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Social Assistance Benefit Rates and the Employment Rate of Lone Mothers

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Executive Summary

Issue

Over the period 1988-95, the employment rate (percent of employed) of lone mothers in Ontario declined from 61.3 to 47.0 per cent. This statistic is particularly startling considering that over the same period the employment rate of mothers with a spouse in Ontario did not decline, while in Quebec the employment rate of mothers with and without a spouse went up. As a result of these trends, after 1991, for the first time, the employment rate of lone mothers in Quebec exceeded that of lone mothers in Ontario

Approach

The paper uses the 1988-90 Labour Market Activity Survey longitudinal data to explore the incidence of social assistance among lone mothers (including social assistance entry and exit rates) and to estimate the effect of social assistance benefits, labour market conditions, and other factors on the employment rate of lone mothers.

Findings

The results show that the increase in social assistance benefits has been a major factor behind the decline in employment rates of lone mothers in Ontario. It is estimated that each $1,000 increase in benefit rates is associated with a 1.9 percentage points reduction in the employment rate of lone mothers. As a result, 95 per cent of the 5.9 percentage point increase in the Quebec-Ontario employment rate gap of lone mothers over the period 1988-90 can be attributed to the increase in Ontario benefits relative to Quebec by $2,962.

Labour market conditions do not appear to have had a major impact on employment rates in Ontario over the period 1988-90. This is not very surprising given that the significant deterioration of the Ontario labour market took place after 1990. In particular, the unemployment rate of lone mothers in Ontario increased from 9.2 to 12.0 per cent in 1988-90, while it doubled by the year 1995 (21.7 per cent).

Further Work

However, the dramatic increase in the unemployment rate of lone mothers in Ontario after 1990 suggests strongly that deteriorating labour market conditions can have a disproportionate effect on groups that are at high risk of receiving social assistance. The recently released Survey of Labour Market and Income Dynamics provides a unique opportunity for probing in detail the labour dynamics of social assistance recipients.

Sommaire

Sujet

Entre les années 1988 et 1995, le taux d'emploi (pourcentage de personnes ayant un emploi) des mères seules en Ontario est passé de 61,3 p. 100 à 47,0 p. 100, ce qui est surprenant, étant donné qu'en Ontario, au cours de la même période, le taux d'emploi des mères ayant un conjoint n'a pas diminué et qu'au Québec, le taux d'emploi des mères ayant ou non un conjoint s'est accru. Par conséquent, après 1991, le taux d'emploi des mères seules au Québec a été, pour la première fois, supérieur à celui des mères seules en Ontario.

Approche

Les données longitudinales de l'Enquête sur l'activité de 1988-1990 ont été utilisées pour déterminer la fréquence du recours à l'aide sociale chez les mères seules (y compris les taux d'entrée et de sortie) et pour évaluer l'incidence des prestations d'aide sociale, de la situation du marché du travail et d'autres facteurs sur le taux d'emploi des mères seules.

Constatations

On constate que l'augmentation des prestations d'aide sociale a beaucoup contribué au déclin des taux d'emploi des mères seules en Ontario. On estime que chaque augmentation de 1 000 $ a pour résultat de réduire de 1,9 point de pourcentage le taux d'emploi des mères seules. Par conséquent, de l'écart de 5,9 points de pourcentage entre le taux d'emploi des mères seules en Ontario et celui des mères seules au Québec pour la période de 1988 à 1990 peut être attribué, à 95 p. 100, au fait que les prestations ont augmenté de 2 962 $ en Ontario, alors qu'elles sont demeurées les mêmes au Québec.

La situation du marché du travail ne semble pas avoir eu une incidence majeure sur les taux d'emploi en Ontario au cours de la période 1988-1990, ce qui n'est guère surprenant étant donné que la détérioration importante du marché du travail ontarien n'est survenue qu'après 1990. Plus particulièrement, le taux de chômage des mères seules en Ontario est passé de 9,2 p. 100 à 12 p. 100 entre 1988 et 1990, pour ensuite doubler entre 1990 et 1995 (21,7 p. 100).

Travaux supplémentaires

La forte augmentation du taux de chômage des mères seules en Ontario survenue après 1990 est la preuve qu'une détérioration de la situation du marché du travail peut avoir des répercussions disproportionnées sur les groupes les plus susceptibles d'avoir recours à l'aide sociale. L'Enquête sur la dynamique du travail et du revenu, qui a récemment été publiée, fait état de la dynamique du travail des bénéficiaires de l'aide sociale.

Table of Contents

1. Introduction

The focus of this paper is on the Quebec-Ontario divergence in employment rate trends of lone mothers with children under 16. Over the period 1988-95, the employment rate (percent employed) of lone mothers in Ontario declined from 61.3 to 47.0 per cent. This statistic is particularly startling considering that over the same period the employment rate of mothers with a spouse in Ontario did not decline, while in Quebec the employment rate of mothers with and without a spouse went up. As a result of these trends, after 1991, for the first time, the employment rate of lone mothers in Quebec exceeded that of lone mothers in Ontario (see Chart 1).

