LABOUR AND INCOME

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MEASURING RESPONSE

$ Over time, standards have evolved to guide the calculation of response rates for cross-sectional surveys. The use of standards greatly reduces the potential for confusion, and allows comparisons among surveys. However, the current standards cannot be directly applied to longitudinal surveys.

With several new longitudinal surveys now under development at Statistics Canada, standards for response measurement for longitudinal surveys will no doubt receive more attention. SLID's experience may help in the development of standards appropriate for longitudinal surveys. In the meantime, the main measures we will use -- and some early results -- are outlined below.

Why is it more difficult to measure response in a longitudinal survey? Here are some of the reasons:

- *The denominator is not stable.* If a household split occurs, the survey may follow both branches (SLID does this). Even if the survey in principle follows the same people, the number of households will fluctuate over time.

Editor's Note

As the year comes to an end, so too does your subscription to *Dynamics* and to the SLID 1994 Research Paper Series. Even though *Dynamics* is free, you **must** return the order form to continue to receive it. This annual updating of our mailing list ensures that we send it only to those who want it. A SLID Subscription Form has been enclosed with this issue of *Dynamics*.
At the same time, consider subscribing (or resubscribing, for those receiving the 1994 Research Papers) to the 1995 SLID Research Paper Series. The prices remain the same for 1995: an annual subscription fee of $50 for paper versions and $15 for diskette versions. For this modest price in 1994, subscribers received 18 research papers! Soon, SLID Research Papers will be available through INTERNET at no charge, but availability will not be as timely as for subscriptions. Only at the end of each year will Research Papers for that year be available.

Philip Giles

- *Separate measures are needed for the current wave and for cumulative response.* The response rate for households where an interview is attempted (plus any new ones discovered since the last wave) is an important measure. But so is the cumulative rate, reflecting cases dropped in earlier waves.

- *Response rates cannot be defined without reference to the survey's following rules.* These are the rules governing who is traced through time and who is interviewed. They vary from one longitudinal survey to the next and have an impact on the definition of the eligible population.

For these and other reasons, it is not possible to devise one all-encompassing response rate. SLID is planning to use three main response rates.

A *phase response rate* is produced for every labour and every income interview. The main purpose of this measure, which is conceptually comparable to the response rate for a cross-sectional survey, is to provide feedback to the field staff on how well the data collection operation went. It is calculated at the household level, and shows households where an interview is obtained as a proportion of households where one is expected. Because of household splits, the number of households where an interview is expected is not known definitively until the interviewing is completed.

The response rate obtained for the preliminary interview of the first panel -- conducted in January 1993 -- was 88%. The phase response rate for the first labour interview in 1994 was 86%; for the first income interview, a rate of 82% was achieved. As noted above, the phase response rate is based on households. The number of households eligible for the labour interview was about 15,900. As a result of household splits, this actually increased to 16,300 for the income interview.

A *wave response rate* refers to one year's labour and income interview, combined. Labour and income interviews for a specific year are not distinct waves. The labour interview is conducted in January and the income interview is deferred until May, but the two refer to the same reference period and together they make up one wave. (We treat cases where a respondent completes the labour interview but not the income interview, or vice versa, as "partial response".) A wave response rate can be calculated at either the household or the person level. At the person level, it covers both longitudinal respondents and "cohabitants" who have moved in since the original sample was selected.

The sample in 1994 included about 40,200 longitudinal respondents and 2,100 cohabitants of all ages. Of this total, about 32,100 were eligible for the labour and income interviews. The wave response rate was 91% -- meaning that, of the longitudinal respondents and cohabitants who were eligible, 91% responded to either labour or income.

Finally, a *panel response rate* applies to the longitudinal sample only. It shows the respondents as a proportion of the sample originally selected for the panel. This rate tends to decline over time as a result of sample attrition. It reflects past accumulated sample losses, including the 12% lost at the time of the preliminary interview. The longitudinal response rate at the end of the first wave was 80% -- the product of 88% and 91%. For data users who are interested in undertaking longitudinal studies, this is the most relevant rate.

