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**LABOUR FORCE CLASSIFICATION IN SLID AND LFS**

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Nathalie Noreau, Household Surveys Division

Alison Hale, Household Surveys Division

Philip Giles, Household Surveys Division

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## **EXECUTIVE SUMMARY**

To compare data on labour force status between SLID and the Labour Force Survey (LFS), it is necessary to understand the differences between the two surveys as they relate to labour force classification. Primarily, SLID uses a one-year recall period as compared to one week used by the LFS. The derivation of weekly labour force status for SLID was influenced by the desire to be as conceptually similar to the LFS as possible, but clearly the differences in collection have a large impact.

This document presents the results of comparing data from the two surveys for reference year 1993. We compared the estimated number of persons who were employed and unemployed from the two data sources. The number of unemployed and the unemployment rates produced by SLID were lower, corresponding to a higher level of employment. The major cause for these differences was attributed to the “telescoping” effect of the much longer recall period for SLID. In addition to the comparisons between the two surveys, summary data on transitions from one labour force status to another were produced from the SLID data.



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## **1. BACKGROUND**

An important design consideration for SLID was to adhere to concepts and standards used by existing surveys. This was to avoid “reinventing the wheel”, as well as to provide data which users were comfortable with and to allow comparison of data from different surveys. The Labour Force Survey (LFS) is one survey from which SLID “borrowed”. Comparisons between SLID and LFS are interesting as the two surveys can provide complementary information for analysts. This study is an important look at a major variable: labour force classification, or labour force status.

The LFS is a household survey carried out monthly by Statistics Canada. Since its inception in 1945, the objectives of the LFS have been to divide the working-age population into three mutually exclusive classifications - employed, unemployed, and not in the labour force - and to provide descriptive and explanatory data on each of these categories. This categorization is referred to as a person’s labour force status. The purpose of this document is to compare data on labour force status from the LFS and SLID for 1993.

The concepts of employment and unemployment are derived from the theory of the supply of labour as a factor of production. The production referred to is in turn defined as those goods and services included in the System of National Accounts. For this reason, unpaid housework and volunteer work are not counted as work by the survey, although these activities need not differ from paid work, either in purpose or in the nature of the tasks completed.

While the logical and precise unit of measurement of total labour supply is person-hours, the conceptual terms of reference for the survey require that individual

members of the population be classified as employed, unemployed, or not in the labour force. Accordingly, persons who are **supplying** services in the reference period, regardless of the quantity supplied, are classified as employed while those who provide evidence that they are **offering** their labour services to the market (again regardless of quantity) are classified as unemployed. The remainder of the population, those neither currently supplying nor offering their labour services, are referred to as persons not in the labour force.

The concepts and definitions of employment and unemployment adopted by the survey are based on those endorsed by the International Labour Organisation (ILO).

**EMPLOYMENT:** Employed persons are those who, during the reference week:

- (a) did any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. It also includes unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household; or
- (b) had a job but were not at work due to factors such as own illness or disability, personal or family responsibilities, vacation, labour dispute or other reasons (excluding persons on layoff, between casual jobs, and those with a job to start at a future date).

**UNEMPLOYMENT:** Given the concept of unemployment as the unutilized supply of labour, the operational definition of unemployment is based primarily on the activity of job search and the availability to take a job. In addition to being conceptually appropriate, job search activities can, in a household survey, be



objectively and consistently measured over time. The definition of unemployment is therefore the following:

Unemployed persons are those who, during reference week:

- a) were on temporary layoff during reference week with an expectation of recall and were available for work, or
- b) were without work, had actively looked for work in the past four weeks, and were available for work, or
- c) had a new job to start within four weeks from reference week, and were available for work.

Persons are regarded as available if they reported that they could have worked in the reference week if a suitable job had been offered (or recalled if on temporary layoff); or if the reason they could not take a job was of a temporary nature such as: because of own illness or disability, personal or family responsibilities, because they already have a job to start in the near future, or because of vacation (prior to 1997, those on vacation were not considered available). Full-time students currently attending school and looking for full-time work are not considered to be available for work during the reference week. They are assumed to be looking for a summer or co-op job or permanent job to start sometime in the future, and are therefore not part of the current labour supply.

Note that in the above definition there are two groups for which job search is not required: persons on temporary layoff and persons with a job to start at a definite date in the future. Persons on layoff are included among the unemployed on the grounds that their willingness to supply labour services is apparent in their expectation of returning to work. A similar argument is applied for persons who will be starting at a new job in four weeks or less.

Finally, for the purposes of measuring job search as part of the identification of the unemployed, the LFS uses a four-week search period although the reference period for identifying the employed is that of one week. The justification for the difference is that delays inherent in job search (for example, periods spent awaiting the results of earlier job applications) require that the active element of looking for work be measured over a period greater than one week if a comprehensive measure of job search is to be obtained.

**NOT IN THE LABOUR FORCE:** Persons not in the labour force are those who, during the reference week, were unwilling or unable to offer or supply labour services under conditions existing in their labour markets, that is, they were neither employed nor unemployed.

Both LFS and SLID derive labour force status for a one-week period: LFS for the survey reference week each month and SLID for every week in the reference period.

In a longitudinal context, weekly labour force status has several valuable uses. One can examine spells in a given state; for example, durations of unemployment spells. An alternative is to look at transitions; for example, by comparing persons who move out of the labour force according to whether the transition is from employed or unemployed. By summarizing the weekly values, one can produce annual measures; for example, how many are unemployed at some time during the year. Such annual measures can be compared to the monthly incidence produced by LFS to indicate the dynamics of the labour force. For example, if the monthly unemployment rate averaged about 10% for the year and the annual unemployment rate (persons unemployed at any time during the year as a percentage of those in the labour force at any time during the year) is about 12%, then one would

conclude that there is little change and most unemployed people tend to stay unemployed for long periods of time. In reality, the annual unemployment rate is around 20% to 25%, indicating that there are many movements between the three categories.