Chart 1: Employment Rate of Mothers with Children Under 16
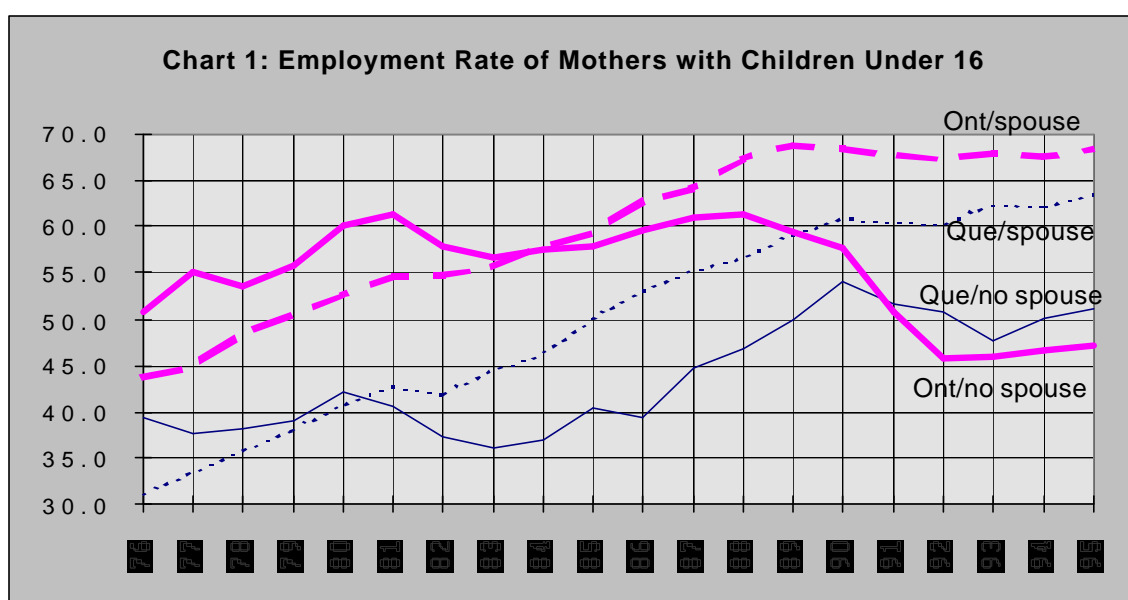
Source: Statistics Canada "Labour Force Annual Averages" (Catalogue 71-220 - CD ROM version)

Trends in the employment rate of lone mothers are of particular interest from the social policy point of view because of the high incidence of poverty, especially child poverty, among persons in such families. One of the questions examined by this paper is whether differences in social assistance developments in the two provinces may explain, at least in part, the difference in employment trends. Given the high incidence of social assistance among lone mothers, any effect of social assistance programs on the employment rate of recipients will have a noticeable effect on the employment rate of the entire group.

The paper is based primarily on an analysis of the 1988-90 Labour Market Activity Survey (LMAS) longitudinal data. The data provide an insight into the determinants of the employment rate of mothers with young children, as well as the dynamics of dependency on social assistance (including entry and exit rates). The period covered by the data is particularly relevant for exploring the decline in employment rates of lone mothers in Ontario since it also coincides with major changes in social assistance in Ontario.

In what follows, Section 2 discusses the policy issue and makes reference to related literature; Section 3 provides an overview of social assistance changes in Ontario and Quebec in 1988-90;   Section 4 describes briefly the LMAS data and related methodological questions; Section 5 uses the LMAS data to examine the incidence of social assistance and entry and exit rates over the 1988-90 period; Section 6 explores trends in employment rates of lone mothers and mothers with a spouse; Section 7 uses the LMAS data to estimate the effect of social assistance benefits, labour market conditions, and other factors on the employment rate of lone mothers; finally Section 8 summarizes the main conclusions.

2. The Issue

2.1 Broad Considerations

The employment rate of lone mothers is of particular policy interest for two important reasons. First, lone mothers are at high risk of relying on social assistance and changes in their employment rate can have a significant impact on welfare caseloads. Second, a large percentage of poor children live in households with a female sole supporter. Consequently, the employment rate of lone mothers affects both welfare costs and child poverty.

The 1994 federal government Green Paper on social policy reform provided the following alarming statistic: "In March 1993, 3 million Canadians (nearly 40 per cent of whom were children) depended on social assistance. This compares to 1.4 million recipients in the same month in 1981 -- a doubling in just 12 years" (Canada, 1994: 19-20).[1]

A number of hypotheses have been put forward as to likely factors underlying the increase in case loads -- such as, rapid skill deterioration and labour replacement due to technological change and globalization; shift of macroeconomic policy emphasis from economic stability to controlling inflation and reducing the deficit; and changing social values (see for example Richards, 1995: pp. xiv-xix).

A reflection of the adverse trends in the labour market is the deterioration of employment opportunities for those at the bottom of the income distribution as demonstrated, for example, by the decline of the share of earnings accruing to the bottom quintile, particularly among men. From 1971 to 1992 the percent of men earning less than 50 per cent of the median increased from 25 to 30 per cent (see Brown, 1995).

2.2 The Quebec-Ontario Experience

Differences in labour market trends and social assistance benefit rate trends in Quebec and Ontario over the years covered by this study (1988-90) provide an opportunity for probing the determinants of the work effort of lone mothers. With respect to the decline in the Ontario-Quebec gap of employment rates among lone mothers, there is equal suspicion that both labour market conditions and social assistance benefits were a factor.

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[1]   Although the focus of this study is lone mothers, it should be pointed out that the bulk of the increase in social assistance caseload is not due to lone mothers but those groups who traditionally have used welfare very little, such as single individuals and couples (Dooley, 1995).

