

Dynamics of Canadian Welfare Participation

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Abstract

Although Canada is contemplating major reforms of welfare policy, there is scant information regarding the use of welfare. This paper rectifies this situation by documenting the dynamics of welfare participation in British Columbia over the period 1980-1992. We find:

- most welfare spells are shorter than 6-months (75%)
- a little more than 10% last longer than a year
- almost no welfare cases last 4 years and those that do involve families with children
- single parents and older individuals have longer spells
- couples (with and without children) and childless single individuals have shorter spells
- the fraction of the caseload who are employable has been steadily rising from 38% in 1980-82 to 64% in 1991-92
- the fraction of the caseload who are single males has risen by 10 percentage points from 34% in 1980-82, while the fraction of all other types of households have fallen
- the age structure of the caseload is virtually unchanged over the decade: over 70% are over age 25
- a quarter of welfare recipients are back on the welfare rolls within three months of leaving, while a full 50% return within a year
- some couples and single individuals without children exhibit a strong seasonal pattern in welfare return rates

These patterns suggest several conclusions important to policy: first, governments need to focus on helping individuals become self-sufficient and remain off-welfare more than encouraging quicker exits; and second, it may be more efficient for governments to target special programs at single parent families who remain on welfare for a long period of time, taking account of their needs and circumstances.

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Introduction

The current social assistance programs in Canada were established, under the Canada Assistance Plan of 1966, to provide financial assistance to all individuals and families in need. Over the past two decades the number of social assistance recipients in Canada has increased by almost 120 percent and total government spending on welfare has more than tripled in real terms. Consequently the welfare programs have come under increasing public and governmental scrutiny, with the federal government committed to implementing major reforms to the income security system, of which social assistance is an important component.

In order to evaluate alternative welfare reform proposals it is important to be informed about the pattern of welfare use and how that pattern varies with the characteristics of the recipients. For example, recipients may primarily use welfare as a form of transitional support, easing a financial crisis during a brief period while out of the labour force. Alternatively, recipients may use welfare as a substitute for labour market income and thereby remain on the program for a number of years. If the welfare population is comprised of both types of users, then it is important for the design of effective policies to be able to identify and target the different groups.

However, despite the significance of the welfare system in Canada, both in terms of the people it directly benefits and the public resources devoted to it, there is a very little knowledge of how people interact with the system. A major reason for the lack of published research on the use of social assistance in Canada has been the lack of suitable data sets. To study the dynamics of welfare participation it is necessary to have a panel data set that both follows individuals for a relatively long period of time and records program participation information.

Until recently, there has been no publicly available Canadian longitudinal data set⁴.

Several researchers have recently examined the incidence of social assistance receipt using annual, cross-sectional survey data. Allen (1993) and Charette and Meng (1994) analysed the incidence of welfare participation among Canadian lone mothers using the Census for 1985 and the Labour Market Activity Survey (LMAS) for 1989 respectively. Dooley (1994) analysed changes in the incidence of social assistance income among lone mothers with multiple cross-sections of the Survey of Consumer Finances (SCF) from the period 1973-1991⁵. The findings of these studies are generally consistent with a simple, static model of welfare participation and they provide important information on the characteristics of lone mother families that participate in the welfare programs. However these studies do not examine other household types, especially single men and women who represent a substantial portion of the welfare caseload at a point in time and account for much of the dramatic increase in the caseload in recent years. Furthermore, these studies do not provide any guide to the dynamics of the participation, such as whether they remain on the caseload for a long period of time. To examine the intensity of welfare use, and whether individuals are dependent on the program over a period of time, it is necessary to directly model the distribution of welfare spell durations.

The vast majority of information about the experiences of low-income individuals with

⁴. The first Canadian panel survey was Statistic Canada's Labour Market Activity Survey. The initial panel followed individuals for the years 1986 and 1987. The second, and last, panel followed individuals from 1988 to 1990. Although this data source has rich information on the labour market behaviour of the interviewees, the short time period of the panels severely limit their usefulness in analysing the dynamics of welfare participation. Sources at Statistics Canada suggest that up to 20 - 30% of social assistance is unreported in the LMAS.