## **2. HOW LABOUR FORCE STATUS IS MEASURED IN SLID**

SLID produces a weekly labour force status, with the objective of being as consistent as possible with the labour force survey. As the data collection differs greatly between the two surveys, consistency is possible only conceptually. Appendices A and B outline the algorithms for determining labour force status in each of SLID and LFS, respectively.

The differences stem primarily from the fact that SLID uses a one-year reference and recall period, whereas LFS refers to the previous week. One would expect some “telescoping” to occur with SLID data. That is, data quality would be poorer for the initial part of the reference year as the recall is longer than it is for the latter part of the year. Thus, respondents may have difficulty differentiating between events which occurred just prior to the beginning of the reference period and events which occurred during the reference period. Such things as short spells of unemployment and short-term jobs will be underreported for SLID.

In particular, recalling availability for work for all periods of time when a person is jobless would appear to be quite difficult. Another reporting difference is associated with the concept of “future starts”. In the LFS, one can ask in the “proper” time sequence about whether the person has a job to start at a definite time in the future. For SLID, the equivalent concept is measured through asking for the date of job offer in addition to the date of job start.

The design of the survey questionnaire considered the ability of respondents to report detailed information with a one-year reference, and implemented certain measures to aid recall. The data are collected using computer-assisted interviewing. Details of SLID questionnaires are provided annually in this Working Paper Series. The initial step is to ask the respondent to list all jobs held during the previous year, and to provide a start and end date for each one. Based on these dates, start and end dates of jobless spells are automatically derived, and confirmed with respondents. This step could result in the adjustment of job dates. To aid recall, respondents are provided with information from the previous interview. In this context, jobs and jobless spells which were unended at the end of the previous reference year are fed back to the respondent. (This process is called “dependent interviewing”.)

When a new job is reported, the method of obtaining the job is asked to stimulate recall of job search activities. Job search activities are asked in the context of each jobless spell, rather than for the year as a whole. Absences from work (as opposed to jobless spells) are determined within the context of each job. In particular, this information identifies spells of temporary and seasonal layoff.

### **3. RESULTS BASED ON LFS REFERENCE WEEKS AND ON CORRESPONDING WEEKS IN THE SLID**

To the extent possible, results from the two surveys should be compared using comparable data. Therefore, this discussion compares monthly LFS data (collected for a specific reference week) with SLID data that match the LFS reference week as closely as possible. Population in the labour force, employed,

unemployed, the participation rate and the unemployment rate are compared (see Table 1 and Figures A to E).

**Table 1: Labour market indicators from the LFS and SLID**

MONTH	LABOUR FORCE		PARTICIPATION RATE		EMPLOYMENT		UNEMPLOYMENT		UNEMPLOYMENT RATE	
	LFS	SLID	LFS	SLID	LFS	SLID	LFS	SLID	LFS	SLID
	'000		%		'000		'000		%	
January	14,140	14,413	70.2	71.9	12,449	13,015	1,692	1,398	12.0	9.7
February	14,181	14,440	70.2	72.1	12,508	13,051	1,673	1,389	11.8	9.6
March	14,372	14,494	71.1	72.3	12,581	13,109	1,790	1,384	12.5	9.6
April	14,329	14,517	70.8	72.5	12,620	13,181	1,708	1,336	11.9	9.2
May	14,670	14,911	72.4	74.4	12,987	13,504	1,683	1,407	11.5	9.4
June	15,006	15,022	73.9	75.0	13,367	13,719	1,639	1,303	10.9	8.7
July	15,166	15,279	74.6	76.3	13,418	13,817	1,748	1,462	11.5	9.6
August	15,026	15,221	73.8	76.0	13,365	13,791	1,661	1,430	11.1	9.4
September	14,616	14,657	71.7	73.2	13,113	13,470	1,503	1,187	10.3	8.1
October	14,553	14,573	71.4	72.7	13,053	13,396	1,500	1,176	10.3	8.1
November	14,522	14,481	71.1	72.3	12,960	13,240	1,562	1,240	10.8	8.6
December	14,458	14,428	70.7	72.0	12,852	13,148	1,606	1,280	11.1	8.9

The first thing that strikes one in these data is that the two surveys show similar seasonal variations. The same trends are not present in all series, however. For example, labour force, employment and participation rate are much higher in summer months than in winter months. The other series are more stable from month to month.

Furthermore, the LFS results tend to diverge somewhat from SLID results. In fact, unemployment and the unemployment rate are higher in the LFS data, while the converse holds true for the other series. In this regard, problems related to telescoping may cause the SLID to underestimate brief unemployment spells. Respondents could be expected to have difficulty remembering relatively brief unemployment spells occurring around the beginning of the previous year.

Information feedback helps to alleviate this problem, but does not solve it entirely. It is reasonable, therefore, to expect higher observed unemployment values in the LFS.

Results for the other series are higher in the SLID, because of feedback procedures used in the course of the interview to remind respondents of employment declared in the previous year's interview. Therefore, this survey has a tendency to overestimate employment levels. The combined effect of underestimating unemployment and overestimating employment explains the mixed results obtained when labour force data from the two surveys are compared.