Chart 2 shows that the unemployment rate of lone mothers in Ontario doubled from 1988 to 1992 (from 9.2 to 20.3 per cent), while in Quebec it increased marginally (from 16.3 to 16.9 per cent).   However, over the period covered by this study (1988-90) the increase in the unemployment rate of lone mothers in Ontario was relatively small (from 9.2 to 12.0 per cent). One would expect, therefore, that labour market conditions were less of a factor before 1990 than after 1990.
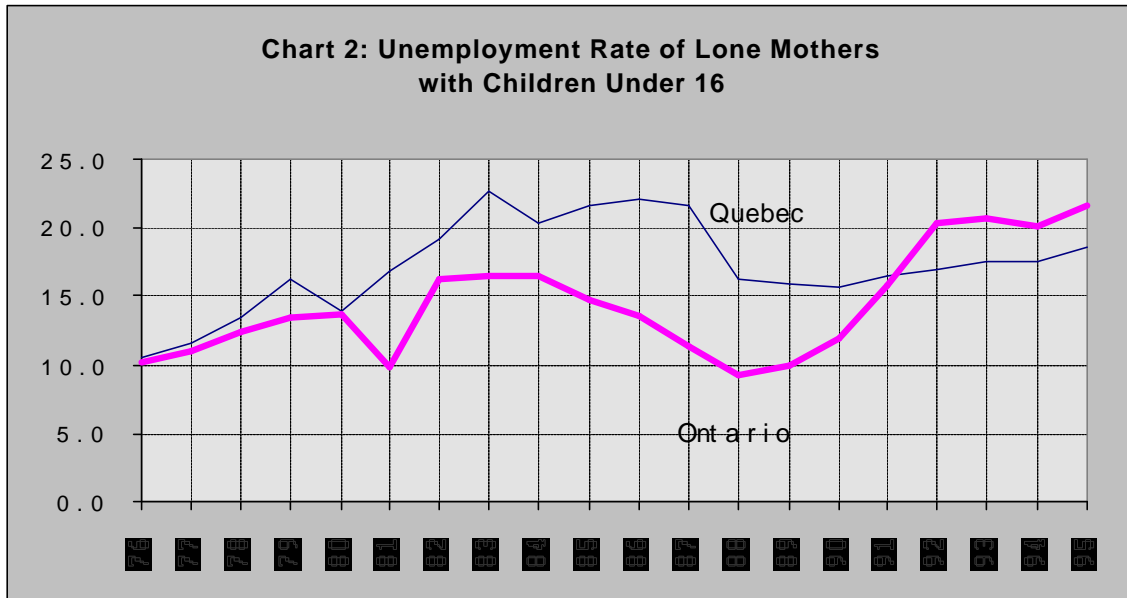
Source: Statistics Canada "Labour Force Annual Averages" (Catalogue 71-220 - CD ROM version)

There is also suspicion that a potentially significant explanatory factor may have been the increase in social assistance benefits in Ontario relative to Quebec. In particular, over the period 1988 to 1990 social assistance benefit rates for lone parents in Ontario increased by 41 per cent, while the caseload increased by 26 percent. By contrast, over the same period social assistance benefits for lone parents in Quebec increased by 15 per cent, while the caseload declined by 6 per cent (see Tables 1 and 2).

Table 1
Social Assistance Basic Rates 1988-90
Single Parent with Two Children Under 16

	1988	1989	1990	88-90 Chng	88-90 %Chng
NFLD	9,642	9,963	10,428	786	8%
PEI	11,763	12,525	13,235	1,472	13%
NS	8,963	11,024	11,474	2,511	28%
NB	5,348	7,939	8,193	2,845	53%
QUE	8,688	9,387	9,948	1,260	15%
ONT	10,331	12,305	14,553	4,223	41%
MAN	10,172	10,141	10,543	372	4%
SASK	11,952	11,947	12,167	215	2%
ALTA	11,079	10,950	10,950	-129	-1%
BC	10,345	11,441	12,124	1,778	17%
AVERAGE	9,828	10,762	11,362	1,533	16%

Note: The source of 1988 figures is Sarlo (1992); the source of 1989 and 1990 figures for single parents with one child is the National Council of Welfare: Welfare Incomes; the rates for single parents with two children are estimated based on the ratio of benefits for single parents with two children to single parents with one child in 1988. The same estimation procedure was used by Charette and Meng (1994).

Table 2
Social Assistance Caseload: All Single Parents, 1988-90

	1988	1989	1990	88-90 %Chng
NFLD	5,098	na	5,842	15%
PEI	1,288	1,267	1,294	0%
NS	10,188	9,800	10,306	1%
NB	11,603	11,565	11,665	1%
QUE	75,954	72,010	71,641	-6%
ONT	100,429	109,144	126,623	26%
MAN	na	na	na	na
SASK	9,060	8,526	8,196	-10%
ALTA	na	na	na	na
BC	36,503	35,663	34,250	-6%
TOTAL	250,123	na	269,817	8%

Source: Human Resources Development Canada, unpublished data.

A recent study of the determinants of welfare participation of female heads of households (i.e., lone females and lone mothers) in Canada, using the LMAS data for 1990, found that "the elasticities of welfare participation with respect to both welfare benefits and earned income exemption are relatively high. There is also some indication of a negative relationship between the marginal tax rate on earned income above the exemption level and the probability of welfare participation" (Charette and Meng, 1994: p. 304).

Despite the considerable analytical effort, fundamental questions still remain unanswered -- such as, for example, whether "the Canadian welfare problem is clients with long spells or clients with multiple spells or the failure of clients to mix work and welfare" (Dooley, 1995: p.38). There is growing dissatisfaction with social assistance and social programs in general. "Social assistance programs focus on the immediate problem of income need and do little to encourage self-reliance. The system does not emphasize training and improving employability, and the benefit structure discourages work effort and acts as a 'welfare trap.' A focus on the non-working poor and the neglect of the working poor exacerbates the situation" (Grady, 1995: p.49).

3. Overview of Social Assistance Changes

Over the period 1988-90, which is the focus of this paper, there were considerable changes in the social assistance program in Ontario. First, Ontario increased its benefit rates by significantly more than any of the other provinces. In 1986, social assistance benefit rates in Ontario were comparable to benefit rates in Saskatchewan, Alberta, PEI, and Newfoundland. By 1990, Ontario had the highest benefit rate among all provinces. Over the period 1988-90 covered by this study, Ontario benefits for a lone mother with two children increased by $4,223, about three times the average increase for all provinces (see Table 1).