⁵. There is substantial underreporting of social assistance income in the Census and SCF data as well as the LMAS, which raises the issue of the accuracy of the model estimates based on single cross-sections. Dooley's (1994) focus on changes in the incidence of welfare receipt and use of multiple cross-sections of the SCF should minimise the biases that may result from the underreporting of welfare receipt.

labour market and welfare programs has been generated using U.S. data (see Moffit (1992) for a thorough review). The general conclusions of this literature are that most welfare recipients are single mothers, that most welfare spells are short (60% are shorter than 2 years) while the majority of use is through long spells (Bane and Ellwood (1983,1994), Gritz and MaCurdy (1992)), and that the notion of welfare being a migration magnet is unwarranted (Walker (1993)). Finally, entry into welfare is generally not due to divorce or childbearing but rather changes in labor market status. Exit is through marriage and work (Bane and Ellwood (1994), Gritz and MaCurdy (1992)). None of these conclusions need hold for Canada because institutionally the two systems are very different, for example single men and couples without children are eligible to receive benefits in Canada and the Canadian welfare system is relatively much more generous. Hence in an environment of policy reform, we are largely uninformed about the dynamics of welfare use in Canada.

The research presented in this paper utilises a unique data set, derived from the administration of social assistance programs in the Province of British Columbia, to analyse the pattern of welfare receipt over the period 1980-1992. From the raw monthly caseload data we construct spells of welfare receipt. We directly address the dynamic pattern of welfare use by analysing the length of welfare spells in B.C.. We summarise the duration of welfare spells by various demographic characteristics and then refine the information to describe recidivism and the length of repeat spells as well as the length of time between welfare spells. The present research extends the work of Bruce et.al (1993) by analysing the exit and re-entry rates for all individuals and families that received social assistance in B.C., using nonparametric methods and allowing for right-censored spells.

The paper proceeds by first explaining the institutional features of the Canadian system. We then describe the data used and turn to documenting the changes in the social assistance caseload using simple duration models. We describe overall use of the program and then focus on the recidivism and how the spell dynamics are different for multiple spell users. The final section concludes and draws out several policy implications of the main finding.

1. Institutional Features

(a) The Canada Assistance Plan

The universal social assistance programs presently in operation in Canada were established under the Canada Assistance Plan (CAP) of 1966. The stated objective of the Canadian welfare system is to provide financial assistance to individuals and families whose resources are inadequate to meet their needs, irrespective of the cause of the hardship. Under CAP, the federal government sets broad guidelines on the eligibility criteria and implementation of the "needs test" and undertakes to share equally with the provinces the costs of those programs⁶. The provinces are responsible for administering the welfare programs and have much discretion in determining the rules and benefit structure of their separate programs. Consequently there are considerable differences in the welfare programs across the provinces and territories of Canada⁷.

Despite the diversity between the provincial welfare programs, they share many common features, especially in relation to the central role of the "needs test" with which eligibility is

⁶. Since 1991 the Federal government has placed an upper limit on the total payments under CAP to the three "have" provinces of British Columbia, Alberta and Ontario. As a result, the Federal government presently funds significantly less than half the CAP program costs in these provinces.

⁷. In the provinces of Nova Scotia, Ontario and Manitoba there is a further division between the province and municipalities in the design and administration of welfare programs.

assessed. To qualify for assistance a household must undergo a budgetary assessment which takes into account both the household's basic needs and the resources available to meet them. The amount of assistance is based on the difference between the calculated needs and resources, subject to a maximum amount.

In assessing a household's needs, the individual's or family's employability is first established, which determines how the household's assets are dealt with⁸. If the value of the household assets are lower than the maximum allowable levels then the household's budgetary needs are calculated. The provisions of the CAP prescribe that the assessment of need must take into account the basic living items of food, shelter, clothing, utilities, personal and household expenses. The provinces set maximum allowable amounts for each of these items. Next, the resources available to the household to meet those requirements are calculated. The resources include earned income, alimony and maintenance payments and government transfers such as unemployment insurance and pension income. A deficit between assessed needs and available resources qualifies the household for assistance. The actual amount of assistance paid depends on the employability status, family status and size of the household. Table 1.1 presents the maximum annual welfare benefits payable for several household types in each province and territory in 1992 as estimated by the National Council of Welfare (1993a).

Since the inception of CAP there has been a dramatic rise in the number of Canadians in receipt of welfare at a point in time. Table 1.2 presents the number of general assistance recipients, including dependents, in each province and territory for selected years between 1970 and 1992. Over this period the number of welfare recipients in Canada increased from

⁸. Households classified as employable are generally subject to lower asset exemption levels in the assessment of benefit eligibility.

approximately 1.2 million people in 1970 to over 2.7 million in 1992, a rise of almost 120 percent. The onset of the recessions in 1974-75, 1981-82 and 1990-1992 resulted in large increases in the welfare caseload. Disturbingly, there were no significant declines in the caseloads in the years of economic and employment growth subsequent to the recessions.