Figure A: Labour force from LFS and SLID, 1993

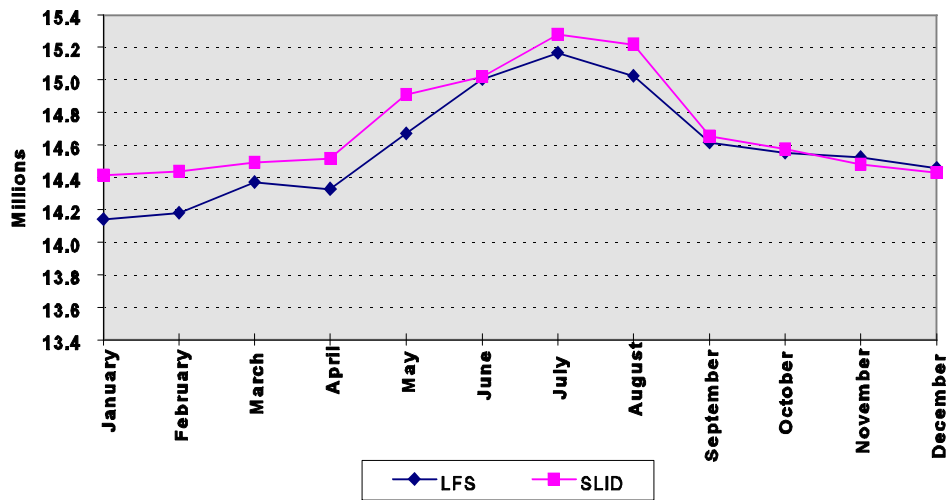


Figure B: Participation rate from LFS and SLID, 1993

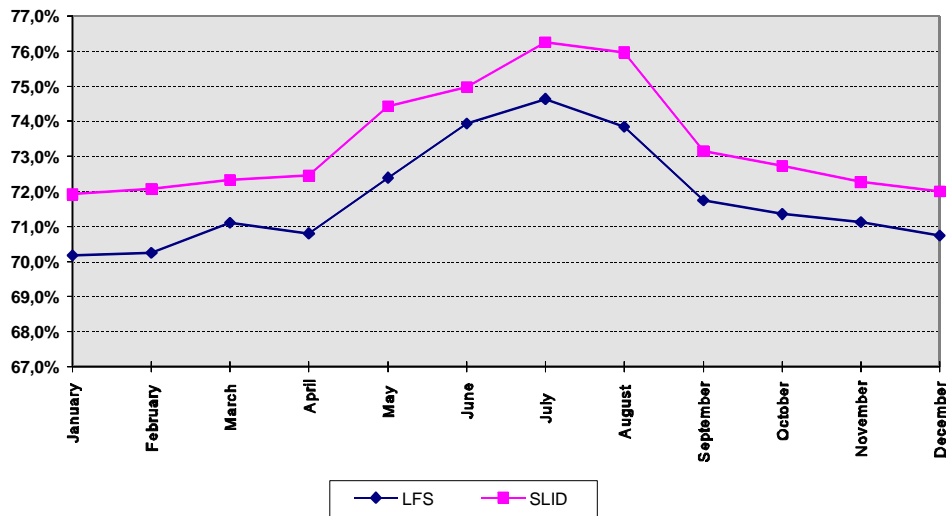


Figure C: Number of persons employed, from LFS and SLID, 1993

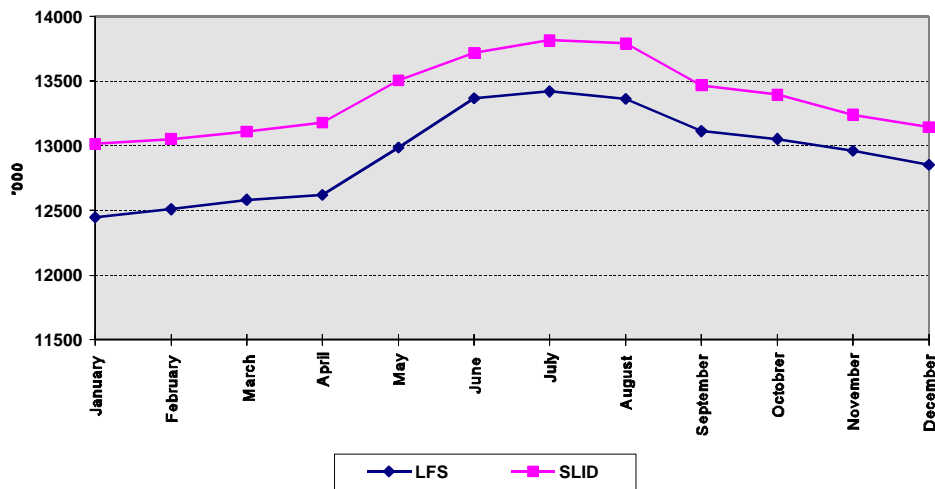


Figure D: Number of persons unemployed, from LFS and SLID, 1993

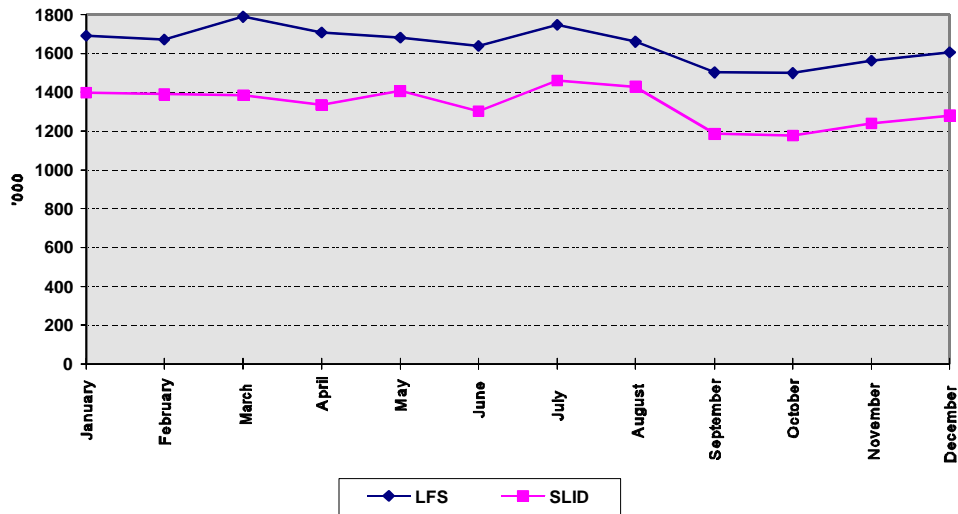
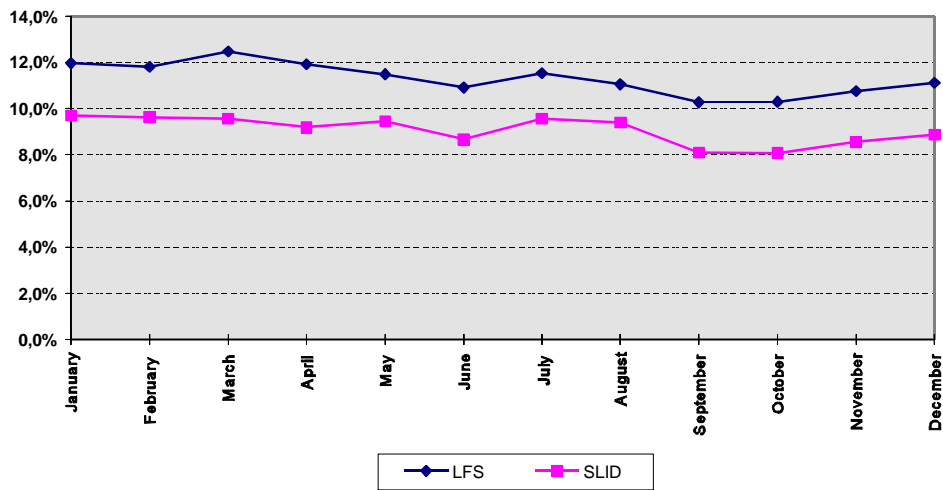


