponding category estimate (i.e., the estimate of the number of persons contributing to the quantitative estimate). If the corresponding category estimate is not releasable, the quantitative estimate will not be either. For example, the coefficient of variation of the total number of weeks absent from work would be greater than the coefficient of variation of the corresponding proportion of paid workers with an absence. Hence if the coefficient of variation of the proportion is not releasable, then the coefficient of variation of the corresponding quantitative estimate will also not be releasable.

Coefficients of variation of such estimates can be derived as required for a specific estimate using a technique known as pseudo replication. This involves dividing the records on the microdata files into subgroups (or replicates) and determining the variation in the estimate from replicate to replicate. Users wishing to derive coefficients of variation for quantitative estimates may contact Statistics Canada for advice on the allocation of records to appropriate replicates and the formulae to be used in these calculations.

10.5 Release Cut-offs for the Canadian Out-of-Employment Panel Survey

The minimum size of the estimate at the provincial, regional and Canada levels are specified in the table below. Estimates smaller than the minimum size given in the "Unacceptable" column should not be released.

Table of Release Cut-offs

Province	Acceptable	Marginal	Unacceptable
Newfoundland	2960 and over	860-2960	under 860
Prince Edward Island	2190 and over	820-2190	under 820
Nova Scotia	3370 and over	940-3370	under 940
New Brunswick	3190 and over	880-3190	under 880
Quebec and Northwest Territories	4200 and over	1050-4200	under 1050
Ontario	4600 and over	1150-4600	under 1150
Manitoba	4670 and over	1860-4670	under 1360
Saskatchewan	4070 and over	1190-4070	under 1190
Alberta	4910 and over	1270-4910	under 1270
British Columbia and Yukon Territory	5840 and over	1510-5840	under 1510
CANADA	**4380 and over**	**1080-4380**	**under 1080**

10.6 C.V. Tables

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

Newfoundland / Terre-Neuve

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	111.9	111.3	109.6	106.7	103.7	100.6	97.4	94.1	90.7	87.1	79.5	61.6	35.6
2	**********	78.7	77.5	75.4	73.3	71.1	68.9	66.5	64.1	61.6	56.2	43.6	25.1	
3	**********	63.3	61.6	59.9	58.1	56.2	54.3	52.3	50.3	45.9	35.6	20.5		
4	**********	54.8	53.3	51.8	50.3	48.7	47.0	45.3	43.6	39.8	30.8	17.8		
5	**********	49.0	47.7	46.4	45.0	43.6	42.1	40.6	39.0	35.6	27.5	15.9		
6	**********	44.8	43.6	42.3	41.1	39.8	38.4	37.0	35.6	32.5	25.1	14.5		
7	**********	41.4	40.3	39.2	38.0	36.8	35.6	34.3	32.9	30.1	23.3	13.4		
8	**********	37.7	36.7	35.6	34.4	33.3	32.1	30.8	28.1	21.8	12.6			
9	**********	35.6	34.6	33.5	32.5	31.4	30.2	29.0	26.5	20.5	11.9			
10	**********	33.7	32.8	31.8	30.8	29.8	28.7	27.5	25.1	19.5	11.2			
11	**********	32.2	31.3	30.3	29.4	28.4	27.3	26.3	24.0	18.6	10.7			
12	**********	30.8	29.9	29.0	28.1	27.2	26.2	25.1	23.0	17.8	10.3			
13	**********	29.6	28.8	27.9	27.0	26.1	25.1	24.2	22.1	17.1	9.9			
14	**********	28.5	27.7	26.9	26.0	25.1	24.2	23.3	21.3	16.5	9.5			
15	**********	26.8	26.0	25.1	24.3	23.4	22.5	20.5	15.9	9.2				
16	**********	25.9	25.1	24.3	23.5	22.7	21.8	19.9	15.4	8.9				
17	**********	25.1	24.4	23.6	22.8	22.0	21.1	19.3	14.9	8.6				
18	**********	24.4	23.7	23.0	22.2	21.4	20.5	18.7	14.5	8.4				
19	**********	23.8	23.1	22.3	21.6	20.8	20.0	18.2	14.1	8.2				
20	**********	23.2	22.5	21.8	21.0	20.3	19.5	17.8	13.8	8.0				
21	**********	22.6	22.0	21.3	20.5	19.8	19.0	17.4	13.4	7.8				
22	**********	22.1	21.4	20.8	20.1	19.3	18.6	17.0	13.1	7.6				
23	**********	21.0	20.3	19.6	18.9	18.2	16.6	12.8	7.4					
24	**********	20.5	19.9	19.2	18.5	17.8	16.2	12.6	7.3					
25	**********	20.1	19.5	18.8	18.1	17.4	15.9	12.3	7.1					
30	**********	17.8	17.2	16.6	15.9	14.5	11.2	6.5						
35	**********	16.5	15.9	15.3	14.7	13.4	10.4	6.0						
40	**********	14.9	14.3	13.8	12.6	9.7	5.6							
45	**********	13.5	13.0	11.9	9.2	5.3								
50	**********	12.8	12.3	11.2	8.7	5.0								
55	**********	11.7	10.7	8.3	4.8									
60	**********	10.3	8.0	4.6										
65	**********	9.9	7.6	4.4										
70	**********	9.5	7.4	4.3										
75	**********	7.1	4.1											
80	**********	6.9	4.0											
85	**********	6.7	3.9											
90	**********	6.5	3.7											
95	**********	6.3	3.6											
100	**********	6.2	3.6											
125	**********	3.2												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

Prince Edward Island / Île du Prince Édouard

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	**********	**********	**********	114.1	111.0	107.9	104.7	101.4	97.9	94.4	90.7	82.8	64.1	37.0
2	**********	**********	**********	80.7	78.5	76.3	74.0	71.7	69.2	66.7	64.1	58.5	45.3	26.2
3	**********	**********	**********	64.1	62.3	60.4	58.5	56.5	54.5	52.3	47.8	37.0	21.4	
4	**********	**********	**********	55.5	54.0	52.3	50.7	49.0	47.2	45.3	41.4	32.1	18.5	
5	**********	**********	**********	48.3	46.8	45.3	43.8	42.2	40.5	37.0	28.7	16.6		
6	**********	**********	**********	44.1	42.7	41.4	40.0	38.5	37.0	33.8	26.2	15.1		
7	**********	**********	**********	40.8	39.6	38.3	37.0	35.7	34.3	31.3	24.2	14.0		
8	**********	**********	**********	37.0	35.8	34.6	33.4	32.1	29.3	22.7	13.1			
9	**********	**********	**********	34.9	33.8	32.6	31.5	30.2	27.6	21.4	12.3			
10	**********	**********	**********	32.1	31.0	29.8	28.7	26.2	20.3	11.7				
11	**********	**********	**********	30.6	29.5	28.5	27.3	25.0	19.3	11.2				
12	**********	**********	**********	28.3	27.2	26.2	23.9	18.5	10.7					
13	**********	**********	**********	27.2	26.2	25.1	23.0	17.8	10.3					
14	**********	**********	**********	26.2	25.2	24.2	22.1	17.1	9.9					
15	**********	**********	**********	24.4	23.4	21.4	16.6	9.6						
16	**********	**********	**********	23.6	22.7	20.7	16.0	9.3						
17	**********	**********	**********	22.0	20.1	15.5	9.0							
18	**********	**********	**********	21.4	19.5	15.1	8.7							
19	**********	**********	**********	19.0	14.7	8.5								
20	**********	**********	**********	18.5	14.3	8.3								
21	**********	**********	**********	18.1	14.0	8.1								
22	**********	**********	**********	17.6	13.7	7.9								
23	**********	**********	**********	17.3	13.4	7.7								
24	**********	**********	**********	13.1	7.6									
25	**********	**********	**********	12.8	7.4									
30	**********	**********	**********	11.7	6.8									
35	**********	**********	**********	6.3										
40	**********	**********	**********	5.9										