Second, Ontario improved the treatment of earnings of social assistance recipients. With the introduction of STEP in October 1989, earnings were treated more favourably in Ontario than any other province (except Quebec under APPORT). Under STEP, in addition to the existing $190 monthly earnings exemption, the tax back rate on earnings above that level was reduced from 100 per cent to 80 per cent. In calculating earnings certain employment related costs were also allowed (see Table 3).

In the case of Quebec, the treatment of earnings of social assistance recipients was improved in August 1989. However, the most significant change in the Quebec system took place in 1988 with the introduction of APPORT retroactive as of January 1988. APPORT is a wage supplement program for low-income parents with dependent children, regardless of whether they receive social assistance or not. In the case of social assistance recipients, APPORT effectively reduces the tax-back rate from almost 100 per cent to 55 per cent.

Table 3
Simplified Presentation of Treatment of Earnings
Under Social Assistance 1989-90

	Earnings exemption		Tax-back rate above exemptions	
	1988	**1990**	**1988**	**1990**
NFLD	100	100	100%	100%
PEI	0	100	90%	90%
NS	100	100	100%	100%
NB	200	200	100%	100%
QUE	80	80	55%	55%
ONT	190	190	100%	80%
MAN	100	120	100%	100%
SASK	150	150	100%	100%
ALTA	115	115	na	na
BC	100	100	75%	75%

Sources:
Quebec: Ministere de la Main-d'oeuvre. de la Securite du revenu et de la Formation professionnelle. Ontario: Ministry of Community and Social Services. Other provinces: National Council of Welfare
Notes:
The table provides a simplified picture of the treatment of earnings under provincial social assistance programs. All provinces make allowance for work related costs. In the case of Quebec we have assumed that all eligible recipients receive benefits under APPORT (while in fact there are indications that the incidence is less than 50 per cent). Alberta's tax-back rates start at zero below $115 monthly and gradually increase to 90% above $300 monthly.

As a result of the higher benefit rates and the more favourable treatment of earnings (lowering of tax-back rate from 100 to 80 per cent), the range of earners who could receive social assistance benefits in Ontario increased dramatically. The more favourable treatment of earnings had two likely behaviour effects: it encouraged more social assistance recipients to declare more income from work; and it encouraged more low-income/marginal workers, who under STEP were eligible for small top-ups and health coverage, to stay in the work force.

4. Data and Methodology

The paper uses the 1988-90 Labour Market Activity Survey (LMAS) data to get a better understanding of the effect of social assistance on the labour market behaviour of lone mothers with young children (under 16 years of age). The LMAS database is uniquely suited to fill some important gaps in our understanding of poverty and the effect of social assistance on labour market behaviour.

The LMAS contains longitudinal information on socio-demographic characteristics, labour market activity, and participation in social assistance, UI and HRDC training programs. The LMAS has been funded entirely by HRDC and has been designed to address a wide range of important issues such as, for example, main barriers to employment, the interaction of social assistance and UI, and the penetration of HRDC programs to target populations.

An additional attraction of the 1988-90 LMAS is that it covers a period during which there was a sea change in social assistance programs, particularly in Ontario and Quebec. For example, Ontario introduced STEP in October 89 as a means of treating more leniently the earnings of welfare recipients; Quebec introduced APPORT in August 1988 (retroactively to January 1 1988) as a means of supplementing the earnings of low income working families. Consequently, the period covered by the LMAS data can serve as a "live" experiment for understanding the effects of social program changes on the labour market behaviour of eligible populations.

The LMAS is a fairly complex survey. Also, longitudinal data provide additional challenges to those presented by cross-sectional data. One challenge is that receipt of social assistance is under-reported by the LMAS (a problem common to other surveys as well, such as the Survey of Consumer Finances). This introduces some amount of distortion into comparisons between SARs and non-SARs. However, the data are still useful in revealing significant underlying differences. They are also useful in revealing trends (especially since there is no reason to believe that the rate of under-reporting changed systematically over the three year period).

The three-year history from the LMAS data is used to identify flows of lone mothers into and out of social assistance and to explore the determinants of their labour market behaviour. A basic premise of the methodology is that by contrasting the experience between provinces (particularly between Ontario and Quebec) after "normalizing" the data for differences in labour market conditions and differences in the composition of the welfare population in the two provinces, we can attribute differences in labour market behaviour to differences in policies introduced over the period 1988-90.

5. Incidence of Social Assistance

In this section the LMAS data are used to take a closer look at the incidence of social assistance and the dynamics of dependency on social assistance -- in particular entry and exit rates. The analysis will help us understand the effect of social assistance changes on the employment rate of lone mothers.

Table 4 shows that the incidence of social assistance in Ontario was the lowest among all the provinces. However, the rate of increase in the incidence from 1988 to 1990 is significantly higher in Ontario than the rest of the provinces. In fact, over the period 1989-90, the incidence of social assistance among lone mothers declined in all provinces outside Ontario by 4-5 percentage points, while in Ontario the incidence increased by 5.5 percentage points.[2]

To a certain extent, the increase in the incidence of social assistance in Ontario resulted from the significant increase in the level of income that individuals could earn and still qualify for partial social assistance benefits. This was the result of the combined effect of higher social assistance benefits and a more liberal treatment of earnings under STEP. This effect is often referred to as a "mechanical effect" (Ashenfelter, 1993).

Table 5 shows that the welfare population is not a constant one, but changes significantly from year to year. For example, in Ontario 27.5 per cent of lone mothers on social assistance in 1989 entered social assistance in that year (entry rate), while 31.5 per cent of social assistance recipients in the previous year had exited by 1989 (exit rate). The entry and exit rates are even more significant over a two-year period.

This is a very fundamental observation. It shows that in order to reduce the incidence of social assistance we have to influence entry and exit rates. Exit rates are particularly important because they relate to the issue of long-term dependency on welfare. Low exit rates means recipients stay on for a long time. In turn, long term dependency on social assistance often leads to more serious difficulties of reintegration into the labour market.