Figure E: Unemployment rate, from LFS and SLID, 1993





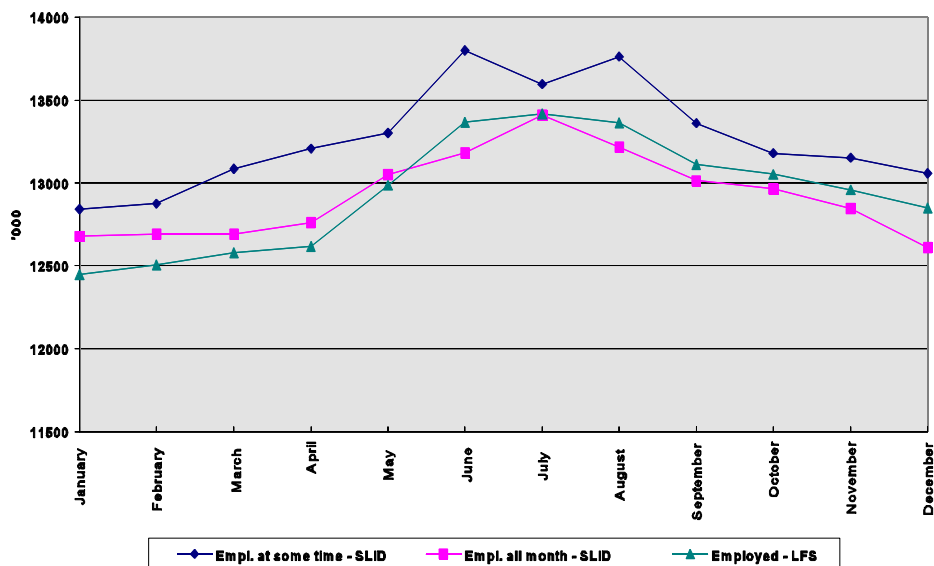
#### 4. MONTHLY MEASURES OF INCIDENCE

##### a) Number of persons employed by month

This analysis compares two series from SLID (number of persons employed at some time during the month and number of persons employed during the entire month) with one series from the LFS (number of persons employed, collected monthly during the reference week). See Table 2 and Figure F. A first observation is that seasonal variations in these data are virtually identical from series to series. In particular, employment as measured by both surveys is much higher during the summer months.

While the SLID series “persons employed at some time (at least one week) during the month” is conceptually similar to that used in the Labour Force Survey, the data behave otherwise: the SLID provides a substantially higher estimate of the number of persons who worked at least one week during the month than does the LFS. This series also exceeds the SLID series on number of persons who worked during the entire month; this result is highly predictable, as this latter group is included in former group.

**Figure F: Number of persons employed by month, from LFS and SLID, 1993**



**Table 2: Persons employed during entire month, by month**  
**(Population aged from 16 to 69 years / Reference year 1993)**  
 ('000)

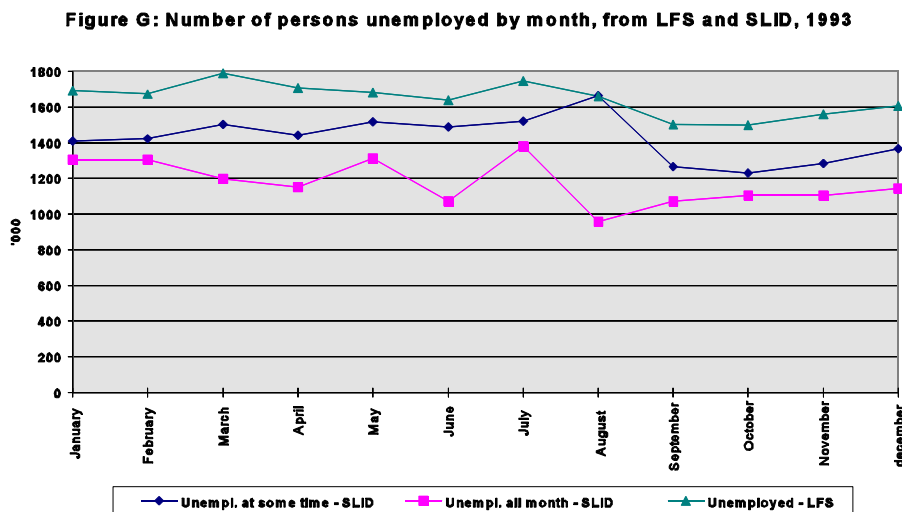
	Employed during ENTIRE month	Employed during month	Employed
	SLID	SLID	LFS
Month			
January	12,678	12,843	12,449
February	12,692	12,876	12,508
March	12,690	13,086	12,581
April	12,762	13,208	12,620
May	13,049	13,301	12,620
June	13,182	13,799	13,367
July	13,408	13,597	13,418
August	13,215	13,762	13,365
September	13,013	13,360	13,113
October	12,966	13,181	13,053
November	12,844	13,152	12,960
December	12,609	13,060	12,852

Interestingly, LFS figures for the first five months of the year are somewhat lower than corresponding SLID figures. Starting in June, however, LFS figures for the number of persons who worked during the entire month are higher than their SLID counterparts. As discussed above, this discrepancy is caused by SLID feedback procedures, which tend to lead to overestimates of employment in the beginning of the year. In particular, while respondents have no trouble remembering the months in which they started or stopped working, they have more difficulty remembering exact dates, which they often report as the beginning or end of a month. This phenomenon is even more pronounced in the case of jobs held at the beginning of

the year, especially if the respondent had to be reminded of a short-term job that he or she had neglected to mention.