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

Nova Scotia / Nouvelle Écosse

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	112.7	112.1	110.4	107.5	104.4	101.3	98.1	94.8	91.3	87.7	80.1	62.0	35.8
2	********	79.7	79.3	78.1	76.0	73.8	71.6	69.4	67.0	64.6	62.0	56.6	43.9	25.3
3	**********	64.7	63.7	62.0	60.3	58.5	56.6	54.7	52.7	50.7	46.2	35.8	20.7	
4	**********	56.1	55.2	53.7	52.2	50.7	49.1	47.4	45.7	43.9	40.1	31.0	17.9	
5	**********	49.4	48.1	46.7	45.3	43.9	42.4	40.8	39.2	35.8	27.7	16.0		
6	**********	45.1	43.9	42.6	41.4	40.1	38.7	37.3	35.8	32.7	25.3	14.6		
7	**********	41.7	40.6	39.5	38.3	37.1	35.8	34.5	33.2	30.3	23.5	13.5		
8	**********	39.0	38.0	36.9	35.8	34.7	33.5	32.3	31.0	28.3	21.9	12.7		
9	**********	36.8	35.8	34.8	33.8	32.7	31.6	30.4	29.2	26.7	20.7	11.9		
10	**********	34.9	34.0	33.0	32.0	31.0	30.0	28.9	27.7	25.3	19.6	11.3		
11	**********	32.4	31.5	30.5	29.6	28.6	27.5	26.5	24.2	18.7	10.8			
12	**********	31.0	30.1	29.2	28.3	27.4	26.4	25.3	23.1	17.9	10.3			
13	**********	29.8	29.0	28.1	27.2	26.3	25.3	24.3	22.2	17.2	9.9			
14	**********	28.7	27.9	27.1	26.2	25.3	24.4	23.5	21.4	16.6	9.6			
15	**********	27.7	27.0	26.2	25.3	24.5	23.6	22.7	20.7	16.0	9.2			
16	**********	26.9	26.1	25.3	24.5	23.7	22.8	21.9	20.0	15.5	9.0			
17	**********	26.1	25.3	24.6	23.8	23.0	22.2	21.3	19.4	15.0	8.7			
18	**********	25.3	24.6	23.9	23.1	22.3	21.5	20.7	18.9	14.6	8.4			
19	**********	24.7	24.0	23.2	22.5	21.7	21.0	20.1	18.4	14.2	8.2			
20	**********	24.0	23.4	22.7	21.9	21.2	20.4	19.6	17.9	13.9	8.0			
21	**********	23.5	22.8	22.1	21.4	20.7	19.9	19.1	17.5	13.5	7.8			
22	**********	22.3	21.6	20.9	20.2	19.5	18.7	17.1	13.2	7.6				
23	**********	21.8	21.1	20.5	19.8	19.0	18.3	16.7	12.9	7.5				
24	**********	21.3	20.7	20.0	19.3	18.6	17.9	16.4	12.7	7.3				
25	**********	20.9	20.3	19.6	19.0	18.3	17.5	16.0	12.4	7.2				
30	**********	19.1	18.5	17.9	17.3	16.7	16.0	14.6	11.3	6.5				
35	**********	17.1	16.6	16.0	15.4	14.8	13.5	10.5	6.1					
40	**********	16.0	15.5	15.0	14.4	13.9	12.7	9.8	5.7					
45	**********	14.6	14.1	13.6	13.1	11.9	9.2	5.3						
50	**********	13.9	13.4	12.9	12.4	11.3	8.8	5.1						
55	**********	12.8	12.3	11.8	10.8	8.4	4.8							
60	**********	12.2	11.8	11.3	10.3	8.0	4.6							
65	**********	11.8	11.3	10.9	9.9	7.7	4.4							
70	**********	10.9	10.5	9.6	7.4	4.3								
75	**********	10.5	10.1	9.2	7.2	4.1								
80	**********	9.8	9.0	6.9	4.0									
85	**********	9.5	8.7	6.7	3.9									
90	**********	8.4	6.5	3.8										
95	**********	8.2	6.4	3.7										
100	**********	8.0	6.2	3.6										
125	**********	5.5	3.2											
150	**********	5.1	2.9											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

New Brunswick / Nouveau Brunswick

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	112.9	112.4	110.6	107.7	104.6	101.5	98.3	95.0	91.5	87.9	80.3	62.2	35.9
2	********	79.9	79.5	78.2	76.1	74.0	71.8	69.5	67.1	64.7	62.2	56.8	44.0	25.4
3	**********	64.9	63.9	62.2	60.4	58.6	56.8	54.8	52.8	50.8	46.3	35.9	20.7	
4	**********	56.2	55.3	53.8	52.3	50.8	49.1	47.5	45.8	44.0	40.1	31.1	17.9	
5	**********	49.5	48.2	46.8	45.4	44.0	42.5	40.9	39.3	35.9	27.8	16.1		
6	**********	45.2	44.0	42.7	41.4	40.1	38.8	37.4	35.9	32.8	25.4	14.7		
7	**********	41.8	40.7	39.6	38.4	37.2	35.9	34.6	33.2	30.3	23.5	13.6		
8	**********	39.1	38.1	37.0	35.9	34.8	33.6	32.4	31.1	28.4	22.0	12.7		
9	**********	36.9	35.9	34.9	33.8	32.8	31.7	30.5	29.3	26.8	20.7	12.0		
10	**********	35.0	34.1	33.1	32.1	31.1	30.0	28.9	27.8	25.4	19.7	11.4		
11	**********	33.4	32.5	31.6	30.6	29.6	28.6	27.6	26.5	24.2	18.7	10.8		
12	**********	31.1	30.2	29.3	28.4	27.4	26.4	25.4	23.2	17.9	10.4			
13	**********	29.9	29.0	28.2	27.3	26.3	25.4	24.4	22.3	17.2	10.0			
14	**********	28.8	28.0	27.1	26.3	25.4	24.5	23.5	21.5	16.6	9.6			
15	**********	27.8	27.0	26.2	25.4	24.5	23.6	22.7	20.7	16.1	9.3			
16	**********	26.9	26.2	25.4	24.6	23.7	22.9	22.0	20.1	15.5	9.0			
17	**********	26.1	25.4	24.6	23.8	23.0	22.2	21.3	19.5	15.1	8.7			
18	**********	25.4	24.7	23.9	23.2	22.4	21.6	20.7	18.9	14.7	8.5			
19	**********	24.7	24.0	23.3	22.6	21.8	21.0	20.2	18.4	14.3	8.2			
20	**********	24.1	23.4	22.7	22.0	21.2	20.5	19.7	17.9	13.9	8.0			
21	**********	23.5	22.8	22.2	21.5	20.7	20.0	19.2	17.5	13.6	7.8			
22	**********	23.0	22.3	21.6	21.0	20.2	19.5	18.7	17.1	13.3	7.7			
23	**********	21.8	21.2	20.5	19.8	19.1	18.3	16.7	13.0	7.5				
24	**********	21.4	20.7	20.1	19.4	18.7	17.9	16.4	12.7	7.3				
25	**********	20.9	20.3	19.7	19.0	18.3	17.6	16.1	12.4	7.2				
30	**********	19.1	18.5	17.9	17.3	16.7	16.1	14.7	11.4	6.6				
35	**********	17.2	16.6	16.1	15.5	14.9	13.6	10.5	6.1					
40	**********	16.1	15.5	15.0	14.5	13.9	12.7	9.8	5.7					
45	**********	14.7	14.2	13.6	13.1	12.0	9.3	5.4						
50	**********	13.9	13.4	12.9	12.4	11.4	8.8	5.1						
55	**********	13.3	12.8	12.3	11.9	10.8	8.4	4.8						
60	**********	12.3	11.8	11.4	10.4	8.0	4.6							
65	**********	11.8	11.4	10.9	10.0	7.7	4.5							
70	**********	10.9	10.5	9.6	7.4	4.3								
75	**********	10.6	10.2	9.3	7.2	4.1								
80	**********	9.8	9.0	7.0	4.0									
85	**********	9.5	8.7	6.7	3.9									
90	**********	8.5	6.6	3.8										
95	**********	8.2	6.4	3.7										
100	**********	8.0	6.2	3.6										
125	**********	5.6	3.2											
150	**********	5.1	2.9											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