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ADJUSTMENTS TO THE JANUARY LABOUR INTERVIEW IN WAVE 2

$ In gearing up for the second wave of the survey in 1995, we've thought about refinements that should be made to the questionnaire at this stage, starting with the January labour interview. Fortunately, there's not much to improve upon--small changes in the detail, additions rather than deletions.

Some changes are needed to reflect the additional "dynamics" now that we're collecting information for the second or in some cases third time. For instance, as household members change, we want to know when any have come back instead of counting them as completely new. Also, a few adjustments are warranted in the response categories to certain questions due to the high frequency of some "write-in" responses. Providing a list of choices which covers the vast majority of responses saves interviewers' time since they need not type the response, plus it saves time in processing since textual responses must be processed manually.

Here are the notable changes that will appear in the January interview in 1995.

Household composition and demographics

- Returning members: Former household members could return. A list of former members (restricted to the time frame covered by the survey, i.e., since January 1993) appears on the screen for the interviewer to identify joiners who are really returners.

- Updating of relationships: Irrespective of new people in the household, relationships among members sometimes change -- for example, persons living in a common-law relationship may get married. Marital status is updated every year, but interviewers also have the option of reviewing the relationship information for anyone if it appears that there might be a change.

- Dwelling type and tenure: Type of dwelling information will be added to the survey with the following question: "Do you now live in a: single detached house; semi-detached town-house or duplex; apartment; or other?" To determine dwelling tenure, another question asks, "Is this dwelling owned by a member of this household?" In subsequent interviews, these questions will come up again only if the respondent has moved.

Labour

- Former employers: As with new household members, when a person reports a new employer, the names of any previous ones will appear on the screen to identify cases where this is a return to a former employer. Again the time frame is limited to the survey reference period, so we don't identify employers for whom the respondent only worked before January 1993.

- Up to six employers: Previously, dates of employment were collected for up to six employers during the year, but detailed employer characteristics were collected for only a maximum of three. Now all questions on employer characteristics will cover up to six employers.

- Feed back information on compensation received: If Unemployment Insurance, Workers' Compensation or social assistance was received in December 1993 -- that is, just prior to the current reference year -- then the respondent is reminded that this receipt was reported at the end of the previous year, before the interview proceeds to the usual questions on receipt of compensation during the reference year.

This is expected to aid recall and reduce "seam" problems related to the start of a new year.

- Reduce write-ins on how the respondent got his/her job: Last year, there were several write-in responses. In light of the types of these responses, two completely new categories will be added: "Union" and "Contacted directly by employer". Added to the "Employment agency" category will be the note "including Canada Employment Centres".

- Reduce write-ins on the time unit used for reporting wages: The category "Daily" will be added.

- Reduce write-ins to the question on reason for job loss: Since many write-ins were related to layoffs, this possibility will be added explicitly to the "Business slowdown" option, ie. "Layoff/business slowdown".

- Improve options related to "Poor working conditions" among reasons for leaving job: The category "Poor working conditions" will be replaced by the category "Dissatisfied with job", followed by branching to a new question which probes further for the reason for dissatisfaction.
  Poor pay
  Not enough hours of work
  Too many hours of work
  Poor physical conditions (bad ventilation, too noisy, etc.)
  Sexual harassment
  Personal conflict with employer/other employees
  Work too stressful
  Other, specify

- Reduce write-ins on why job came to an end: The job may not have been cut short at all, hence the addition "Temporary job/Contract ended".

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DERIVED VARIABLES FROM THE PRELIMINARY INTERVIEW

$ Below are the derived variables from the preliminary interview, by topic. These variables are derived in that the information was not requested directly in the interview. For example, "age when first child born" is derived from the questions on year when first child born and the respondent's year of birth. The yes/no variables on ethnic origin are derived from codes under the question on this topic.