**b) Number of persons unemployed, by month**

Similarly, it is interesting to compare data on the number of persons unemployed at some time during the month (SLID) or during the entire month (SLID) with unemployment data from the LFS (Table 3 and Figure G). There are no apparent trends with regard to seasonal variations in the data from two surveys. In contrast to the employment data, the LFS figures are higher for all observed months. This can be explained by the tendency on the part of SLID to underestimate short-term unemployment because of telescoping problems. In particular, respondents must attempt to remember unemployment spells throughout the year and may forget some of the shorter spells. Apparently, SLID classifies certain people as employed, while the LFS would treat these same people as unemployed (see above).



**Table 3: Persons unemployed during entire month, by month**  
**(Population aged from 16 to 69 years / Reference year 1993)**  
 ('000)

	Unemployed during WHOLE month	Unemployed during month	Unemployed
	SLID	SLID	LFS
Month			
January	1,304	1,409	1,692
February	1,304	1,422	1,673
March	1,197	1,504	1,790
April	1,149	1,441	1,708
May	1,311	1,516	1,683
June	1,072	1,487	1,639
July	1,379	1,518	1,748
August	956	1,663	1,661
September	1,073	1,264	1,503
October	1,103	1,231	1,500
November	1,103	1,285	1,562
December	1,144	1,368	1,606

As with employment data, SLID data for persons unemployed during the entire month are lower than those for persons unemployed for only part of the month.

## 5. UNEMPLOYMENT SPELLS

### a) Spells not terminated in December 1993

Discussions of unemployment make frequent reference to unemployment spells during the year or at a particular time during the year. Table 4 compares SLID and LFS data regarding ongoing unemployment spells as of December 1993. These data suggest a fairly significant under-representation of very brief unemployment spells in the SLID, which also reports far more lengthy unemployment spells than does the LFS. A possible explanation for this latter observation may be that some respondents do not mention short interruptions in job search activities (intervals in which they were not looking for a job) during long unemployment spells. Therefore, longer unemployment spells may be overestimated at the expense of shorter spells, so that very long and very short unemployment spells may be estimated inaccurately.

**Table 4: Length of ongoing unemployment spells as of December 1993  
(Population aged from 16 to 69 years / Reference year 1993)**

In thousands and percentages (%)

Length of spell (weeks)	All spells		Cumulative percentages	
	SLID	LFS	SLID	LFS
Total	1,315	1,590	--	--
1 to 4	171	396	13.0	24.9
5 to 13	308	424	36.4	51.6
14 to 26	232	301	54.0	70.5
27 to 52	177	220	67.5	84.3
53	427	249	100.0	100.0

**b) Censored unemployment spells (SLID only)**

Unemployment spells in 1993 may be divided into four categories: left-censored, right-censored, censored on both sides and not censored.

- < Left-censored: the spell began BEFORE the beginning of 1993 and ended before the end of 1993.
- < Right-censored: the spell began during 1993 and ended AFTER the end of 1993.
- < Censored on both sides: the spell began BEFORE the beginning of 1993 and ended AFTER the end of 1993.
- < Not censored: the spell began AND ended DURING 1993.

Tables 5 and 6, which present data on censored unemployment spells, indicate in particular that half of all unemployment spells last ten weeks or less. This high percentage of short unemployment spells is due in large part to uncensored unemployment spells. Specifically, 52% of those for whom the unemployment spell occurred between the beginning and end of 1993 spent between one and five weeks without work. Figures H and I illustrate these results as well.

**Table 5: Length of unemployment spells, by type of censoring  
(Population aged from 16 to 69 years / Reference year 1993)  
(‘000)**

	Total	Spell left-censored			
		Yes		No	
		Spell right-censored		Spell right-censored	
		Yes	No	Yes	No
Total	4,135	427	924	888	1,895
Length of unemployment spell (weeks)					
1 to 5	1,311	0	114	214	983
6 to 10	805	0	114	168	524
11 to 15	440	0	149	127	164
16 to 20	409	0	184	101	123
21 to 25	217	0	113	61	42
26 to 30	200	0	79	82	39
31 to 35	129	0	76	43	10
36 to 40	78	0	33	37	8
41 to 45	68	0	37	30	1
46 to 52	51	0	25	26	0
53	427	427	0	0	0

**Table 6: Length unemployment spells, by type of censoring  
(Population aged from 16 to 69 years / Reference year 1993)  
In percentage (%)**

	Total	Spell left-censored			
		Yes		No	
		Spell right-censored		Spell right-censored	
		Yes	No	Yes	No
Total	100.0	100.0	100.0	100.0	100.0
Length of unemployment spell (weeks)					
1 to 5	31.7	0.0	12.3	24.1	51.9
6 to 10	19.5	0.0	12.3	18.9	27.7
11 to 15	10.6	0.0	16.1	14.3	8.6
16 to 20	9.9	0.0	19.9	11.4	6.5
21 to 25	5.2	0.0	12.2	6.9	2.2
26 to 30	4.8	0.0	8.5	9.2	2.1
31 to 35	3.1	0.0	8.2	4.8	0.5
36 to 40	1.9	0.0	3.6	4.2	0.4
41 to 45	1.6	0.0	4.0	3.4	0.0
46 to 52	1.2	0.0	2.7	2.9	0.0
53	10.3	100.0	0.0	0.0	0.0