Quebec / Québec

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	121.1	120.6	120.0	118.1	115.0	111.7	108.4	105.0	101.4	97.7	93.9	85.7	66.4	38.3
2	85.7	85.3	84.8	83.5	81.3	79.0	76.7	74.2	71.7	69.1	66.4	60.6	46.9	27.1
3	********	69.6	69.3	68.2	66.4	64.5	62.6	60.6	58.5	56.4	54.2	49.5	38.3	22.1
4	********	60.3	60.0	59.1	57.5	55.9	54.2	52.5	50.7	48.9	46.9	42.9	33.2	19.2
5	********	53.9	53.7	52.8	51.4	50.0	48.5	46.9	45.4	43.7	42.0	38.3	29.7	17.1
6	********	49.2	49.0	48.2	46.9	45.6	44.3	42.9	41.4	39.9	38.3	35.0	27.1	15.6
7	********	45.6	45.4	44.7	43.5	42.2	41.0	39.7	38.3	36.9	35.5	32.4	25.1	14.5
8	********	42.6	42.4	41.8	40.7	39.5	38.3	37.1	35.9	34.5	33.2	30.3	23.5	13.6
9	********	40.2	40.0	39.4	38.3	37.2	36.1	35.0	33.8	32.6	31.3	28.6	22.1	12.8
10	********	38.1	37.9	37.4	36.4	35.3	34.3	33.2	32.1	30.9	29.7	27.1	21.0	12.1
11	********	36.4	36.2	35.6	34.7	33.7	32.7	31.6	30.6	29.5	28.3	25.8	20.0	11.6
12	********	34.8	34.6	34.1	33.2	32.3	31.3	30.3	29.3	28.2	27.1	24.7	19.2	11.1
13	********	33.4	33.3	32.8	31.9	31.0	30.1	29.1	28.1	27.1	26.0	23.8	18.4	10.6
14	********	32.2	32.1	31.6	30.7	29.9	29.0	28.1	27.1	26.1	25.1	22.9	17.7	10.2
15	********	31.1	31.0	30.5	29.7	28.9	28.0	27.1	26.2	25.2	24.2	22.1	17.1	9.9
16	********	30.1	30.0	29.5	28.7	27.9	27.1	26.2	25.4	24.4	23.5	21.4	16.6	9.6
17	********	29.2	29.1	28.7	27.9	27.1	26.3	25.5	24.6	23.7	22.8	20.8	16.1	9.3
18	********	28.4	28.3	27.8	27.1	26.3	25.6	24.7	23.9	23.0	22.1	20.2	15.6	9.0
19	********	27.7	27.5	27.1	26.4	25.6	24.9	24.1	23.3	22.4	21.5	19.7	15.2	8.8
20	********	27.0	26.8	26.4	25.7	25.0	24.2	23.5	22.7	21.9	21.0	19.2	14.8	8.6
21	**********	26.2	25.8	25.1	24.4	23.7	22.9	22.1	21.3	20.5	18.7	14.5	8.4	
22	**********	25.6	25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.3	14.2	8.2	
23	**********	25.0	24.6	24.0	23.3	22.6	21.9	21.1	20.4	19.6	17.9	13.8	8.0	
24	**********	24.5	24.1	23.5	22.8	22.1	21.4	20.7	19.9	19.2	17.5	13.6	7.8	
25	**********	24.0	23.6	23.0	22.3	21.7	21.0	20.3	19.5	18.8	17.1	13.3	7.7	
30	**********	21.9	21.6	21.0	20.4	19.8	19.2	18.5	17.8	17.1	15.6	12.1	7.0	
35	**********	20.3	20.0	19.4	18.9	18.3	17.7	17.1	16.5	15.9	14.5	11.2	6.5	
40	**********	19.0	18.7	18.2	17.7	17.1	16.6	16.0	15.5	14.8	13.6	10.5	6.1	
45	**********	17.6	17.1	16.7	16.2	15.6	15.1	14.6	14.0	12.8	9.9	5.7		
50	**********	16.7	16.3	15.8	15.3	14.8	14.3	13.8	13.3	12.1	9.4	5.4		
55	**********	15.9	15.5	15.1	14.6	14.2	13.7	13.2	12.7	11.6	9.0	5.2		
60	**********	15.3	14.8	14.4	14.0	13.6	13.1	12.6	12.1	11.1	8.6	4.9		
65	**********	14.7	14.3	13.9	13.4	13.0	12.6	12.1	11.6	10.6	8.2	4.8		
70	**********	14.1	13.7	13.4	13.0	12.5	12.1	11.7	11.2	10.2	7.9	4.6		
75	**********	13.6	13.3	12.9	12.5	12.1	11.7	11.3	10.8	9.9	7.7	4.4		
80	**********	13.2	12.9	12.5	12.1	11.7	11.3	10.9	10.5	9.6	7.4	4.3		
85	**********	12.8	12.5	12.1	11.8	11.4	11.0	10.6	10.2	9.3	7.2	4.2		
90	**********	12.5	12.1	11.8	11.4	11.1	10.7	10.3	9.9	9.0	7.0	4.0		
95	**********	12.1	11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9		
100	**********	11.8	11.5	11.2	10.8	10.5	10.1	9.8	9.4	8.6	6.6	3.8		
125	**********	10.3	10.0	9.7	9.4	9.1	8.7	8.4	7.7	5.9	3.4			
150	**********	9.4	9.1	8.9	8.6	8.3	8.0	7.7	7.0	5.4	3.1			
200	**********	8.1	7.9	7.7	7.4	7.2	6.9	6.6	6.1	4.7	2.7			
250	**********	7.1	6.9	6.6	6.4	6.2	5.9	5.4	4.2	2.4				
300	**********	6.5	6.3	6.1	5.9	5.6	5.4	4.9	3.8	2.2				
350	**********	5.8	5.6	5.4	5.2	5.0	4.6	3.5	2.0					
400	**********	5.4	5.2	5.1	4.9	4.7	4.3	3.3	1.9					
450	**********	4.9	4.8	4.6	4.4	4.0	3.1	1.8						
500	**********	4.7	4.5	4.4	4.2	3.8	3.0	1.7						
750	**********	3.4	3.1	2.4	1.4									
1000	**********	2.7	2.1	1.2										
1500	**********	1.0												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