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[2]   Changes in the incidence of social assistance reflect the effect of several labour market and program factors. For example, in Ontario, in addition to the significant increase in benefits there were important administrative changes, such as the relaxation of the spouse-in-the-house rule that led to more lone mothers qualifying for benefits.

Table 4
Incidence of Social Assistance
Among Mothers with a Child Under 16, 1988-90

	SAR in 88	SAR in 89	SAR in 90	Change 88-89	Change 89-90	SAMPLE SIZE
CANADA						
Spouse.......	4.1%	3.5%	4.0%	-.6%	.5%	8816
No Spouse....	39.4%	35.0%	32.4%	-4.3%	-2.6%	1247
ATLANTIC						
Spouse.......	5.3%	4.6%	5.0%	-.7%	.4%	2427
No Spouse....	45.5%	42.7%	38.5%	-2.8%	-4.2%	286
QUEBEC						
Spouse.......	4.8%	4.0%	4.2%	-.8%	.2%	1423
No Spouse....	43.2%	39.3%	35.0%	-3.9%	-4.4%	206
ONTARIO						
Spouse.......	1.8%	1.6%	3.0%	-.1%	1.3%	1484
No Spouse....	30.9%	29.2%	34.7%	-1.7%	5.5%	236
PRAIRIE						
Spouse.......	4.0%	3.4%	3.9%	-.6%	.5%	2655
No Spouse....	36.0%	30.0%	25.1%	-6.0%	-5.0%	383
BC						
Spouse.......	3.5%	2.5%	2.9%	-1.0%	.4%	827
No Spouse....	44.9%	36.8%	32.4%	-8.1%	-4.4%	136

Source: Estimated from the LMAS public use tapes

Table 5
Social Assistance Entry and Exit Rates
Among Mothers with a Child Under 16, 1988-90

	Entered SA 1989	Exited SA 1989	Entered SA 1990	Exited SA 1990	SAMPLE SIZE
CANADA					
Spouse..............	40.0%	49.0%	43.9%	35.1%	8816
No Spouse...........	16.2%	25.5%	21.8%	27.7%	1247
ATLANTIC					
Spouse..............	35.7%	44.2%	45.1%	40.2%	2427
No Spouse...........	13.1%	18.5%	18.2%	26.2%	286
QUEBEC					
Spouse..............	26.3%	38.2%	30.0%	26.3%	1423
No Spouse...........	17.3%	24.7%	19.4%	28.4%	206
ONTARIO					
Spouse..............	70.8%	73.1%	68.2%	41.7%	1484
No Spouse...........	27.5%	31.5%	29.3%	15.9%	236
PRAIRIE					
Spouse..............	41.8%	50.5%	38.8%	30.8%	2655
No Spouse...........	16.5%	30.4%	24.0%	36.5%	383
BC					
Spouse..............	57.1%	69.0%	50.0%	42.9%	827
No Spouse...........	6.0%	23.0%	15.9%	26.0%	136

Source: Estimated from the LMAS public use tapes

Over the period 1988-89, Ontario had higher social assistance entry and exit rates than the rest of the provinces. This suggests that Ontario had, relative to the rest of the provinces, a less serious problem of long-term dependency on social assistance.

However, there was a significant decline in the Ontario social assistance exit rate in 1989-90 (to about half of the 1988-89 exit rate) to a level below the rest of the provinces. This suggests that one of the effects of STEP may have been to delay the exit of social assistance recipients. Some of the recipients whose earnings improved in 1990 remained eligible for partial benefits, while before STEP they would have become ineligible. This is one illustration of the "mechanical effect" discussed earlier of changes in the range of earnings eligible for partial benefits.[3]

One would have anticipated the entry rate to increase in the following year or two. The reason is that it takes longer for individuals outside the system to become aware of improved benefits. Changes affect first those already in the system (i.e., by reducing exit rates), followed by an increase in the entry rate of new recipients. Consequently, the October 1989 changes probably had an echo effect past 1990.[4]

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[3]   By providing small top-ups and health coverage, STEP's objective was to encourage recipients to make the transition to work and prevent low-income workers from leaving their jobs for social assistance.

[4]   This echo effect cannot be studied with the LMAS data because they only cover the period 1988-90.

6. Employment Rate Trends

The focus of this paper is to explain what factors may have contributed to the significant decline in the employment rate of lone mothers in Ontario. For the purpose of the analysis, we have selected from the LMAS sample mothers with children under 16 as of 1988, who did not change province or marital status over the 1988-90 period. The sample permits us to trace the employment rate of the same individuals over the three-year period.

The LMAS allows a number of alternative measures of work effort (such as annual weeks of work and annual hours of work). However, we have chosen the employment rate as the key measure since the main motivation of the paper is to explain trends in employment rates. To replicate as closely as possible the annual average employment rates produced from the monthly Labour Force Survey, we first estimated the employment rate of each individual on the third week of each month (which corresponds to the reference week of the Labour Force Survey) and then averaged each individual's 12 monthly employment rates.

Table 6 broadly confirms the results produced from the Labour Force Survey annual averages.[5]   It shows that over the period 1988-90 the employment rate of lone mothers declined in Ontario from 60.9 per cent in 1988 (above the national average of 58.0 per cent) to 58.9 per cent in 1990 (below the national average of 61.6 per cent). Although it is difficult to establish trends over a three year period, these number are consistent with the longer term trends from annual averages based on the monthly Labour Force Survey.

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[5]   However, it should be noted that the LMAS sample employed here is unique, in that it follows the same individuals over time and excludes individuals who changed province or marital status. Consequently, there is no precise correspondence between the Labour Force Survey sample and the sample used here.