Corresponding to the trend in the welfare caseload has been the substantial increase in the amount of real resources spent on the welfare programs. Table 1.3 presents the total federal-provincial expenditures (at constant 1992 prices) on the general assistance programs in Canada. Over the 20 years from 1970 to 1990 the total costs of the general assistance welfare programs in Canada increased by over 230 percent⁹. The largest increase in welfare costs occurred in Alberta (284%), B.C. (277%), Ontario (278%) and Quebec (218%). The large increases in welfare beneficiaries and program costs have provided a major impetus to call for reform of the welfare system.

(b) Rules of the Welfare Programs in British Columbia

The objective of the paper is to describe the dynamics of welfare participation in B.C. The social assistance program administered by the B.C. government, collectively known as GAIN (Guaranteed Available Income for Need) is composed of six separate programs. Three are supplementary programs: GAIN for the handicapped, GAIN for Seniors, and Old Age Security. The other programs provide income assistance: Child in home of a relative, Age 60-64 benefits and Basic Income Assistance (IA). Although Basic IA forms the residual category for individuals ineligible for the other 5 programs, it represents the predominant share of the total GAIN caseload over the 1980-1992 period. Given the general nature of the Basic IA program and its

⁹. The real increase in the total spending under CAP, including general assistance as well as counselling, residential care and administration costs, from 1970 to 1990 was over 300 percent.

predominance in the total GAIN caseload (as shown in Figure 2.1), it is the primary focus of this paper¹⁰.

As noted above, the employability status of an individual is important in determining their eligibility for assistance as well as the level of benefits. In B.C., a person was classified as employable if they were not (i) 65 years of age or older (ii) temporarily or permanently unable to work due to medical reasons (iii) a single parent with one dependent child under six months of age or two or more dependent children under 12 years of age¹¹ or (iv) a single parent required to stay at home to care for a disabled child.

A household that is eligible for welfare may augment their income through earnings¹². Recipients can retain a fixed amount of their earnings, the "earnings disregard," without a reduction in their benefits. The earnings disregard varies by family size and, in some provinces, by employability. In British Columbia, for most of the 1980-1992 period, the earnings disregard was \$50 a month for singles and \$100 a month for recipients with at least one dependent¹³. Benefits are taxed back at a rate of 75 percent for all earnings in excess of the disregard¹⁴. However more recently the B.C. government has implemented enhanced earnings exemption

¹⁰. The Basic IA program also accounts for most of the monthly variation in the total welfare caseload; the correlation coefficient between the monthly Basic IA and Total GAIN caseload over the 13 year period is 0.99 .

¹¹. The definition of unemployable in relation to the age of the youngest child is most stringent in B.C. and Alberta. In the other provinces and territories, generally a lone parent is classified as unemployable if the youngest child is under school. However, in 1994 B.C. changed this to 12 years of age.

¹². Generally, welfare benefits are taxed-backed by 100 percent for every dollar of unearned income.

¹³. The earnings disregards in B.C. were doubled in April 1992.

¹⁴. For a comparison of the B.C. welfare program parameters with the other provinces and territories see National Council of Welfare (1987, 1990-1993a).

programs to improve the incentive for recipients to make the transition from welfare to the paid workforce.

The benefit rates presented in Table 1.1 for the year 1992 show that B.C.'s IA program is slightly more generous than the "average" province. For instance, B.C. ranked as 5th, 3rd and 7th most generous province in terms of the level of assistance paid to single employables, single parents with one child and to couples with two children respectively. Table 1.4 shows the real benefits paid for the different household types for several years from 1986 to 1992. Over the seven years, the average annual increase in real welfare benefits was approximately 2 percent for singles and lone parents with one child and less than 1 percent for couples with two children.

2. The Data

The data used in the analysis are from the monthly case records of the social assistance programs in B.C. The raw data are a ten percent random sample of all individuals with an IA history in B.C. during the period of January 1980 to December 1992. The sample consists of 87,288 individual records. Each record contains the individual's (or principal claimant's) birth date, sex and a variable indicating under which B.C. social assistance program, if any, the individual received benefits for each month of the thirteen year period. Additionally, the records include variables indicating the individual's family type, number of dependents and employability status for the corresponding months that the person was in receipt of social assistance.

Table 2.1 provides cross-sectional summary statistics on how the caseload has changed over the decade by presenting the ratio of the number of category specific person-months to the total person-months on the rolls in the time period. A number of attributes from this simple summary are worth noting. First, the use of IA reflects it being a safety net for all family types

rather than a categorical program like AFDC (Aid to Families with Dependent Children) in the U.S. which is targeted towards children. Only one quarter of IA cases are by single mothers and only 30% are by families with children. Second, single individuals without dependents represent over 60% of welfare recipients in any given month. Third, the use of welfare is evenly distributed over the age spectrum: at a point in time, a quarter are less than 26 years of age, 33% are between 26 and 36 and 41% are over 36. Finally, over the last decade more than half of the caseload in a given month is represented by individuals classified as employable. These facts are very different to the public's perception that welfare is used principally by young single mothers.

