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## TRANSITION IN THE LABOUR FORCE

Over a one-year period, Canada's labour force undergoes massive changes. During every working day in 1993, an estimated 17,000 Canadians aged 16 to 69 experienced a major transition.

About 4.3 million individuals, or 27% of those in the labour force at some point in 1993, had a change in labour force status. That is, they moved out of the labour force, or back into it, became unemployed, or got a job. Another 1.6 million worked all year, but had more than one job.

This highlights the dynamic aspect of the labour market, complementing the "snapshots" produced by Statistics Canada's Labour Force Survey (LFS) — source of the monthly unemployment rate. Tracking the experiences of individual workers and job seekers throughout a full year reveals the substantial flows and transitions which underlie the LFS measure of net change in employment and unemployment.

From a statistical perspective, individual worker transitions offset each other, although they were real experiences for the individuals involved and have major implications for employers. For example,

### **Editor's Note**

We did it! From today onwards, all the variables from SLID's first wave are available for custom retrievals. The public use microdata files for Wave 1 are available on CD-ROM starting this Friday, June 28. And the *SLID Microdata User's Guide*, available today in a hefty 3-ring binder, tells you everything you wanted to know about SLID but were afraid to ask. (We're still there for your questions!) More inside on these products and our custom retrieval service. Also, today's issue of *Dynamics* features the second of two studies which just begin to explore the potential of the SLID database. Our earlier study in April raised a lot of interest, and we expect this one will, too!

Heather Lathe





576,000 workers started the year employed but left the labour force during 1993. Many of those who left the labour force were facing a major change, such as retirement. For 274,000 workers, the pattern was reversed: they were not working or searching for work, but got a job and ended the year employed.

Another example of offsetting patterns: 415,000 individuals started the year unemployed, became employed and stayed that way until year end. Almost as many workers looking for work (375,000) did the opposite. They lost or left a job and ended the year still looking for work.

As can be seen, the labour force in 1993 was fluid, changing constantly, transforming daily.

Overall, an estimated 15.2 million Canadians, or 76% of the population aged 16-69, worked at some time in 1993. Threequarters of those, or about 11.3 million, worked the full year, whether full time or part time.

## One-fifth of labour force unemployed at some point during the year

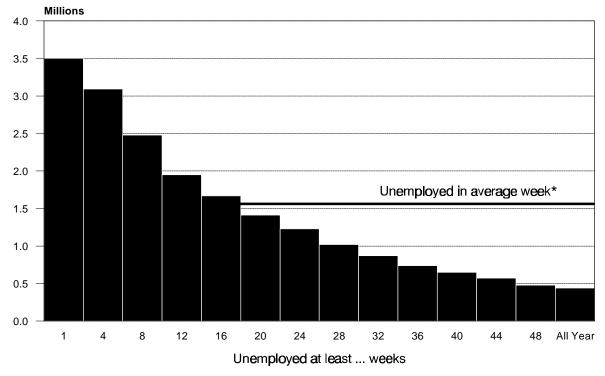
About 22% of the labour force, or 3.5 million people, had at least one spell of unemployment at some point in 1993. In contrast, the annual average unemployment rate, from Statistics Canada's Labour Force Survey, was 11.2%, representing an average of 1.6 million people.

Many people cycled in and out of unemployment during the year. For 20%, the unemployment experience was short-lived, at four weeks or less, while 13% were unemployed all year. (See Chart 1)

Another 411,000 were unemployed for part of the year, and not in the labour force for the remainder. Some tested the job market unsuccessfully, and then withdrew. Others moved into the labour force during the year but had not found work by year end. Results for 1994 will show how long it took them to find work, or whether these individuals eventually withdrew as well.



# Unemployed at some time in 1993 morthan twice the number unemployed in average week



\* This number is from the Labour Force Survey.

In all, there were 4.3 million persons whose labour force status changed at least once in 1993. Over one-third, or 1.6 million, spent part of the year working and the rest of the year unemployed. Another 1.3 million spent part of the year working and the remainder out of the labour force.