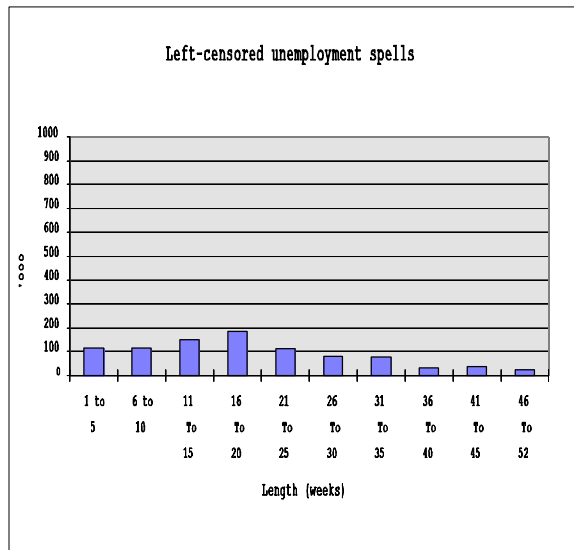
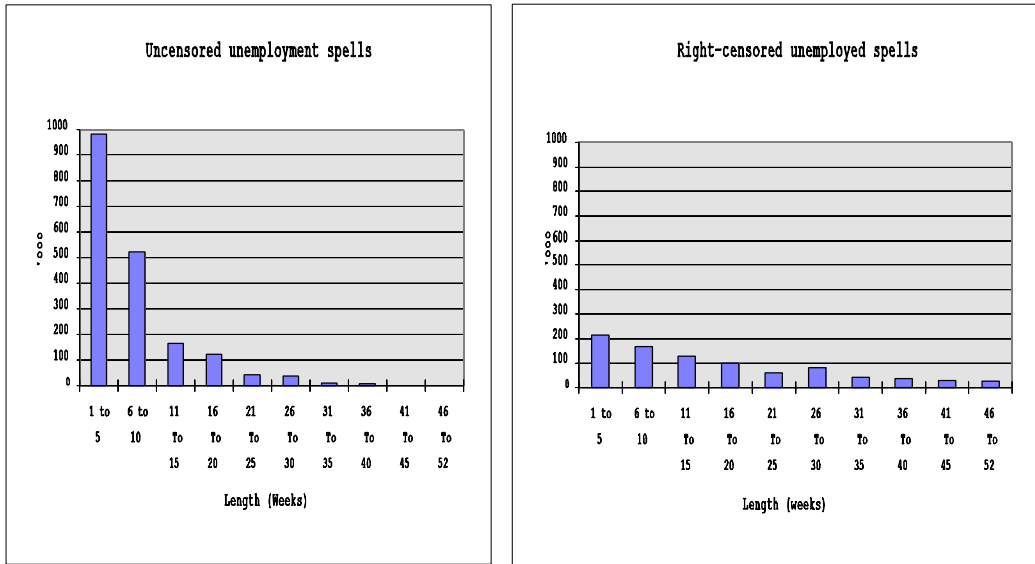
In all, 36% of persons reporting a left-censored unemployment spell (i.e., that began prior to 1993 and ended during 1993) were unemployed between 11 and 20 weeks. By contrast, 43% of those reporting a right-censored unemployment spell



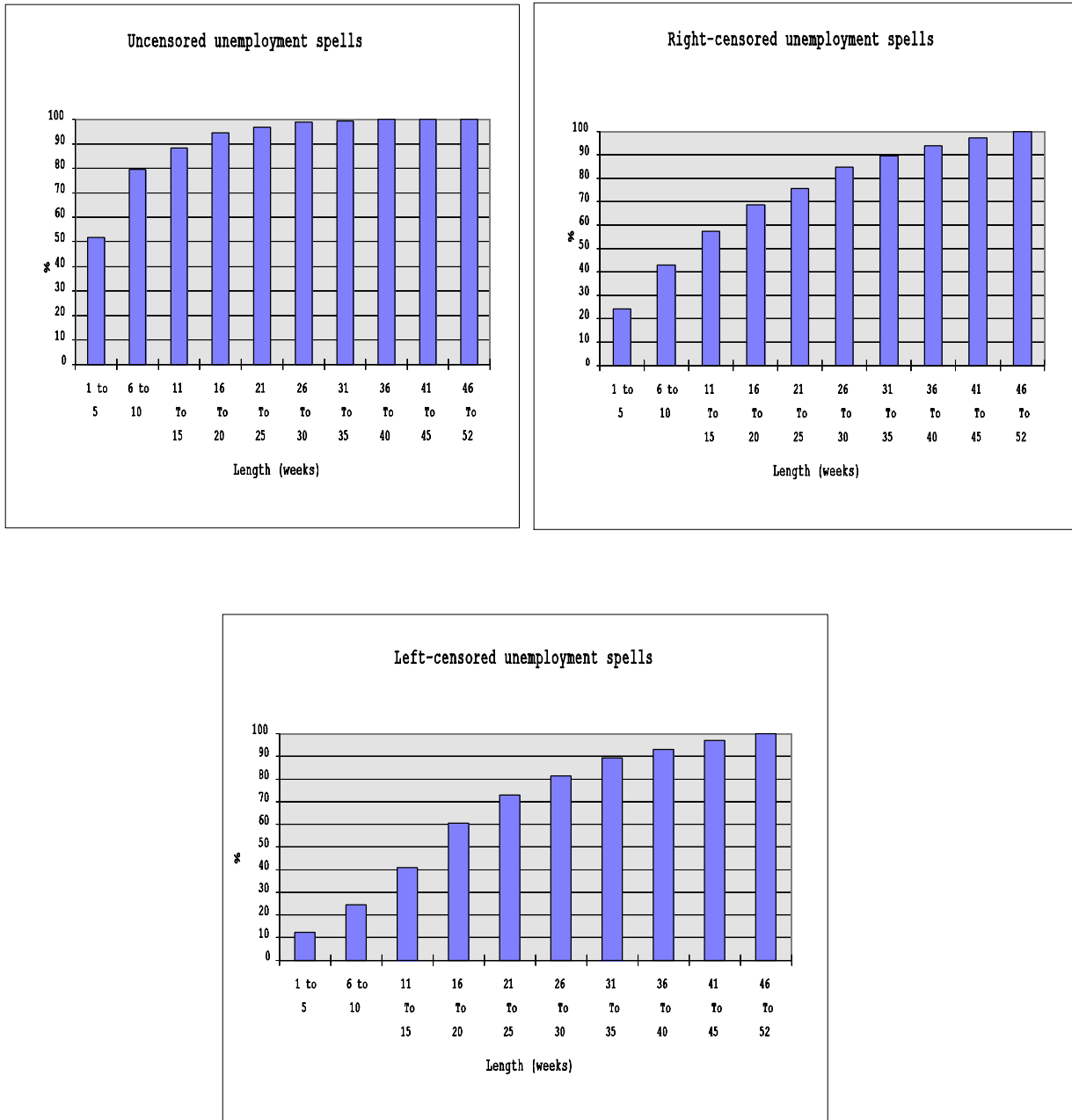
(i.e., that began during 1993 and ended subsequent to 1993) were unemployed between one and ten weeks.