There appears to be two regime shifts in 1982-83 and 1990-91. The first panel of the table shows that over the last decade, the number of individuals who are employable has been steadily rising from 38% in 1980-82 to 64% in 1991-92. This alarming finding is substantiated by the number of single males rising from 34% in 1980-82 to 44% in 1991-92. Every other type of household has fallen as a fraction of the total caseload: couples, and single females with and without children use relatively fewer resources. The general trend is reinforced by the number of cases receiving Basic Income Assistance rising from 72% in 1980-82 to 81% in 1991-92. The age structure of the caseload has changed less dramatically over the decade. While most recipients are over age 25, this fraction has only risen by two percentage points to 74%. The source of this change has been an increase in the relative number of recipients between 26 and 36 years of age.

A spell of IA is defined as a sequence of consecutive months of Basic IA receipt. Some care must be taken in selecting spell data that are appropriate for valid statistical analysis. We

do not include spells which began prior to the start of the data period. To include such left-censored spells would require specification of the actual distribution that generated them. In order to avoid making strong distributional assumptions, we drop left-censored spells and our results are therefore conditional on all spells beginning after January 1980. For these spells it is possible to determine the precise length of time on welfare unless the spell progressed beyond December 1992. Although such spells are "right-censored" the statistical methods we employ control for this and thereby provide unbiased estimates of the spell distribution. For each spell of IA there is also information on recipient's sex, marital status, employability status and the number of dependent children at the commencement of the spell. A spell of "off-IA" is defined as the time between the end of an IA spell and the commencement of a new IA spell. From the original set of 87, 288 individuals, a sample of 164,894 Employable and 41,1032 Unemployable IA spells was generated. Table 2.2 provides summary statistics on the spell sample.

We would like to emphasize a number of features of these summary statistics. First, only 20% of spells are by individuals or families classified as Unemployable although they account for nearly half of the population in receipt of welfare at a point in time. This is only possible if spells by "Unemployables" are longer, which we clearly see: 75% of the IA spells by Employables are from 1-6 months in length whereas only 53% of the spells by Unemployables are of this length. A second feature of the spell data is that single men account for 63% of all spells, couples for only 16% of the total, and single parent families for only 16%. Thus, it is clear from a comparison with the point in time welfare receipt (single parents comprise a quarter

of the caseload) that single parents have longer spells on average than other family types¹⁵. Thirdly, over 73% of all spells over this time period were by single men (53%) or single women (20%) without children, further reinforcing the fact that single parents are not the predominant users of welfare.

3. Characteristics of the Overall Welfare Spell Durations

Our goal is to document Canadian welfare use while correcting for bias problems caused by right-censoring. Since we have access to a very large panel data set, we adopt non-parametric methods to analyse the spell distributions. We use the Kaplan-Meier (source) estimates of the hazard and survivor functions which statistically controls for right-censoring¹⁶. We proceed by first analyzing the entire sample of spells by stratifying the spell distribution by individual characteristics. The basic family types we examine are single men, single women and couples with and without children broken down by employability status. The empirical hazard functions are plotted in Figures 3.1-3.3 and the corresponding survivor functions are presented in Table 3.1. Note that higher hazard or exit rates correspond to shorter expected welfare spells and hence a lower survivor rate.

The figures have several striking features. First, there is negative duration dependence in that exit rates are declining over the spell lengths considered. This means that the probability of leaving welfare falls the longer the time on welfare. This finding is consistent with the U.S.

¹⁵. As demonstrated in the bottom panel of Table 2.2, the discussion on the spell distribution needs to be interpreted with caution because of the 164,894 welfare spells, 9.1% are right-censored and as expected, this problem is most severe for the longer spells. Thus, as summary statistics for the spell distribution, Table 2.2 presents statistics that are downward biased.

¹⁶. The hazard rate at time T is defined as the probability that a welfare spell will end at time T conditional on it having lasted until period T, while the survivor function at time T is the probability that a spell will be at least T periods in duration.

results for women and corresponds to several types of welfare models such as: negative conditioning which depresses the desire to work; depreciated human capital lowering the offer wage distribution; or, employer screening¹⁷. The reader should note this is only a correlation because these results could arise from unobserved characteristics (also known as unobserved heterogeneity). The apparent duration dependence may be due to some unmeasured characteristic, such as motivation, with those most likely to exit welfare due to the characteristic departing early, leaving behind a population less and less likely to exit. Therefore the finding of negative duration dependence should be treated with caution.