About 4 million individuals, a fifth of the entire working age population, spent the entire year out of the labour force. Of these, 17% were full-time students at some point during the year, and another 17% were retired. (See Chart 2)

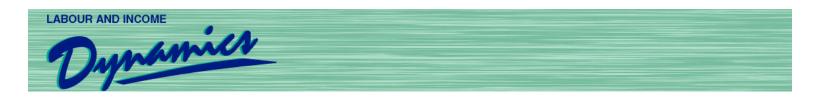
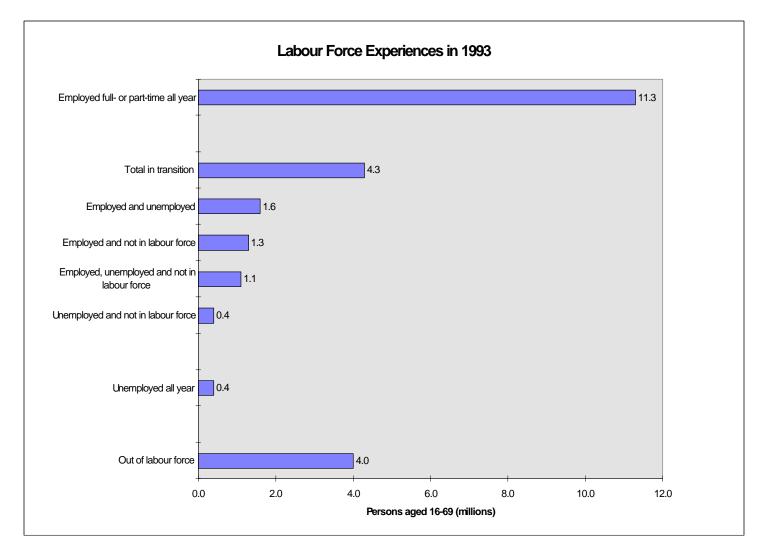


Chart 2



#### Even the most "stable" group of employed underwent change

About 9.1 million people, or 60% of those with a job at some point in 1993, worked full-time throughout the year. That is, each month they worked on average 30 hours per week or more. Of those individuals, 8.1 million worked in the same full-time job for the whole year, in a sense the ultimate in work stability. But they still underwent some change: one in five got a substantial raise (of at least 10%), but one in ten took a pay cut of at least that magnitude.

Employees who worked the whole year at one full-time job earned an average of \$17.32 an hour, compared with \$14.88 for all those who worked at some time during the year.

Individuals who worked in one full-time job for the whole year were also more likely to have been in a position of authority during 1993. More than a third (35%) supervised others, compared to 29% of those who worked at any point during the year. Supervisors tended to work more hours per week than non-supervisors.

Women were less likely than men to have worked in one full-time job for the whole year. Those women who did had lower wages, averaging \$15.11 an hour compared with \$18.94 for men. Among women in this group who identified themselves as managers, only 18% felt that they were at the top or upper levels of management. That compared with 30% of male managers.

Three times as many women as men worked all year at one part-time job. About 29% of women who worked part-time all year did so because that was all they could find, compared to 23% of men.

#### Definitions

*Full-time Worker:* A person who, in a given month, worked 130 or more hours.

*Full-year Worker:* A person who was employed all year. *Out of the labour force:* A person who did not work, or search for work, at any time during 1993.

*Retired:* A person aged 55-69 who did not work during the year, had five or more years of work experience, and received an employer pension or Canada/Quebec Pension Plan income in 1993.

*Hourly wage:* The wage at the end of the job, or year end, was used for persons with one job. For those with more than one job, a composite hourly wage for all jobs was used. Hourly wage was calculated for paid workers, including salaried as well as hourly-rated employees. Increases or decreases of 10% or more were counted as a change.

*Don't Know Adjustment:* Responses were adjusted to account for those who responded Don't Know to a question. The Don't Know population was distributed according to existing proportions.

#### \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$

WAVE 1 ON CD-ROM

The Survey of Labour and Income Dynamics Public Use Microdata (Product No. 75M0001XCB) for reference year 1993 is a collection of files on CD-ROM intended for hands-on analysis. The two primary files are the Person data file, containing information on every sample member aged 16 and over, and the Person-Job data file, containing practically the same variables, but with a separate record for each job. For example, a sample person without a job during the reference year would be represented with one record on the Person file but no record on the Person-Job file. On the other hand, a sample member with three jobs during the reference year would be represented with one record on the Person file and three records on the Person-Job file.

Background information, including marital history, ethnocultural traits, fertility, schooling and work history, was collected in January 1993. In January 1994, the survey returned to the same people for their labour market activities and family changes over the previous year. It returned again in May 1994 for income information. All this information is part of the 1993 reference year or "Wave 1" data.

The variables of the public use microdata are the same as those of the internal file but certain detail has been suppressed so as not to reveal the identity of any respondent. Nonetheless, a great deal of information can be drawn from the public use files. Furthermore, your cost in ordering custom data retrievals can be reduced. (See the next article below.)