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                              Table 6
                        Employment Rates
              Among Mothers with a Child Under 16, 1988-90
      +----------------------+-------+-------+-------+-------+
      |                      |EmpRate|EmpRate|Change |SAMPLE |
      |                      | 1988  | 1990  | 88-90 | SIZE  |
      +----------------------+-------+-------+-------+-------+
      |CANADA                |       |       |       |       |
      |   Spouse.............| 58.2% | 62.7% |  4.5% | 8816  |
      |   No Spouse..........| 58.0% | 61.6% |  3.6% | 1247  |
      |ATLANTIC              |       |       |       |       |
      |   Spouse.............| 51.6% | 56.0% |  4.4% | 2427  |
      |   No Spouse..........| 49.7% | 54.2% |  4.5% |  286  |
      |QUEBEC                |       |       |       |       |
      |   Spouse.............| 52.5% | 55.4% |  2.9% | 1423  |
      |   No Spouse..........| 51.8% | 54.9% |  3.1% |  206  |
      |ONTARIO               |       |       |       |       |
      |   Spouse.............| 65.0% | 68.9% |  3.9% | 1484  |
      |   No Spouse..........| 60.9% | 58.9% | -2.1% |  236  |
      |PRAIRIE               |       |       |       |       |
      |   Spouse.............| 64.1% | 69.0% |  4.9% | 2655  |
      |   No Spouse..........| 64.9% | 70.1% |  5.2% |  383  |
      |BC                    |       |       |       |       |
      |   Spouse.............| 56.1% | 63.6% |  7.5% |  827  |
      |   No Spouse..........| 60.4% | 67.7% |  7.4% |  136  |
      +----------------------+-------+-------+-------+-------+
      Source: Estimated from the LMAS public use tapes
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What is particularly interesting is that over the same period the employment rate of lone mothers increased at about the same rate as that of mothers with a spouse in all provinces except in Ontario. In Ontario, although the employment rate of mothers with a spouse increased (by 3.9 per cent) the employment rate of lone mothers decreased by 2.1 per cent (the only region with a decline). In the next section we explore these differences in employment rate trends to see to what extent they may reflect the effect of changes to social assistance in Ontario.

7. Determinants of Employment Rates

The primary interest of the analysis is to distinguish the effect of social assistance changes on the employment rate of lone mothers with children under 16, from the effect of changes in labour market conditions.

Over the period 1988-90, there was a wide variation in benefit rate changes between the provinces. For example, in the case of lone parents with two young children the change ranged from a $129 reduction in Alberta, to a $4,223 increase in Ontario. The wide range of variation in social assistance benefit changes between the provinces makes it possible to estimate their statistical relationship with changes in associated employment rates.

7.1   Methodological Approach

The basic premise of our approach is that changes in the employment rate gap between lone mothers and mothers with a spouse reflect the effect of changes in social assistance programs.

The rationale of this approach is as follows. Since the incidence of social assistance among mothers of young children with a spouse is very low, the impact of social assistance on recipients will not have a noticeable effect on the overall employment rate of the group. Consequently, changes in the employment rate of mothers with a spouse are a good proxy for changes in labour market conditions faced by all mothers with young children. By contrast, the incidence of social assistance among lone mothers of young children is very high. As a result, the impact of social assistance on recipients would have a noticeable effect on the overall employment rate of the group.

Chart 3: Changes in SA Benefits versus Changes in the Employment Rate Gap between Mothers With and Mothers Without a Spouse, 88-90
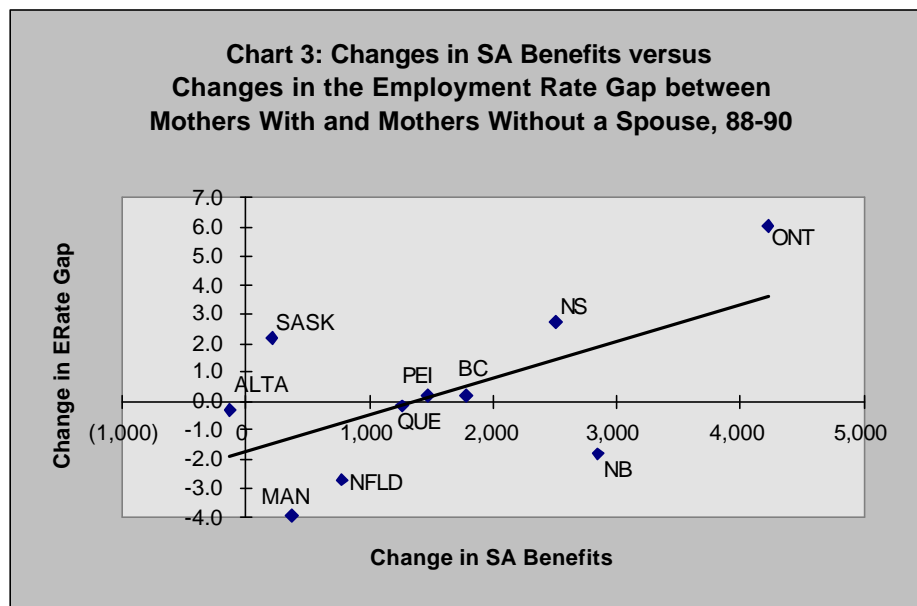
Chart 3 shows that there is a positive correlation between changes in social assistance benefit rates and changes in the employment rate gap between mothers of young children with and without a spouse over the period 1988-90. The correlation, although not perfect, does suggest that increases in social assistance benefits tend to be associated with a decline in the employment rate of lone mothers.