Current Work (for up to 2 jobs, where applicable)

- number of months worked during 1992
- total hours worked in 1992
- implicit hourly wage during 1992
- total earnings in 1992
- if jobless in January 1993, number of months since last worked
- occupation of current job (classified by 1980 Standard Occupational Classification, at 4-digit level and 2-digit level)
- industry of current job (classified by 1980 Standard Industrial Classification, at 3-digit level and 2-digit level)

Work Experience

- age at which person first started working full-time
- since then, number of years working full-time; part-time; some of each; less than 6 months; and with no work
- number of years of work experience (full-time equivalents)

Demographic and Personal History

- age at first marriage (or common-law relationship)
- duration (in months) of first marriage, if marriage dissolved or person widowed
- ethnic origin, yes/no, for: Canadian; British; French; other European; visible minority; other non-visible minority; and aboriginal
- country of birth by geographical groups
- visible minority status by yes/no and group. *[For employment equity studies. Derived from ethnic origin and, as necessary, country of birth and mother tongue]*
- aboriginal target group status, yes/no. *[For employment equity studies. Includes respondents who indicated North American Indian, Métis or Inuit/Eskimo as ethnic background and respondents who said they were a Registered Indian as defined by the Indian Act of Canada]*
- immigrant status, yes/no; period of immigration and age at immigration, by age and age groups
- for females over 18: number of children born; number of children adopted or raised other than own children; and total number of children born and raised
- for females over 18, age when first child born

Educational Attainment

- highest level of education
- number of years of schooling completed

- number of years of post-secondary schooling completed
- for most recent non-university post-secondary diploma/certificate received:
  - number of years completed full-time (or full-time equivalents)
  - age at which received
  - major field of study
- for most recent non-university post-secondary diploma/certificate received:
  - age at which received
  - major field of study

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RESEARCH PAPERS

$ The following are recently released Research Papers which can be ordered individually or by subscription. For more information, contact Anne Palmer by phone at (613) 951-2903, by fax at (613) 951-3253, or by mail at 11-D8 Jean Talon Building, Tunney's Pasture, Ottawa, K1A 0T6. Internet users: GILES@STATCAN.CA.

94-11 The Use of Tax File Data in the Survey of Labour and Income Dynamics: Summary Report
Ruth Dibbs, Susan Poulin, Maryanne Webber

The previous issue of Dynamics (September 1994) described a major change in the collection of income data for SLID, planned for implementation in 1995. Respondents will be asked to grant permission for SLID to access their income tax files in lieu of providing income information directly. The research paper details the various issues related to this new direction.

94-12 1994 SLID Income Interview: Observation and Debriefing Report
Élaine Fournier and Helen Smith

This document contains detailed reporting of observations made by interviewers and Head Office observers to the May 1994 SLID income interview. Due to its great detail, it would likely be of interest primarily to those with both a high level of knowledge of SLID and an interest in the data collection operation.

94-13 Calculation of Family Income for SLID
Philip Giles, Sylvie Michaud and Chantal Grondin

As an individual's economic well-being is closely linked with his/her family circumstances, many researchers are interested in "family" data from SLID. However, in general, the family is not a stable unit through time, and thus raises new issues for a longitudinal survey. As it is arguably the most important family variable in SLID, family income is used as an example of the approach to be adopted for other family variables as well.

94-15 Data Quality of Income Data Using Computer Assisted Interviewing: SLID Experience
Chantal Grondin and Sylvie Michaud

Many alternatives were considered for the design of the collection software for the SLID income component. The objective was a balance between simplicity for the interviewer and for the respondent, as well as the implementation of checks to increase the quality of the collected data. An evaluation of the income data collected in the May 1993 field test compared the collected data with that contained in the income tax files.

94-16 Measuring Non-response in a Longitudinal Survey: The Experience of the Survey of Labour and Income Dynamics
Sylvie Michaud and Maryanne Webber

As with other facets of the survey, the calculation of response rates for a longitudinal survey, such as SLID, poses new challenges. Moreover, SLID has its own peculiarities, such as the "deferred" income interview and the use of dependent interviewing. This paper presents various data quality measures proposed for the survey, including wave and panel response rates, and measures of the characteristics of non-respondents.

94-17 Measurement Issues in the Reporting of Unemployment Insurance *Alison Hale, Chantal Grondin, Sylvie Michaud*

How good are household surveys at measuring receipt of Unemployment Insurance benefits? SLID includes questions on the receipt of UI (both when it was received and amounts). This study looks at the receipt of UI reported by survey respondents in the 1993 field tests as compared to a benchmark, namely what was reported on their income tax form.