By definition, all respondents reporting unemployment spells of 53 weeks fall within the group reporting a left- and right-censored unemployment spell. These people spent the entire year unemployed, therefore, and may have been unemployed prior or subsequent to the reference year. As discussed above, SLID tends to overestimate unemployment spell of 53 weeks. Specifically, some respondents who have been searching for work during almost an entire year could be expected to forget brief spells of inactivity (when they were not looking for work). The SLID counts such brief spells as unemployment spells.

**Figure H: Left- or right-censored and uncensored unemployment spells, from SLID, 1993**



**Figure I: Left or right truncated and non truncated unemployment spells, cumulative percentages, from the SLID, 1993**



## 6. LABOUR MARKET TRANSITIONS (SLID ONLY)

Three statuses with respect to labour force participation are possible:

- < Employed
- < Unemployed
- < Not in labour force (inactive)

A labour market transition involves a change from one status to another. Table 7 indicates that while most Canadians between 16 and 69 years of age (79%) did not experience a transition during 1993, a fair percentage (16.3%) experienced one or two transitions during the year. Very few Canadians (4.7%) changed their status more than twice during the year.

**Table 7: Number of labour force participation status transitions  
(Population aged from 16 to 69 years / Reference year 1993)**

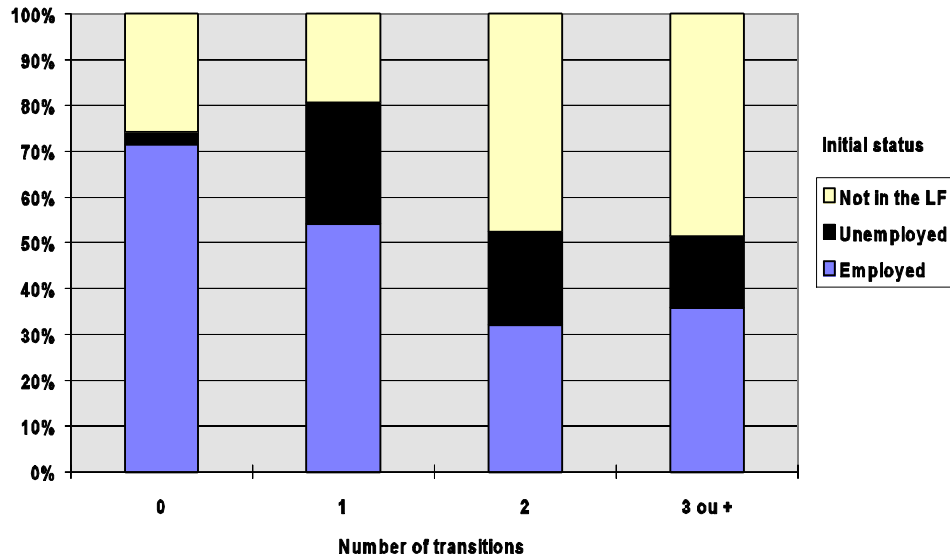
In thousands and percentages (%)

	Total	Proportion
Total	20,094	100.0
No of labour market transitions		
0	15,867	79.0
1	1,713	8.5
2	1,563	7.8
3	637	3.2
4	204	1.0
5	62	0.3
6	31	0.2
7	3	0.0
8	6	0.0
9	5	0.0
10	2	0.0
11	1	0.0

A more detailed examination of these labour market transitions (Table 8 and Figure J) indicates that most of those who experienced no transition during 1993 were employed at the beginning of the year; the next largest group were not in the labour force. Furthermore, those most likely to change status in 1993 were those who were unemployed at the beginning of the year (1.24 transitions on average). Specifically, 68% of those who were unemployed in January 1993 experienced at least one transition during the year. In numbers, however, there were far more transitions among people employed at the beginning of the year, as there are far more respondents having this initial status than any other.

**Table 8: Number of labour force transitions by initial status  
(Population aged from 16 to 69 years / Reference year 1993)  
(‘000)**

	Total	Number of labour force transitions				Mean
		None	One	Two	Three or more	
Total	19,616	15,389	1,713	1,563	951	0.41
Labour market status at beginning of year						
Employed	12,783	1,014	927	501	341	0.25
Unemployed	1,352	427	455	320	150	1.24
Not in labour force	5,481	3,948	331	742	460	0.62
Do not know	478	478	0	0	0	0.00

**Figure J: Proportion having each initial status, by number of transitions**

Finally, it is enlightening to examine status transitions between two consecutive weeks (see Table 9). First, transitions between similar statuses in the two weeks (for example, employed both weeks, but at a different job) are not counted. Second, there were a fairly large number of transitions between “unemployed” and “employed” (2,243,000 transitions between the two weeks). In fact, 80% of transitions originating in the “unemployed” status involved a move to the “employed” status. On the other hand, 52% of transitions experienced by employed persons during a given week involve a move to unemployment in the following week.