Second, men, women and couples without children have virtually the same spell dynamics after the first 3-months (couples have a higher initial exit rate). However, the presence of dependent children is associated with substantial differences in exit rates: couples have a higher exit rate than men who have a higher exit rate than women. While it is unclear why single fathers should leave the rolls more quickly than single mothers, the finding for couples is explainable through a model of lower fixed costs of employment for couples: they do not need to pay for outside childcare. This view is reinforced by Figures 3.1-3.3 where the welfare exit rate is presented for men, women and couples differentiated by parental status. While the exit rate is lower for both single fathers and mothers than for single men and women, the exit rate is virtually the same for couples whether they have children or not.

While the hazard rates illustrate the basic time patterns, the survivor functions provide a natural measure of welfare dependency. Survivor functions for welfare usage are presented in Table 3.1. The table shows that the median spell lengths are between 1 and 3 months for all

¹⁷See MaCurdy (1989) for a thorough discussion.

groups except for single parents with children whose median spell length is closer to 6 months. Each of the three family types without children display the same disturbing trend: 10% of spells last more than a year and 5% more than two years. There are considerable differences between families which are employable versus unemployable. Approximately 40% of unemployable spells and only 20% of employable spells last a year.

Mimicking the findings in the U.S., the presence of children for single-parent households significantly lengthens spells: of those on welfare, 30% of single mothers with one child and 37% of single mothers with two children remain on IA for more than a year and 20-25% for longer than two years. More importantly, over 10% of single mothers with more than two children collect IA for longer than 6 years. This pattern is not seen for couples with children - their spell behaviour is identical to childless households. Thus, long-term welfare receipt by single mothers may be due to problems of overcoming the fixed costs of employment.

Additionally, single parents with limited labour market opportunities have little financial incentive to leave welfare. Over the data period, real welfare benefit levels in B.C. remained generally stable while the real value of the minimum wage declined appreciably (by one-third from 1976 to 1992). Consequently single parents were financially better off on welfare in 1992 than working fulltime at a minimum wage job¹⁸. Given that maximum welfare benefits for single parent families are well below the poverty line, it is unlikely that cutting benefit levels would be effective in reducing the incidence of long-term spells. A more constructive policy to encourage independence requires addressing the structural labour market constraints facing single parents, such as low levels of education and experience and the need for childcare support, so that they

¹⁸. This is based on calculations presented in National Council of Welfare (1993b:30-44).

have access to jobs that pay well above the minimum wage.

4. Off-Welfare Spells

Features of the time off-welfare before another spell begins provide further clues about how welfare might be being used. Figure 4.1 demonstrates that there is a pronounced pattern of negative duration dependence for those off-welfare: the longer you remain off-welfare the less likely you are to return for another period of welfare receipt. However, this conclusion does have an important caveat. After an initial steep decline in the probability of returning to welfare at the end of the first year off welfare, the probability of returning to welfare rises temporarily. This might be a result of seasonal use of welfare by some individuals. Another important feature of Figure 4.1 is that 14% of exits return to welfare within 1 month. While this may simply reflect administrative inconsistencies or "churning", if we define an exit from welfare as 2 consecutive months off the program, over 9 percent of welfare exits are back on the IA rolls within 2 months and 16 percent within 3 months.

To develop an understanding about which demographic groups show the presence of seasonal returns, in Figure 4.2 we present plots of hazard functions broken down by whether individuals are employable or unemployable, single or married, and with or without children. The striking feature of these data is that we only see the seasonal pattern for couples and single individuals without children.

Survivor functions for various demographic groups are presented in Table 4.1. There we see that 25% of welfare exits are back on the rolls within 3 months, 50% are back within a year and a full 60% have returned within 4 years. Repeat use of welfare is a significant phenomenon. While one might initially have the view that repeat welfare use is a problem for single mothers,

in fact 43% of single men are back within a year after the first welfare spell we observe, and 62% are back on the rolls within a year of the end of their second spell! For single mothers, 43% are back within a year of the end of their first welfare spell, while 57% are back within a year of the end of their second welfare spell. Therefore, although most welfare spells appear to be relatively short, there is a very high incidence of recidivism. Continuous, long-term use and dependency on welfare is not a characteristic of most welfare recipients. However welfare does not appear to be effective in providing transitional support, for most welfare users periodically return to the program. Either many individuals are chronically poor and neither able to gain self-sufficiency nor end a repeating cycle of poverty, or, many individuals are using welfare in conjunction with temporary or seasonal jobs. In an economy where seasonal jobs are common, the hypothesis that welfare is being utilised as a form of unemployment insurance¹⁹ or perhaps being incorporated in an implicit contract setting with employers deserves further research.