If you purchase the CD-ROM in the next few months, you will receive the "interim copy", which contains everything except the data files in Ivision format and the accompanying Ivision software. You will receive automatically the final CD-ROM copy at no cost when it becomes available in the next few months. The interim copy of the CD-ROM replaces the diskette product, which was previously planned. The diskette version requires so many diskettes as to be almost prohibitive. However, anyone who still wishes to order it can do so (Product No. 75M0001XDB). Note that a large amount of hard drive space (about 300 MB) is required to copy the files from diskette, as they are compressed and not directly readable from the diskettes. The data can be read directly from the CD-ROM, so no extra storage is necessary.

Waves	Years	Cost of CD-ROM
1	1993	\$1700
1, 2	1993- 1994	\$2700 OR \$1000 if you purchased Wave 1
1, 2, 3	1993- 1995	\$3700 OR \$1000 if you purchased Wave 1&2 OR \$2000 if you purchased Wave 1

The cost of the CD-ROM for Waves 1, 2 and 3 is still as follows:

#### SLID Microdata User's Guide

#### (Product No. 75M0001GPE or 75M0001GPF)

This is a comprehensive description of the survey objectives, design, methods and content. One copy (English or French) is included with the public use microdata files, but the guide can also be purchased separately, for \$25 a copy. The *Microdata User's Guide* should also be of interest to anyone wishing to order custom retrievals. For example, it contains a fairly detailed description of the SLID content by theme, a useful first step before delving into the SLID data dictionary and record layouts (also contained in the guide).

#### SLID Electronic Data Dictionary

This is a bilingual list of the variables and the code sets. The *SLID Electronic Data Dictionary* is included in the contents of the CD-ROM (interim copy or final), or can be ordered separately on diskette (no charge). It is menu-driven and requires Windows. Unfortunately, an electronic data dictionary is not available for those without Windows software. However, a paper version of the data dictionary is included



in the *SLID Microdata User's Guide* for those without the necessary hardware and software and for those preferring to use the paper version.

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### STANDARD AND CUSTOM DATA TABLES

At this time, the primary data product is the public-use microdata file. This is due to the basic necessity of a microdata file for any other product as well as to meet the basic survey objective: supporting primary analysis on changes Canadians experience through time in labour market activities and economic well-being.

However, some users are interested only in a few data tables. Other users are interested in tables using variables which are not included on the public-use microdata file for reasons of confidentiality protection. To meet these data needs, SLID offers three approaches:

- custom tabulations, and more generally, custom data retrievals
- ♦ standard tables
- "do-it-yourself" custom retrievals

#### Custom tabulations

This is the simplest approach, but can also be the most costly. In consultation with a survey analyst, the data user specifies the required tables. A survey officer produces the tables using the internal survey database. Suppression of the values in certain cells is performed for reasons of confidentiality and/or data quality. The output is then delivered to the client. The charge to the client is based on Statistics Canada's costs related to the request; i.e., cost recovery.

The other approaches are priced the same way, but involve less costs to Statistics Canada so are less costly to the user.

#### Standard tables

Standard tables are defined and produced by survey staff in the expectation that they are of interest to several users. No analytical text accompanies these tables. The cost of producing the tables is divided by the potential number of users, so that any given table is less costly than the equivalent table produced as a custom tabulation. The

disadvantage to the user is that there is no possibility of modifying the table, so the available standard tables may not be exactly what is needed.

Eventually, SLID will have an electronic data product containing a wide selection of standard tables, allowing the export of tables into spreadsheets. At present, a few printed tables are in production, according to the data most frequently requested. The standard tables will be expanded over time, along with improvements in functionality and access.

#### "Do-it-yourself" custom retrievals

A data user may write a program to be sent to Statistics Canada in electronic form and run against the internal database. (Some limited testing is also possible using the values on the suppressed field.) The output is reviewed by survey staff to ensure that no risk to confidentiality exists. If this validation approves the program results, they are delivered to the client. The cost is lower than that of custom retrievals. The public-use microdata file contains all the detailed variables of the SLID internal database, except that the values for some have been suppressed. The record layout and data dictionary are equivalent to those for the internal file to facilitate the planning, writing and testing of programs.

This "do-it-yourself" approach is essentially the same as that for the remote access system currently being developed within Statistics Canada. Under remote access, the electronic delivery mechanisms are more specific and formal, and further reduce the involvement of Statistics Canada staff, thus leading to a greater reduction in costs and turnaround time. More details on the remote access system will be provided in *Dynamics* as SLID becomes more involved.

For more information on how to submit a program, please contact us.

\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$To order or for further information on custom retrievals,<br/>microdata files and related products, please call our dissemination unit:<br/>(613) 951-4633 or (613) 951-5266. The fax number is (613) 951-3012.<br/>By Internet, we can be reached at: dynamics@statcan.ca.

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