Ontario / Ontario

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	126.0	125.4	124.8	122.8	119.6	116.2	112.7	109.1	105.4	101.6	97.6	89.1	69.0	39.9
2	89.1	88.7	88.2	86.9	84.5	82.2	79.7	77.2	74.6	71.8	69.0	63.0	48.8	28.2
3	********	72.4	72.0	70.9	69.0	67.1	65.1	63.0	60.9	58.7	56.4	51.4	39.9	23.0
4	********	62.7	62.4	61.4	59.8	58.1	56.4	54.6	52.7	50.8	48.8	44.6	34.5	19.9
5	********	56.1	55.8	54.9	53.5	52.0	50.4	48.8	47.2	45.4	43.7	39.9	30.9	17.8
6	********	51.2	50.9	50.1	48.8	47.4	46.0	44.6	43.0	41.5	39.9	36.4	28.2	16.3
7	********	47.4	47.2	46.4	45.2	43.9	42.6	41.3	39.9	38.4	36.9	33.7	26.1	15.1
8	********	44.3	44.1	43.4	42.3	41.1	39.9	38.6	37.3	35.9	34.5	31.5	24.4	14.1
9	********	41.8	41.6	40.9	39.9	38.7	37.6	36.4	35.1	33.9	32.5	29.7	23.0	13.3
10	********	39.7	39.5	38.8	37.8	36.7	35.6	34.5	33.3	32.1	30.9	28.2	21.8	12.6
11	********	37.8	37.6	37.0	36.0	35.0	34.0	32.9	31.8	30.6	29.4	26.9	20.8	12.0
12	********	36.2	36.0	35.5	34.5	33.5	32.5	31.5	30.4	29.3	28.2	25.7	19.9	11.5
13	********	34.8	34.6	34.1	33.2	32.2	31.3	30.3	29.2	28.2	27.1	24.7	19.1	11.1
14	********	33.5	33.3	32.8	32.0	31.1	30.1	29.2	28.2	27.2	26.1	23.8	18.4	10.7
15	********	32.4	32.2	31.7	30.9	30.0	29.1	28.2	27.2	26.2	25.2	23.0	17.8	10.3
16	********	31.3	31.2	30.7	29.9	29.0	28.2	27.3	26.4	25.4	24.4	22.3	17.3	10.0
17	********	30.4	30.3	29.8	29.0	28.2	27.3	26.5	25.6	24.6	23.7	21.6	16.7	9.7
18	********	29.6	29.4	29.0	28.2	27.4	26.6	25.7	24.9	23.9	23.0	21.0	16.3	9.4
19	********	28.8	28.6	28.2	27.4	26.7	25.9	25.0	24.2	23.3	22.4	20.4	15.8	9.1
20	********	28.0	27.9	27.5	26.7	26.0	25.2	24.4	23.6	22.7	21.8	19.9	15.4	8.9
21	********	27.4	27.2	26.8	26.1	25.4	24.6	23.8	23.0	22.2	21.3	19.4	15.1	8.7
22	********	26.7	26.6	26.2	25.5	24.8	24.0	23.3	22.5	21.7	20.8	19.0	14.7	8.5
23	********	26.1	26.0	25.6	24.9	24.2	23.5	22.8	22.0	21.2	20.4	18.6	14.4	8.3
24	********	25.6	25.5	25.1	24.4	23.7	23.0	22.3	21.5	20.7	19.9	18.2	14.1	8.1
25	**********	25.0	24.6	23.9	23.2	22.5	21.8	21.1	20.3	19.5	17.8	13.8	8.0	
30	**********	22.8	22.4	21.8	21.2	20.6	19.9	19.3	18.5	17.8	16.3	12.6	7.3	
35	**********	21.1	20.8	20.2	19.6	19.1	18.4	17.8	17.2	16.5	15.1	11.7	6.7	
40	**********	19.7	19.4	18.9	18.4	17.8	17.3	16.7	16.1	15.4	14.1	10.9	6.3	
45	**********	18.6	18.3	17.8	17.3	16.8	16.3	15.7	15.1	14.6	13.3	10.3	5.9	
50	**********	17.4	16.9	16.4	15.9	15.4	14.9	14.4	13.8	12.6	9.8	5.6		
55	**********	16.6	16.1	15.7	15.2	14.7	14.2	13.7	13.2	12.0	9.3	5.4		
60	**********	15.9	15.4	15.0	14.6	14.1	13.6	13.1	12.6	11.5	8.9	5.1		
65	**********	15.2	14.8	14.4	14.0	13.5	13.1	12.6	12.1	11.1	8.6	4.9		
70	**********	14.7	14.3	13.9	13.5	13.0	12.6	12.1	11.7	10.7	8.3	4.8		
75	**********	14.2	13.8	13.4	13.0	12.6	12.2	11.7	11.3	10.3	8.0	4.6		
80	**********	13.7	13.4	13.0	12.6	12.2	11.8	11.4	10.9	10.0	7.7	4.5		
85	**********	13.3	13.0	12.6	12.2	11.8	11.4	11.0	10.6	9.7	7.5	4.3		
90	**********	12.9	12.6	12.2	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2		
95	**********	12.6	12.3	11.9	11.6	11.2	10.8	10.4	10.0	9.1	7.1	4.1		
100	**********	12.3	12.0	11.6	11.3	10.9	10.5	10.2	9.8	8.9	6.9	4.0		
125	**********	10.7	10.4	10.1	9.8	9.4	9.1	8.7	8.0	6.2	3.6			
150	**********	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.6	3.3			
200	**********	8.5	8.2	8.0	7.7	7.5	7.2	6.9	6.3	4.9	2.8			
250	**********	7.3	7.1	6.9	6.7	6.4	6.2	5.6	4.4	2.5				
300	**********	6.7	6.5	6.3	6.1	5.9	5.6	5.1	4.0	2.3				
350	**********	6.2	6.0	5.8	5.6	5.4	5.2	4.8	3.7	2.1				
400	**********	5.6	5.5	5.3	5.1	4.9	4.5	3.5	2.0					
450	**********	5.3	5.1	5.0	4.8	4.6	4.2	3.3	1.9					
500	**********	4.9	4.7	4.5	4.4	4.0	3.1	1.8						
750	**********	3.7	3.6	3.3	2.5	1.5								
1000	**********	2.8	2.2	1.3										
1500	**********	1.8	1.0											
2000	**********	0.9												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