7.2   Regression Analysis

The relationship between social assistance and the employment rate is examined now more vigorously through a regression model that defines changes in the employment rate of lone mothers as a function of changes in social assistance benefits, changes in the employment rate of mothers with a spouse, and several demographic variables. The basic premise is that the employment rates of lone mothers in a province may change over time because of three main factors:

Demographic Factors

Although we are following the same women over only three years, there are still demographic changes taking place. The most important change is the aging of children. For example, a woman with a child 0-2 years of age in 1988 is likely to increase her employment rate by 1990 as her child gets older. By contrast, a woman with a child 0-2 years of age in 1990 is likely to have decreased her employment rate. This is why in the regression model we have included two dummy variables for the presence of a child 0-2 years of age. We also have included dummy variables for the level of education and age of the mother.

Labour Market Factors

As the labour market improves, the employment rate of lone mothers will tend to increase. Labour markets can be measured by several indicators, such as: the general unemployment rate in each province, the general employment rate in each province, or the employment rate of mothers with a spouse in each province. We have chosen the latter because it is reasonable to assume that labour market conditions affect the employment rate of both lone mothers and mothers with a spouse in a similar way. The correlation between the two employment rates is quite strong and robust. For example, the coefficient remained the same after excluding Ontario from the regression model.

Social Assistance Factors

The incorporation of social assistance program effects into the regression model is more difficult. Provincial programs differ in terms of generosity (level of benefits), work incentives (tax back rates, treatment of work-related costs, differential treatment of short-term and long-term recipients, etc.) and administration (strictness of application of eligibility rules, workfare, etc.). Even if it were possible to model all these aspects, with only 10 provinces there are not enough degrees of freedom to be able to incorporate them into the regression.   We have concentrated on only one indicator: level of benefits. Not surprisingly the regression coefficient is not very stable (this is because changes in level of benefits can lead to different results in different provinces depending on what other parallel changes are introduced at the same time. In particular, the results are sensitive to whether Ontario is included in the regression or not.

Table 6: Multiple Regression Results - Model 1

Dependent Variable..	DERATE (88-90 change in employment rate)		
Independent Variables..		B Coeff.	t-stat
DSABEN (88-90 change in SA benefits - $000)		-.019227	-3.160
DERATE2 (88-90 erate change of mothers with spouse)		.398885	17.807
YKID0288 (had a child 0-2 years old in 1988)		-.033093	-1.167
YKID0290 (had a child 0-2 years old in 1990)		-.145571	-4.530
EDUC12 (some secondary education or less)		OMITTED	CATEGORY
EDUC34 (high school or some post-secondary)		.038132	1.809
EDUC567 (post-secondary degree/diploma/certif.)		.019485	.803
AGE1624 (16-24 years old in 1988)		OMITTED	CATEGORY
AGE2534 (25-34 years old in 1988)		.012098	.459
AGE35+ (35 years or older in 1988)		-.009716	-.356
CONSTANT		.044195	1.615

Adjusted R Square = .21964   Standard Error = .32021   F = 44.83796

No. of observations = 1,250

The regression results are summarized in Table 6. The key variables in the regression model are as follows:

- DERATE is the dependent variable; it is equal to the change in the employment rate of each lone mother between 1988 and 1990.

- DERATE2 represents the average change in the employment rate of mothers with a spouse and similar education and age of children. In other words, for each lone mother we estimated the corresponding employment rate of the average mother with a spouse and similar level of education (two broad levels: high school or less; post-secondary education) and age composition of children (presence of preschool age child in 1988).

- DSABEN represents the change is SA benefits for a lone mother with two children over the period 1988-90, expressed in thousands of dollars. This variable is an indicator of the overall generosity of SA in each province, rather than a measure of what each individual lone mother may receive which will depend on the number of children.

- The rest of the regression variables are dummy variables: presence of a child under 3 years of age in 1988 and in 1990; level of education in 1988; and age group of lone mother.

The regression results show that each $1,000 increase in social assistance benefits is associated with a 1.9 percentage points reduction in the employment rate of lone mothers. Alternative specifications of the regression model produced estimates ranging from 1.6 to 2.0 percentage point reductions.

The presence of a child under 3 in 1990 (which in most cases means the mother did not have a child under 3 in 1988) had a very strong negative effect on the employment rate of 15 percentage points. On the other hand, education and age, although they do affect the level of employment rate, did not have much influence on the rate of change in the employment rate.

In order to control for the potential effect of changes in labour market conditions, an alternative regression model was estimated using as a dependent variable the change in labour force participation rates, rather than the change in employment rates (Model 2 - Table 7). The underlying assumption is that the labour force participation rate is less sensitive to labour market conditions than the employment rate, although we know that through the discouraged worker effect an increase in the unemployment rate often is associated with a decrease in the labour force participation rate.

The results of Model 2 show that the coefficient of change in social assistance benefits decreases only marginally relative to the previous regression model (Table 7). Also, a number of alternative specifications using unemployment rates as an independent variable failed to show a significant effect of labour market conditions. This is not very surprising given that that the significant deterioration of the Ontario labour market started in 1990. In the rest of the analysis we use the results of Model 1.

Table 7: Multiple Regression Results - Model 2

Dependent Variable.. DPRATE (88-90 change in participation rate)		
Independent Variables..	B Coeff.	t-stat
DSABEN (88-90 change in SA benefits - $000)	-.017743	-2.715
DPrATE2 (88-90 prate change of mothers with spouse)	.268103	10.453
YKID0288 (had a child 0-2 years old in 1988)	-.029324	-0.962
YKID0290 (had a child 0-2 years old in 1990)	-.138985	-4.021
EDUC12 (some secondary education or less)	OMMITTED	CATEGORY
EDUC34 (high school or some post-secondary)	.022377	0.989
EDUC567 (post-secondary degree/diploma/certif.)	-.010386	-.400
AGE1624 (16-24 years old in 1988)	OMMITTED	CATEGORY
AGE2534 (25-34 years old in 1988)	-.001306	-.046
AGE35+ (35 years or older in 1988)	-.033544	-1.145
CONSTANT	.090672	3.105

Adjusted R Square = .09928   Standard Error = .34402   F = 18.16704

No. of observations = 1,250

7.3   *Explaining the Quebec-Ontario Gap*

The specific question that the regression model attempts to answer is: why in 1988-90 the employment rate of lone mothers in Ontario declined (by 2 percentage points) while it increased in Quebec (by 3.9 percentage points) resulting in an increase in the employment rate gap of lone mothers between the two provinces (by 5.9 percentage points).[6]

The purpose of this section is to explain how the regression results can be used to decompose the change in the Quebec- Ontario differential in employment rate changes among lone mothers into two main components: labour market effects and social assistance benefit effects. The regression is explained in more detail in the next section of this note.