5. Characteristics of Returns to Welfare

Our finding that welfare exits exhibit a seasonal pattern for some demographic groups suggests that repeat users of welfare exhibit a different spell distribution than those who only receive IA once in our sample. Figure 5.1 presents welfare exit rates broken down into single users of the welfare system versus multiple users where we disaggregate by whether the family is employable or unemployable, single and/or with children. The dotted lines refer to families with children while the bold lines refer to repeat users of the system. For employable singles and couples, with or without children, the hazard rates for first time versus repeat users of welfare are not different. For the unemployable group, we see that repeat users with children

¹⁹. That is, such jobs may be not be covered by the regular Unemployment Insurance program, or at least the workers are only able to establish short duration claims.

have slightly shorter spells. The survivor functions presented in Table 5.1 shows that the differences in the spell lengths for first time versus repeat users are small.

6. Conclusions

This study represents a first step in filling the large gap in knowledge concerning how individuals and families use social assistance in Canada. Only recently researchers have begun to examine the decision of lone parent families to participate in Canadian welfare programs using cross-sectional surveys. The research in this study utilises a unique longitudinal data set derived from the administration of the welfare programs in British Columbia to examine the dynamics of Canadian welfare participation.

A number of patterns emerge from the data. First, we find that most welfare spells are shorter than 6-months while over 10% last longer than a year. Further, almost no welfare cases last more than four years and those that do involve families with children. Third, single mothers and fathers have longer spells than either couples (with and without children) or childless single men and women. Fourth, there have been large changes in the caseload composition: the fraction of the caseload who are employable has steadily risen from 38% in 1980-82 to 64% in 1991-92, single males have risen by 10 percentage points from 34% of the caseload in 1980-82 while all other types of household have fallen and the age structure of the caseload is virtually unchanged over the decade: over 70% are over age 25. Finally, a quarter of welfare recipients are back on the welfare rolls within three months of leaving, while a full 50% return within a year. We also find that for single individuals and couples without children there is a significant fraction of the population who display a seasonal pattern to their welfare use.

Two important policy issues are raised by the findings in this paper. First, for the large

majority of recipients, "welfare dependence", defined in terms of remaining on welfare for a long period of time, does not accurately characterise their experience on welfare. Most spells are relatively short. However the very high incidence of repeat use, especially within the first year after leaving welfare, highlights the need for governments to implement more pro-active labour market policies targeted to these individuals to help them become independent and permanently self-sufficient. It also questions whether welfare is acting as a wage subsidy to employers and employees engaged in employment agreements which implicitly incorporate features of the welfare system when setting wage and employment levels. Secondly, there is a subset of single parent families who do remain on the welfare roll for several continuous years. This group account for an important fraction of the caseload at a point in time and for a substantial portion of the welfare budget over a period of time. It is likely these families face significant fixed costs of employment and that there are substantial disincentives to entering the labour market in terms of forgone welfare services and income. As raised by Bane and Ellwood (1994) in the US context, an important issue for public debate is whether it is desirable that welfare acts as a subsidy to these families or whether a more effective policy targeted specifically at this group, taking account of their special needs and characteristics, would be more efficient.

Future work needs to be undertaken to understand whether unobserved heterogeneity and other labour supply characteristics may account for our findings of negative duration dependence. Another factor which needs to be understood is the relationship between the UI and IA systems: how much IA use is generated by UI exhaustion, and how much use of IA represents the choice of rational individuals selecting IA when it is more generous than UI? Both of these issues have important implications for design of reforms to both the UI and IA programs. Finally, we need

to develop a better understanding as to why the B.C. caseload has risen so dramatically in the early 1980s and 1990s. Does the rise in caseload arise from a change in the entry rates into welfare, changes in the eligible population, a lengthening of spells, and/or an increase in the repeat use of welfare? Is there a problem that individuals who would have previously been covered by UI are now being forced to rely on welfare while between jobs or is IA being integrated into the compensation packages in seasonal industries?

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Table 1.1 Provincial and Territorial Welfare Benefits, 1992.

Province	Household Type		
	Single Employable	Single Parent, One Child	Couple, Two Children
Newfoundland	4,301	11,198	12,119
P.E.I.	7,872	10,920	16,303
Nova Scotia	5,904	10,368	12,432
New Brunswick	3,048	8,304	9,318
Quebec	5,994	10,623	13,050
Ontario	8,186	14,817	19,396
Manitoba	6,906	10,608	17,741
Saskatchewan	5,375	10,311	14,683
Alberta	5,640	10,104	15,696
B.C.	6,308	11,373	14,389
Yukon	7,895	13,112	19,765

Source: National Council of Welfare (1993a).