Manitoba / Manitoba

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	142.9	142.2	140.0	136.2	132.4	128.4	124.4	120.1	115.8	111.2	101.5	78.7	45.4
2	********	101.0	100.5	99.0	96.3	93.6	90.8	87.9	85.0	81.9	78.7	71.8	55.6	32.1
3	**********	82.1	80.8	78.7	76.4	74.2	71.8	69.4	66.8	64.2	58.6	45.4	26.2	
4	**********	71.1	70.0	68.1	66.2	64.2	62.2	60.1	57.9	55.6	50.8	39.3	22.7	
5	**********	62.6	60.9	59.2	57.4	55.6	53.7	51.8	49.7	45.4	35.2	20.3		
6	**********	57.1	55.6	54.0	52.4	50.8	49.0	47.3	45.4	41.5	32.1	18.5		
7	**********	52.9	51.5	50.0	48.5	47.0	45.4	43.8	42.0	38.4	29.7	17.2		
8	**********	49.5	48.2	46.8	45.4	44.0	42.5	40.9	39.3	35.9	27.8	16.1		
9	**********	46.7	45.4	44.1	42.8	41.5	40.0	38.6	37.1	33.8	26.2	15.1		
10	**********	44.3	43.1	41.9	40.6	39.3	38.0	36.6	35.2	32.1	24.9	14.4		
11	**********	42.2	41.1	39.9	38.7	37.5	36.2	34.9	33.5	30.6	23.7	13.7		
12	**********	39.3	38.2	37.1	35.9	34.7	33.4	32.1	29.3	22.7	13.1			
13	**********	37.8	36.7	35.6	34.5	33.3	32.1	30.8	28.2	21.8	12.6			
14	**********	36.4	35.4	34.3	33.2	32.1	30.9	29.7	27.1	21.0	12.1			
15	**********	35.2	34.2	33.2	32.1	31.0	29.9	28.7	26.2	20.3	11.7			
16	**********	34.1	33.1	32.1	31.1	30.0	28.9	27.8	25.4	19.7	11.4			
17	**********	33.0	32.1	31.2	30.2	29.1	28.1	27.0	24.6	19.1	11.0			
18	**********	32.1	31.2	30.3	29.3	28.3	27.3	26.2	23.9	18.5	10.7			
19	**********	31.3	30.4	29.5	28.5	27.6	26.6	25.5	23.3	18.0	10.4			
20	**********	30.5	29.6	28.7	27.8	26.9	25.9	24.9	22.7	17.6	10.2			
21	**********	29.7	28.9	28.0	27.1	26.2	25.3	24.3	22.2	17.2	9.9			
22	**********	29.0	28.2	27.4	26.5	25.6	24.7	23.7	21.6	16.8	9.7			
23	**********	27.6	26.8	25.9	25.1	24.1	23.2	21.2	16.4	9.5				
24	**********	27.0	26.2	25.4	24.5	23.6	22.7	20.7	16.1	9.3				
25	**********	26.5	25.7	24.9	24.0	23.2	22.2	20.3	15.7	9.1				
30	**********	24.2	23.4	22.7	21.9	21.1	20.3	18.5	14.4	8.3				
35	**********	21.7	21.0	20.3	19.6	18.8	17.2	13.3	7.7					
40	**********	20.3	19.7	19.0	18.3	17.6	16.1	12.4	7.2					
45	**********	18.5	17.9	17.3	16.6	15.1	11.7	6.8						
50	**********	17.6	17.0	16.4	15.7	14.4	11.1	6.4						
55	**********	16.8	16.2	15.6	15.0	13.7	10.6	6.1						
60	**********	15.5	14.9	14.4	13.1	10.2	5.9							
65	**********	14.9	14.4	13.8	12.6	9.8	5.6							
70	**********	13.8	13.3	12.1	9.4	5.4								
75	**********	13.4	12.8	11.7	9.1	5.2								
80	**********	12.4	11.4	8.8	5.1									
85	**********	12.1	11.0	8.5	4.9									
90	**********	10.7	8.3	4.8										
95	**********	10.4	8.1	4.7										
100	**********	10.2	7.9	4.5										
125	**********	7.0	4.1											
150	**********	6.4	3.7											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

Saskatchewan / Saskatchewan

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	134.4	133.7	131.7	128.1	124.5	120.8	117.0	113.0	108.9	104.6	95.5	74.0	42.7
2	**********	94.6	93.1	90.6	88.1	85.4	82.7	79.9	77.0	74.0	67.5	52.3	30.2	
3	**********	77.2	76.0	74.0	71.9	69.8	67.5	65.2	62.9	60.4	55.1	42.7	24.7	
4	**********	65.8	64.1	62.3	60.4	58.5	56.5	54.5	52.3	47.8	37.0	21.4		
5	**********	58.9	57.3	55.7	54.0	52.3	50.5	48.7	46.8	42.7	33.1	19.1		
6	**********	53.7	52.3	50.8	49.3	47.8	46.1	44.5	42.7	39.0	30.2	17.4		
7	**********	49.8	48.4	47.1	45.7	44.2	42.7	41.2	39.5	36.1	28.0	16.1		
8	**********	46.5	45.3	44.0	42.7	41.4	40.0	38.5	37.0	33.8	26.2	15.1		
9	**********	43.9	42.7	41.5	40.3	39.0	37.7	36.3	34.9	31.8	24.7	14.2		
10	**********	40.5	39.4	38.2	37.0	35.7	34.4	33.1	30.2	23.4	13.5			
11	**********	38.6	37.5	36.4	35.3	34.1	32.8	31.5	28.8	22.3	12.9			
12	**********	37.0	36.0	34.9	33.8	32.6	31.4	30.2	27.6	21.4	12.3			
13	**********	35.5	34.5	33.5	32.4	31.3	30.2	29.0	26.5	20.5	11.8			
14	**********	34.2	33.3	32.3	31.3	30.2	29.1	28.0	25.5	19.8	11.4			
15	**********	33.1	32.2	31.2	30.2	29.2	28.1	27.0	24.7	19.1	11.0			
16	**********	32.0	31.1	30.2	29.2	28.3	27.2	26.2	23.9	18.5	10.7			
17	**********	31.1	30.2	29.3	28.4	27.4	26.4	25.4	23.2	17.9	10.4			
18	**********	30.2	29.4	28.5	27.6	26.6	25.7	24.7	22.5	17.4	10.1			
19	**********	29.4	28.6	27.7	26.8	25.9	25.0	24.0	21.9	17.0	9.8			
20	**********	27.8	27.0	26.2	25.3	24.4	23.4	21.4	16.5	9.6				
21	**********	27.2	26.4	25.5	24.7	23.8	22.8	20.8	16.1	9.3				
22	**********	26.6	25.8	24.9	24.1	23.2	22.3	20.4	15.8	9.1				
23	**********	26.0	25.2	24.4	23.6	22.7	21.8	19.9	15.4	8.9				
24	**********	25.4	24.7	23.9	23.1	22.2	21.4	19.5	15.1	8.7				
25	**********	24.9	24.2	23.4	22.6	21.8	20.9	19.1	14.8	8.5				
30	**********	22.1	21.4	20.6	19.9	19.1	17.4	13.5	7.8					
35	**********	20.4	19.8	19.1	18.4	17.7	16.1	12.5	7.2					
40	**********	18.5	17.9	17.2	16.5	15.1	11.7	6.8						
45	**********	17.4	16.8	16.2	15.6	14.2	11.0	6.4						
50	**********	16.0	15.4	14.8	13.5	10.5	6.0							
55	**********	15.2	14.7	14.1	12.9	10.0	5.8							
60	**********	14.1	13.5	12.3	9.6	5.5								
65	**********	13.5	13.0	11.8	9.2	5.3								
70	**********	12.5	11.4	8.8	5.1									
75	**********	12.1	11.0	8.5	4.9									
80	**********	10.7	8.3	4.8										
85	**********	10.4	8.0	4.6										
90	**********	10.1	7.8	4.5										
95	**********	9.8	7.6	4.4										
100	**********	7.4	4.3											
125	**********	6.6	3.8											
150	**********	3.5												