**Table 9: Week-to-week employment status transitions**  
**(Population aged from 16 to 69 years / Reference year 1993)**  
 ('000)

	Total	New status <sup>2</sup>		
		Employed	Unemployed	Not in labour force
Total	8,209	3,164	2,783	2,262
Initial status <sup>1</sup>				
Employed	3,262	0	1,575	1,686
Unemployed	2,819	2,243	0	576
Not in labour force	2,128	921	1,208	0

<sup>1</sup> "Initial status" refers to status of respondent during a given week.

<sup>2</sup> "New status" refers to status of respondent during the following week.

## 7. CONCLUSION

Labour market status data in the SLID and LFS can only be compared if a number of differences between the two surveys, such as data collection procedures, are well understood. For example, the SLID uses a reference and recall period of one year, while the LFS uses the previous week. Another major difference involves determination of labour market status. While each survey produces data on labour market status by week, LFS figures are based on the reference week for the monthly survey while SLID figures refer to individual weeks of the reference year. It is easier to compare monthly values of this variable for both surveys.

This comparison has yielded relatively satisfactory and interesting results. First, a parallel was established between the data for the two surveys for different labour market indicators. In particular, SLID produces lower estimates of unemployment (both actual numbers and rate) and higher estimates of employment. Seasonal variation, however, is similar for the two surveys.

Comparison of the number of persons employed or unemployed as estimated by the two surveys yields broadly similar results. The primary explanation for this is that the SLID, because of its interview feedback procedures, tends to overestimate employment at the beginning of the year. In addition, problems with telescoping tend to underestimate brief unemployment spells. Furthermore, SLID figures regarding censored unemployment spells indicate that half of such spells lasted ten weeks or less in 1993, while 10% of the unemployed maintained this status for 53 weeks or more. This latter proportion may be an overestimate, however, because a number of respondents may have forgotten short periods of inactivity that occurred at some point during the year.

SLID reveals that 16% of Canadians experienced a change in labour market status during the year. Proportionally, those who were unemployed at the beginning of the year were more likely to experience a transition in 1993 (68%). Finally most transitions occurred from the “unemployed” status to the “employed” status.



## **APPENDIX A: ALGORITHM FOR DERIVATION OF LABOUR FORCE STATUS USING SLID DATA**

This appendix provides the specifications for the derivation of weekly labour force status for SLID. The same logic could be duplicated for the derivation of a monthly labour force status. The possible values are Employed (E) / Unemployed (U) / Not in the labour force (N) / Don't know (DK). For the remainder of this appendix, "weekly labour force status" will be abbreviated to LFST.

For SLID, a "week" has a specific definition: seven consecutive days starting with Sunday and ending on Saturday. Exceptions are the first and last weeks of the year. Week 1 is defined as starting on January 1 and ending on the first Saturday of the month. In a similar fashion, the last week starts with the last Sunday of the year and ends on December 31. In this way, virtually every year has exactly 53 weeks. In leap years where January 1 falls on a Saturday, this approach would yield 54 weeks. To keep the 53-week standard, for these years week 53 would have eight days from Sunday December 24 to December 31. This situation will occur in year 2000, but not again until 2028.

**STEP A:** Determine whether the person was a respondent to the labour interview for the year. If person has no jobs or jobless spells recorded in the data base during the year, then no labour data were collected for this person. Thus, LFST is set to DK for all weeks. Steps B and C are followed by respondents only.

**STEP B:** For every week, certain counts and flags (i.e., yes or no) are required as part of the algorithm for determining LFST:

- 
- < Flag indicating whether the person was a full-time student. SLID collects this information only on a monthly basis. So a person is deemed to be a full-time student in a week if he is a full-time student in the month. For weeks which cross months, the value used corresponds to the month containing the majority of days for the week.
  
  - < Count the number of jobs the person had. This can be determined from the start and end dates of jobs. If the person had a job at any time during the week, then the job is counted for that week.
  
  - < Count the number of absences from a job the person had, and for those months with an absence, determine whether the person had looked for work. Start and end dates are collected for job absences. As with job dates, an absence is counted for a week if it occurred for any part of the week.
  
  - < Flag indicating whether the person had a jobless spell, and if so, whether the person had looked for work during the jobless spell. Again, a jobless spell is attached to a week if it occurred at any time during the week. Job search is only collected by month. As with the assignment of student status, a person is recorded as looking for a job in any week falling into a month with job search. Weeks crossing months are assigned to the month containing the majority of the week.
  
  - < Flag indicating whether it is in a period between a job offer date and a job start date.

- STEP C: Using the information derived in Step B, the following steps are followed sequentially for every week.
- < Initialize LFST to N.
  - < If the person had at least one job, set LFST to E.
  - < Examine all job absences to determine whether any of them affect the value of LFST.
    - < If the number of absences is less than the number of jobs, then the absences do not affect the value of LFST.
    - < If an absence is due to temporary layoff - non-seasonal, then set LFST = U.
    - < If an absence is due to temporary layoff- seasonal conditions, then determine whether the person looked for work. If so, set LFST = U. If not and LFST = E, then set LFST = N.
  - < If the person had no jobs and looked for work, then set LFST = U.
  - < If LFST = N and week is between a job offer and job start, then change the value to U.  
(Rationale: Person wants work, but does not look since there is a job to start in the future.)
  - < If LFST = U and the person was a full-time student, change the value to N.  
(Rationale: Full-time students are not available for work at that time.)

## **APPENDIX B: ALGORITHM FOR DERIVATION OF LABOUR FORCE STATUS USING LFS DATA**

A labour force status classification (i.e., employed, unemployed, and not in the labour force) is assigned to each respondent aged 15 and over, according to their responses to a number of questions during the LFS interview. The following decision table illustrates how the classification is derived. This information has been taken in the Guide to the Labour Force Survey.