Notes: The Northwest Territories are not included in the table since it was not possible to obtain average cost estimates for shelter rates in Yellowknife. The actual costs of rent, heating and utilities are paid under the territorial welfare program.

Table 1.2 General Assistance Recipients (including dependents)¹, 1970-1992.

Province	1970	1975	1980	1985	1990	1992
Newfoundland	83700	63100	48500	49100	47900	59800
P.E.I.	9000	8400	9400	9600	8600	11800
Nova Scotia	47900	53400	51200	73600	78900	92600
New Brunswick	50700	55600	66300	69100	67200	78200
Quebec	433900	416600	511900	708700	555900	674900
Ontario	334800	336400	354800	485800	675700	1184700
Manitoba	49600	56600	45600	62800	66900	80900
Saskatchewan	52200	45300	41400	64000	54100	60400
Alberta	77000	78000	76100	124100	148800	188300
B.C.	105400	162300	122800	267600	216000	279300
Yukon	n.a.	n.a.	1100	1500	1000	1700
N.W.T. ²	—	5700	5200	7400	10000	10400
Canada	1243980	1280400	1334300	1923300	1931000	2723000

Source: Canada Assistance Plan, Annual Report 1970-1992.

Notes: (1) The figures correspond to the number of recipients of general social assistance for the month of March of each fiscal year.

(2) The Northwest Territories did not establish welfare programs under CAP until 1973-74.

Table 1.3 Total General Assistance Expenditures 1970-1992 (1992 constant million dollars).¹

Province	1970	1975	1980	1985	1990	1992
Newfoundland	132.0	132.4	112.6	114.9	127.8	177.4
P.E.I.	10.4	16.5	24.4	28.4	29.5	39.2
Nova Scotia	74.4	115.0	140.3	186.1	235.7	287.8
New Brunswick	53.6	160.7	204.3	257.4	253.2	259.4
Quebec	723.2	1236.3	1690.2	2742.6	2298.4	2836.0
Ontario	687.2	1189.8	1246.1	1876.7	2599.7	— ²
Manitoba	116.0	134.4	119.5	200.0	221.2	285.0
Saskatchewan	84.8	121.7	159.2	230.9	202.9	205.4
Alberta	190.8	256.9	304.6	559.9	732.7	— ²
B.C.	247.8	589.9	618.7	1156.3	935.1	— ²
Yukon	1.2	1.2	1.5	2.7	3.0	6.6
N.W.T.	—	18.5	10.5	12.4	21.8	23.0
Canada	2321.0	3973.3	4631.6	7368.2	7660.8	— ²

Source: Canada Assistance Plan, Annual Report 1970-1992.

Notes:(1) The amounts correspond to two times the Federal Governments payments to the provinces and territories for general assistance under C.A.P. for the respective fiscal years.

(2) The figures are not available due to the Federal Government's ceiling on total payments under the C.A.P.

Table 1.4 Welfare Benefits in British Columbia (1992 constant dollars).

Household Type	1986	1989	1990	1992
Single Employable	5,547	6,082	6,222	6,308
Single Parent, 1 child	9,989	10,987	11,110	11,373
Couple, 2 children	13,644	13,723	13,827	14,389

Source: National Council of Welfare (1993a:34).

	1980-93	1980-82	1983-84	1985-86	1987-88	1989-90	1991-92
Type of Benefit							
Employable	54.3	38.4	54.2	56.1	52.1	58.5	63.8
Unemployable	45.7	61.5	45.8	43.9	48.0	41.6	36.2
Unable to Work	42.6	57.4	43.3	41.3	44.9	38.0	33.3
Labour Dispute	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adult Care	2.9	3.6	2.3	2.4	2.9	3.4	2.8
Medical	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Transient	0.1	0.5	0.2	0.0	0.0	0.0	0.0
Type of Household							
Couple	13.1	14.2	15.8	14.3	12.7	11.2	10.8
with children	8.1	7.9	10.2	9.2	8.0	6.7	6.7
no children	5.0	6.3	5.6	5.0	4.7	4.5	4.1
Single Female	46.3	50.9	43.2	43.5	46.7	48.7	45.5
with children	24.1	27.4	21.7	22.3	24.9	25.7	23.4
no children	22.1	23.5	21.5	21.2	21.8	23.0	22.1
Single Male	40.5	34.0	41.1	42.3	40.6	40.1	43.7
with children	1.3	1.0	1.3	1.4	1.4	1.3	1.5
no children	39.2	33.1	39.8	40.9	39.2	38.8	42.2
Program Type							
Basic	78.5	72.1	79.3	81.0	79.7	77.3	80.5
Other than basic	21.5	27.9	20.7	19.0	20.3	22.8	19.5
CIHR	1.6	2.2	1.4	1.1	1.4	1.8	1.9
Age 60-64	3.4	5.2	3.4	3.1	2.9	3.4	2.8
GFH	11.8	14.0	11.3	10.6	11.7	12.8	11.1
GFS	1.7	2.8	2.2	1.6	1.4	1.3	0.9
OAS	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Age of Recipient							
Less than 21	13.6	14.4	15.9	13.7	12.2	12.3	12.9
Between 21 and 26	14.5	14.1	16.3	15.8	14.3	12.8	13.5
Between 26 and 36	30.8	27.4	29.7	30.8	31.8	31.9	32.6
Over 36	41.2	44.1	38.1	39.7	41.8	43.1	41.1