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

Alberta / Alberta

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	131.9	131.2	129.2	125.7	122.2	118.6	114.8	110.9	106.9	102.7	93.7	72.6	41.9
2	********	93.3	92.8	91.4	88.9	86.4	83.8	81.2	78.4	75.6	72.6	66.3	51.3	29.6
3	********	76.1	75.8	74.6	72.6	70.6	68.4	66.3	64.0	61.7	59.3	54.1	41.9	24.2
4	********	65.9	65.6	64.6	62.9	61.1	59.3	57.4	55.4	53.4	51.3	46.9	36.3	21.0
5	********	59.0	58.7	57.8	56.2	54.7	53.0	51.3	49.6	47.8	45.9	41.9	32.5	18.7
6	********	53.8	53.6	52.7	51.3	49.9	48.4	46.9	45.3	43.6	41.9	38.3	29.6	17.1
7	********	49.8	49.6	48.8	47.5	46.2	44.8	43.4	41.9	40.4	38.8	35.4	27.4	15.8
8	**********	46.4	45.7	44.5	43.2	41.9	40.6	39.2	37.8	36.3	33.1	25.7	14.8	
9	**********	43.7	43.1	41.9	40.7	39.5	38.3	37.0	35.6	34.2	31.2	24.2	14.0	
10	**********	41.5	40.9	39.8	38.6	37.5	36.3	35.1	33.8	32.5	29.6	23.0	13.3	
11	**********	39.6	39.0	37.9	36.8	35.7	34.6	33.4	32.2	31.0	28.3	21.9	12.6	
12	**********	37.9	37.3	36.3	35.3	34.2	33.1	32.0	30.8	29.6	27.1	21.0	12.1	
13	**********	36.4	35.8	34.9	33.9	32.9	31.8	30.8	29.6	28.5	26.0	20.1	11.6	
14	**********	35.1	34.5	33.6	32.7	31.7	30.7	29.6	28.6	27.4	25.0	19.4	11.2	
15	**********	33.9	33.4	32.5	31.6	30.6	29.6	28.6	27.6	26.5	24.2	18.7	10.8	
16	**********	32.3	31.4	30.6	29.6	28.7	27.7	26.7	25.7	23.4	18.2	10.5		
17	**********	31.3	30.5	29.6	28.8	27.8	26.9	25.9	24.9	22.7	17.6	10.2		
18	**********	30.5	29.6	28.8	27.9	27.1	26.1	25.2	24.2	22.1	17.1	9.9		
19	**********	29.6	28.8	28.0	27.2	26.3	25.4	24.5	23.6	21.5	16.7	9.6		
20	**********	28.9	28.1	27.3	26.5	25.7	24.8	23.9	23.0	21.0	16.2	9.4		
21	**********	28.2	27.4	26.7	25.9	25.0	24.2	23.3	22.4	20.5	15.8	9.1		
22	**********	27.5	26.8	26.1	25.3	24.5	23.6	22.8	21.9	20.0	15.5	8.9		
23	**********	26.9	26.2	25.5	24.7	23.9	23.1	22.3	21.4	19.5	15.1	8.7		
24	**********	26.4	25.7	24.9	24.2	23.4	22.6	21.8	21.0	19.1	14.8	8.6		
25	**********	25.8	25.1	24.4	23.7	23.0	22.2	21.4	20.5	18.7	14.5	8.4		
30	**********	23.6	23.0	22.3	21.6	21.0	20.2	19.5	18.7	17.1	13.3	7.7		
35	**********	21.8	21.3	20.7	20.0	19.4	18.7	18.1	17.4	15.8	12.3	7.1		
40	**********	19.9	19.3	18.7	18.2	17.5	16.9	16.2	14.8	11.5	6.6			
45	**********	18.7	18.2	17.7	17.1	16.5	15.9	15.3	14.0	10.8	6.2			
50	**********	17.8	17.3	16.8	16.2	15.7	15.1	14.5	13.3	10.3	5.9			
55	**********	17.0	16.5	16.0	15.5	15.0	14.4	13.8	12.6	9.8	5.7			
60	**********	16.2	15.8	15.3	14.8	14.3	13.8	13.3	12.1	9.4	5.4			
65	**********	15.6	15.2	14.7	14.2	13.8	13.3	12.7	11.6	9.0	5.2			
70	**********	15.0	14.6	14.2	13.7	13.3	12.8	12.3	11.2	8.7	5.0			
75	**********	14.5	14.1	13.7	13.3	12.8	12.3	11.9	10.8	8.4	4.8			
80	**********	13.7	13.3	12.8	12.4	11.9	11.5	10.5	8.1	4.7				
85	**********	13.3	12.9	12.5	12.0	11.6	11.1	10.2	7.9	4.5				
90	**********	12.9	12.5	12.1	11.7	11.3	10.8	9.9	7.7	4.4				
95	**********	12.5	12.2	11.8	11.4	11.0	10.5	9.6	7.4	4.3				
100	**********	12.2	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2				
125	**********	10.6	10.3	9.9	9.6	9.2	8.4	6.5	3.7					
150	**********	9.7	9.4	9.1	8.7	8.4	7.7	5.9	3.4					
200	**********	7.8	7.6	7.3	6.6	5.1	3.0							
250	**********	6.8	6.5	5.9	4.6	2.7								
300	**********	5.9	5.4	4.2	2.4									
350	**********	5.0	3.9	2.2										
400	**********	3.6	2.1											
450	**********	3.4	2.0											
500	**********	3.2	1.9											

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION /
NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

Approximate Sampling Variability Tables / Tableaux de la Variabilité d'Échantillonnage Approximative