The regression equation of Model 1 in a somewhat simplified form is as follows:

$$DERATE = \textbf{0.044} - \textbf{0.019} * DSABEN + \textbf{0.399} * DERATE2$$

The interpretation of the regression coefficients are as follows:

- Each increase in SA benefits by $1,000 is associated with a 2 percentage point reduction in the employment rate of lone mothers (the change in social assistance benefits is measured in $000).

- Each one percentage increase in the employment rate of mothers with a spouse is associated with a 0.40 of a percentage point increase in the employment rate of lone mothers.

- The value of the constant depends on the omitted categories of the dummy variables in the regression equation. The actual value is not important since the constant term is eliminated when we subtract the Ontario from the Quebec employment rate.

Applied to Quebec and Ontario, the above regression predicts the following change in the employment rate of lone mothers in each of the two provinces:

- Predicted change in the employment rate of lone mothers in Quebec over 1988-90:

  $$\textbf{0.044} - \textbf{0.019} * 1.260 + \textbf{0.399} * 0.029$$

- Predicted change in the employment rate of lone mothers in Ontario over 1988-90:

  $$\textbf{0.044} - \textbf{0.019} * 4.222 + \textbf{0.399} * 0.039$$

- Predicted change in the Quebec-Ontario employment rate gap (difference of two above equations)

  $$- \textbf{0.019} * (1.260 - 4.222) + \textbf{0.399} * (0.029 - 0.039) \text{ or}$$

  $$0.056 - 0.004 = .052$$

The regression model, therefore, predicts that the Quebec-Ontario employment rate gap of lone mothers increased by 5.2 percentage points over the period 1988-90 (as opposed to the actual increase by 5.9 percentage points). The relative effect of benefits increases and labour market condition changes are as follows:

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[6]   These employment rate estimates are based on the LMAS and refer to the same individuals over a three year period. Although not strictly comparable to the LFS rates, they depict a similar picture.

- The greater increase in social assistance benefits in Ontario relative to Quebec (by $2,962) contributed to a reduction in the Ontario employment rate of lone mothers relative to those in Quebec by 5.6 percentage points.

- The greater increase in the employment rate of mothers with a spouse in Ontario relative to Quebec (by 1 percentage point) -- an indication of the improvement in the labour market conditions in Ontario relative to Quebec -- contributed to an increase in the Ontario employment rate of lone mothers relative to Quebec by 0.4 percentage points.

- This means, that the increase in social assistance benefits in Ontario relative to Quebec explains 95 per cent of the increase in the employment rate gap (5.6 / 5.9).

- The improvement of labour market conditions in Ontario relative to Quebec contributed to a small reduction in the Quebec-Ontario employment rate gap (by 0.4 of a percentage point)

- Other factors explain about 5.6 per cent of the increase in the Quebec-Ontario employment rate gap of lone mothers.

8. Conclusion

The results of the analysis show that increases in social assistance benefits have been a major factor behind the decline in employment rates of lone mothers with young children in Ontario. On the other hand, it is not clear what effect, if any, more favourable treatment of earnings under STEP had.

It is difficult to accurately assess the impact of the STEP program on employment rates. The initial impact of STEP was to extend social assistance benefits to individuals with higher earnings, many of whom would not have qualified for social assistance under the previous rules. As a result, new entrants had on average a higher employment rate than previous entrants, while recipients with rising earnings stayed longer on social assistance (as suggested by the significant decline in social assistance exit rates following the introduction of STEP).

What can be said with considerable certainty is that higher social assistance benefits do have a negative effect on the employment rates of lone mothers.[7] Therefore, efforts to improve the income situation of lone mothers should be combined with work incentives to avoid a self-defeating reinforcement of long-term dependency on social assistance.

An important complementary observation is that social assistance entry and exit rates differ significantly between the provinces. This is a fundamental point that requires further analysis. In order to reduce the incidence of social assistance we have to influence entry and exit rates. Social assistance exit rates are particularly important because they relate to the issue of long-term dependency on welfare. Low exit rates mean recipients stay on for a long time. In turn, long term dependency on social assistance is often associated with more serious difficulties of reintegration into the labour market.

Finally, labour market conditions do not appear to have had a major impact on employment rates for lone mothers in Ontario over the period 1988-90. This is not very surprising given that the significant deterioration of the Ontario labour market started in 1990. In particular, the unemployment rate of lone mothers in Ontario increased from 9.2 to 12.0 per cent in 1988-90, while it almost doubled by the year 1995 (21.7 per cent). However, the dramatic increase in the unemployment rate of lone mothers in Ontario suggests strongly that deteriorating labour market conditions can have a disproportionate effect on groups that are at high risk of receiving social assistance. The recently released Survey of Labour Market and Income Dynamics provides a unique opportunity for probing in considerable detail the labour dynamics of social assistance recipients.

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[7] One reason the effect on lone mothers is particularly strong is because often there is a large deviation between potential earnings and social assistance benefits. Earnings are based on skills, while social assistance benefits depend on need which reflects the number of children.

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