British Columbia / Colombie Britannique

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ												
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	********	147.9	147.2	144.9	141.1	137.1	133.0	128.8	124.4	119.9	115.2	105.1	81.4	47.0
2	********	104.6	104.1	102.5	99.7	96.9	94.0	91.1	88.0	84.8	81.4	74.3	57.6	33.2
3	********	85.4	85.0	83.7	81.4	79.1	76.8	74.3	71.8	69.2	66.5	60.7	47.0	27.1
4	********	74.0	73.6	72.5	70.5	68.5	66.5	64.4	62.2	59.9	57.6	52.6	40.7	23.5
5	********	66.2	65.8	64.8	63.1	61.3	59.5	57.6	55.6	53.6	51.5	47.0	36.4	21.0
6	********	60.4	60.1	59.2	57.6	56.0	54.3	52.6	50.8	48.9	47.0	42.9	33.2	19.2
7	********	55.9	55.6	54.8	53.3	51.8	50.3	48.7	47.0	45.3	43.5	39.7	30.8	17.8
8	********	52.3	52.0	51.2	49.9	48.5	47.0	45.5	44.0	42.4	40.7	37.2	28.8	16.6
9	**********	49.1	48.3	47.0	45.7	44.3	42.9	41.5	40.0	38.4	35.0	27.1	15.7
10	**********	46.5	45.8	44.6	43.4	42.1	40.7	39.3	37.9	36.4	33.2	25.8	14.9
11	**********	44.4	43.7	42.5	41.3	40.1	38.8	37.5	36.1	34.7	31.7	24.6	14.2
12	**********	42.5	41.8	40.7	39.6	38.4	37.2	35.9	34.6	33.2	30.4	23.5	13.6
13	**********	40.8	40.2	39.1	38.0	36.9	35.7	34.5	33.2	31.9	29.2	22.6	13.0
14	**********	39.3	38.7	37.7	36.6	35.5	34.4	33.2	32.0	30.8	28.1	21.8	12.6
15	**********	38.0	37.4	36.4	35.4	34.3	33.2	32.1	31.0	29.7	27.1	21.0	12.1
16	**********	36.8	36.2	35.3	34.3	33.2	32.2	31.1	30.0	28.8	26.3	20.4	11.8
17	**********	35.7	35.1	34.2	33.2	32.3	31.2	30.2	29.1	27.9	25.5	19.8	11.4
18	**********	34.2	33.2	32.3	31.3	30.4	29.3	28.3	27.1	24.8	19.2	11.1	
19	**********	33.2	32.4	31.4	30.5	29.5	28.5	27.5	26.4	24.1	18.7	10.8	
20	**********	32.4	31.5	30.7	29.7	28.8	27.8	26.8	25.8	23.5	18.2	10.5	
21	**********	31.6	30.8	29.9	29.0	28.1	27.1	26.2	25.1	22.9	17.8	10.3	
22	**********	30.9	30.1	29.2	28.4	27.5	26.5	25.6	24.6	22.4	17.4	10.0	
23	**********	30.2	29.4	28.6	27.7	26.9	25.9	25.0	24.0	21.9	17.0	9.8	
24	**********	29.6	28.8	28.0	27.1	26.3	25.4	24.5	23.5	21.5	16.6	9.6	
25	**********	29.0	28.2	27.4	26.6	25.8	24.9	24.0	23.0	21.0	16.3	9.4	
30	**********	26.5	25.8	25.0	24.3	23.5	22.7	21.9	21.0	19.2	14.9	8.6	
35	**********	24.5	23.8	23.2	22.5	21.8	21.0	20.3	19.5	17.8	13.8	7.9	
40	**********	22.9	22.3	21.7	21.0	20.4	19.7	19.0	18.2	16.6	12.9	7.4	
45	**********	21.0	20.4	19.8	19.2	18.5	17.9	17.2	15.7	12.1	7.0		
50	**********	19.9	19.4	18.8	18.2	17.6	17.0	16.3	14.9	11.5	6.6		
55	**********	19.0	18.5	17.9	17.4	16.8	16.2	15.5	14.2	11.0	6.3		
60	**********	18.2	17.7	17.2	16.6	16.1	15.5	14.9	13.6	10.5	6.1		
65	**********	17.5	17.0	16.5	16.0	15.4	14.9	14.3	13.0	10.1	5.8		
70	**********	16.9	16.4	15.9	15.4	14.9	14.3	13.8	12.6	9.7	5.6		
75	**********	16.3	15.8	15.4	14.9	14.4	13.8	13.3	12.1	9.4	5.4		
80	**********	15.8	15.3	14.9	14.4	13.9	13.4	12.9	11.8	9.1	5.3		
85	**********	15.3	14.9	14.4	14.0	13.5	13.0	12.5	11.4	8.8	5.1		
90	**********	14.5	14.0	13.6	13.1	12.6	12.1	11.1	8.6	5.0			
95	**********	14.1	13.6	13.2	12.8	12.3	11.8	10.8	8.4	4.8			
100	**********	13.7	13.3	12.9	12.4	12.0	11.5	10.5	8.1	4.7			
125	**********	12.3	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2			
150	**********	10.9	10.5	10.2	9.8	9.4	8.6	6.6	3.8				
200	**********	9.1	8.8	8.5	8.1	7.4	5.8	3.3					
250	**********	7.9	7.6	7.3	6.6	5.2	3.0						
300	**********	6.9	6.6	6.1	4.7	2.7							
350	**********	5.6	4.4	2.5									
400	**********	5.3	4.1	2.4									
450	**********	3.8	2.2										
500	**********	3.6	2.1										
750	**********	1.7											

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NOTE: POUR UTILISER CES TABLEAUX, VEUILLEZ VOUS RÉFÉRER À LA DOCUMENTATION RELIÉE AUX MICRO-DONNÉES

Canadian Out-of-Employment Panel Survey - 1995
L'Enquête canadienne par panel sur l'interruption d'emploi - 1995

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CANADA / CANADA

NUMERATOR OF PERCENTAGE / NUMÉRATEUR DU POURCENTAGE (100's)	ESTIMATED PERCENTAGE / POURCENTAGE ESTIMÉ													
	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.0%
1	122.6	122.0	121.4	119.6	116.4	113.1	109.7	106.2	102.6	98.9	95.0	86.7	67.2	38.8
2	86.7	86.3	85.9	84.5	82.3	80.0	77.6	75.1	72.6	69.9	67.2	61.3	47.5	27.4
3	70.8	70.5	70.1	69.0	67.2	65.3	63.3	61.3	59.2	57.1	54.9	50.1	38.8	22.4
4	61.3	61.0	60.7	59.8	58.2	56.5	54.9	53.1	51.3	49.4	47.5	43.4	33.6	19.4
5	54.8	54.6	54.3	53.5	52.0	50.6	49.1	47.5	45.9	44.2	42.5	38.8	30.0	17.3
6	50.1	49.8	49.6	48.8	47.5	46.2	44.8	43.4	41.9	40.4	38.8	35.4	27.4	15.8
7	46.3	46.1	45.9	45.2	44.0	42.7	41.5	40.1	38.8	37.4	35.9	32.8	25.4	14.7
8	********	43.1	42.9	42.3	41.1	40.0	38.8	37.6	36.3	35.0	33.6	30.7	23.8	13.7
9	********	40.7	40.5	39.9	38.8	37.7	36.6	35.4	34.2	33.0	31.7	28.9	22.4	12.9
10	********	38.6	38.4	37.8	36.8	35.8	34.7	33.6	32.5	31.3	30.0	27.4	21.2	12.3
11	********	36.8	36.6	36.0	35.1	34.1	33.1	32.0	30.9	29.8	28.6	26.2	20.3	11.7
12	********	35.2	35.1	34.5	33.6	32.6	31.7	30.7	29.6	28.5	27.4	25.0	19.4	11.2
13	********	33.8	33.7	33.2	32.3	31.4	30.4	29.5	28.5	27.4	26.4	24.1	18.6	10.8
14	********	32.6	32.5	32.0	31.1	30.2	29.3	28.4	27.4	26.4	25.4	23.2	18.0	10.4
15	********	31.5	31.4	30.9	30.0	29.2	28.3	27.4	26.5	25.5	24.5	22.4	17.3	10.0
16	********	30.5	30.4	29.9	29.1	28.3	27.4	26.6	25.7	24.7	23.8	21.7	16.8	9.7
17	********	29.6	29.5	29.0	28.2	27.4	26.6	25.8	24.9	24.0	23.0	21.0	16.3	9.4
18	********	28.8	28.6	28.2	27.4	26.7	25.9	25.0	24.2	23.3	22.4	20.4	15.8	9.1
19	********	28.0	27.9	27.4	26.7	25.9	25.2	24.4	23.5	22.7	21.8	19.9	15.4	8.9
20	********	27.3	27.2	26.7	26.0	25.3	24.5	23.8	22.9	22.1	21.2	19.4	15.0	8.7
21	********	26.6	26.5	26.1	25.4	24.7	23.9	23.2	22.4	21.6	20.7	18.9	14.7	8.5
22	********	26.0	25.9	25.5	24.8	24.1	23.4	22.6	21.9	21.1	20.3	18.5	14.3	8.3
23	********	25.4	25.3	24.9	24.3	23.6	22.9	22.1	21.4	20.6	19.8	18.1	14.0	8.1
24	********	24.9	24.8	24.4	23.8	23.1	22.4	21.7	20.9	20.2	19.4	17.7	13.7	7.9
25	********	24.4	24.3	23.9	23.3	22.6	21.9	21.2	20.5	19.8	19.0	17.3	13.4	7.8
30	********	22.3	22.2	21.8	21.2	20.6	20.0	19.4	18.7	18.1	17.3	15.8	12.3	7.1
35	********	20.6	20.5	20.2	19.7	19.1	18.5	18.0	17.3	16.7	16.1	14.7	11.4	6.6
40	********	19.3	19.2	18.9	18.4	17.9	17.3	16.8	16.2	15.6	15.0	13.7	10.6	6.1
45	********	18.2	18.1	17.8	17.3	16.9	16.4	15.8	15.3	14.7	14.2	12.9	10.0	5.8
50	********	17.3	17.2	16.9	16.5	16.0	15.5	15.0	14.5	14.0	13.4	12.3	9.5	5.5
55	********	16.5	16.4	16.1	15.7	15.2	14.8	14.3	13.8	13.3	12.8	11.7	9.1	5.2
60	********	15.8	15.7	15.4	15.0	14.6	14.2	13.7	13.2	12.8	12.3	11.2	8.7	5.0
65	********	15.1	15.1	14.8	14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.8	8.3	4.8
70	********	14.6	14.5	14.3	13.9	13.5	13.1	12.7	12.3	11.8	11.4	10.4	8.0	4.6
75	**********	14.0	13.8	13.4	13.1	12.7	12.3	11.8	11.4	11.0	10.0	7.8	4.5
80	**********	13.6	13.4	13.0	12.6	12.3	11.9	11.5	11.1	10.6	9.7	7.5	4.3
85	**********	13.2	13.0	12.6	12.3	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2
90	**********	12.8	12.6	12.3	11.9	11.6	11.2	10.8	10.4	10.0	9.1	7.1	4.1
95	**********	12.5	12.3	11.9	11.6	11.3	10.9	10.5	10.1	9.7	8.9	6.9	4.0
100	**********	12.1	12.0	11.6	11.3	11.0	10.6	10.3	9.9	9.5	8.7	6.7	3.9
125	**********	10.9	10.7	10.4	10.1	9.8	9.5	9.2	8.8	8.5	7.8	6.0	3.5
150	**********	9.8	9.5	9.2	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2
200	**********	8.5	8.2	8.0	7.8	7.5	7.3	7.0	6.7	6.1	4.8	2.7
250	**********	7.6	7.4	7.2	6.9	6.7	6.5	6.3	6.0	5.5	4.2	2.5
300	**********	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.0	3.9	2.2
350	**********	6.4	6.2	6.0	5.9	5.7	5.5	5.3	5.1	4.6	3.6	2.1
400	**********	5.8	5.7	5.5	5.3	5.1	4.9	4.8	4.3	3.4	1.9
450	**********	5.5	5.3	5.2	5.0	4.8	4.7	4.5	4.1	3.2	1.8
500	**********	5.2	5.1	4.9	4.8	4.6	4.4	4.2	3.9	3.0	1.7
750	**********	4.1	4.0	3.9	3.7	3.6	3.5	3.2	2.5	1.4
1000	**********	3.6	3.5	3.4	3.2	3.1	3.0	2.7	2.1	1.2
1500	**********	2.7	2.6	2.6	2.5	2.2	1.7	1.0
2000	**********	2.3	2.2	2.1	1.9	1.5	0.9
3000	**********	1.6	1.2	0.7
4000	**********	1.1	0.6
5000	**********	1.0	0.5
6000	**********	0.5

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11.0 Weighting

In the Canadian Out-of-Employment Panel Survey, an overall statistical weight called W2_FINWT was placed on each record to represent the number of sampled persons that the record represents. For COEP 1995, the final weight attached to each record is the product of a basic weight and a non-response adjustment. These two factors are described below.

Basic Weight

In a probability sample, the sample design itself determines weights which must be used to produce unbiased estimates of the population. Each record must be weighted by the inverse of the probability of selecting the person to whom the record refers. In the example of a 2% simple random sample, this probability would be 0.02 for each person and the records must be weighted by 1/0.02=50.

The sample design for the Candian Out-of-Employment Panel Survey was stratified simple random sampling, with strata defined by reason for job separation as given on the ROE file within province. Due to the small sample sizes in the Yukon and Northwest Territories, before calculating weights all cases in Yukon Territory were combined with B.C., and all cases in the Northwest Territories were combined with Quebec.

Within a province-reason stratum, the basic weight is calculated as (number of eligible individuals in the population) / (number of eligible individuals in the sample).

Non-response

Some non-response is inevitable, despite all the attempts made by the interviewers. The Canadian Out-of-Employment Panel Survey non-response rate, taken across both waves of collection for both cohorts, was approximately 68%. Non-response is compensated for by proportionally increasing the weights of responding persons. The weight of each responding record is increased by the ratio of the number of persons that should have been interviewed, divided by the number that were actually interviewed. This adjustment is done separately for each stratum, as defined above. It is based on the assumption that the persons who have been interviewed represent the characteristics of those that should have been interviewed. To the extent that this assumption is not true, the estimates will be somewhat biased.

The non-response adjustment factor was calculated within a province-reason stratum as (sum of basic weights of eligible individuals in the sample) / (sum of basic weights of responding eligible individuals in the sample). The basic weights of all responding eligible individuals in the stratum was then multiplied by this factor to obtain the final weight.

Final Weight

The non-response adjusted weight was then multiplied by 10 to reflect the fact that our initial sampling frame represented only 10% of all Records of Employment for the time periods of interest.

Population Counts

Not everyone on the frame or in the sample was actually eligible for the survey; people whose self-reported reason for job separation did not meet the criteria, people living outside Canada, and deceased individuals were considered out-of-scope for the survey. In order to calculate the sampling weight for the survey respondents, it is necessary to determine how many people in the population and in the sample were actually in the target population. Since only those individuals who were interviewed could be determined to be out-of-scope or not, the proportion of respondents who were out-of-scope was applied to both non-respondents and to the frame as a whole to obtain an estimate of the true target population and number of eligible individuals in the sample. The table below summarizes these results. The survey weights will sum to this “estimated number of eligible individuals at interview 2".

	Cohort 1	Cohort 2
Original target population	43,705	42,291
Estimated number of individuals out-of-scope after interview 1	7,896	5,983
Estimated number of eligible individuals at interview 2	35,809	36,308

12.0
Questionnaires

13.0 Record Layout and Univariates

The table below outlines the organization of the variables in the public use microdata file codebook (see ECDBKENG.PDF).

SECTION	PAGES
General Employment - First Interview	1-5
General Employment - Followup Interview	6-10
ROE Job	10-22
UI Benefits - First Interview	22-24
UI Benefits - Followup Interview	24-25
Job Search - First Interview	25-31
Job Search - Followup Interview	31-36
Job Training - First Interview	36-39
Job Training - Followup Interview	40-42
First Job After ROE Date	42-53
Current Job at First Interview	54-62
Current Job at Followup Interview	63-70
Household Composition - First Interview	70-72
Household Composition - Followup Interview	72-75
Household Income and Expenditures - First Interview	75-80
Household Assets and Debts - First Interview	80-92
Social Assistance - First Interview	93-95
Household Employment - First Interview	95-98
Household Income and Expenditures - Followup Interview	98-100, 105-106
Household Assets and Debts - Followup Interview	100-102
Social Assistance - Followup Interview	102-103
Household Employment - Followup Interview	104
Demographics	106-109
Sample Frame and Collection Information	109
Final Weight	109