Spell Duration (months)	1-6	7-12	13-36	Over 36	Overall
Right censored	7470	2610	4401	4298	18779
Percent of spells	3.6	1.3	2.1	2.1	9.1
Total spells	145920	25091	23740	11175	205926
Percent of Total	70.9	12.2	11.5	5.4	100.0

Table 2.2 - Summary Statistics: Number of Spells										
Spell Duration (months)	Unemployable					Employable				
	1-6	7-12	13-36	Over 36	All	1-6	7-12	13-36	Over 36	All
Total										
0 children	15252	3232	5869	5107	29460	95492	13898	10213	2185	121788
% panel column	70.47	58.49	77.06	81.74	71.80	76.84	71.04	63.34	44.35	73.86
% panel total	37.17	7.88	14.30	12.45		57.91	8.43	6.19	1.33	
1 child	2519	641	941	434	4535	14072	2863	3131	1248	21314
% panel column	11.64	11.60	12.36	6.95	11.05	11.32	14.63	19.42	25.33	12.93
% panel total	6.14	1.56	2.29	1.06		8.53	1.74	1.90	0.76	
More than 2	3871	1090	1369	707	7037	14714	2804	2780	1494	21792
% panel column	17.89	19.72	17.98	11.32	17.15	11.84	14.33	17.24	30.32	13.22
% panel total	9.43	2.66	3.34	1.72		8.92	1.70	1.69	0.91	
Total	21642	5526	7616	6248	41032	124278	19565	16124	4927	164894
% panel total	52.74	13.47	18.56	15.23	100.00	75.37	11.87	9.78	2.99	100.00
% overall total	10.51	2.68	3.70	3.03	19.93	60.35	9.50	7.83	2.39	80.07
Males										
0 children	8925	2136	3038	2791	16890	72169	10697	7804	1576	92246
% panel column	89.78	90.85	92.42	94.42	91.12	83.24	82.55	82.23	77.33	82.97
% panel total	48.15	11.52	16.39	15.06		64.91	9.62	7.02	1.42	
1 child	422	87	104	75	688	5967	895	692	170	7724
% column	4.25	3.70	3.16	2.54	3.71	6.88	6.91	7.29	8.34	6.95
% panel column	2.28	0.47	0.56	0.40		5.37	0.80	0.62	0.15	
More than 2	594	128	145	90	957	8562	1366	994	292	11214
% panel column	5.98	5.44	4.41	3.04	5.16	9.88	10.54	10.47	14.33	10.09
% panel total	3.20	0.69	0.78	0.49		7.70	1.23	0.89	0.26	
Total	9941	2351	3287	2956	18535	86698	12958	9490	2038	111184
% panel total	53.63	12.68	17.73	15.95	100.00	77.98	11.65	8.54	1.83	100.00
% overall total	4.83	1.14	1.60	1.44	9.00	42.10	6.29	4.61	0.99	53.99
Females										
0 children	6327	1572	2355	2316	12570	23323	3201	2409	609	29542
% panel column	54.07	49.51	54.40	70.35	55.87	62.06	48.45	36.31	21.08	55.00
% panel total	28.12	6.99	10.47	10.29		43.42	5.96	4.49	1.13	
1 child	2097	641	750	359	3847	8105	1968	2439	1078	13590
% panel column	17.92	20.19	17.33	10.91	17.10	21.57	29.79	36.77	37.31	25.30
% panel total	9.32	2.85	3.33	1.60		15.09	3.66	4.54	2.01	
More than 2	3277	962	1224	617	6080	6152	1438	1786	1202	10578
% panel column	28.01	30.30	28.27	18.74	27.03	16.37	21.76	26.92	41.61	19.69
% panel total	14.57	4.28	5.44	2.74		11.45	2.68	3.33	2.24	
Total	11701	3175	4329	3292	22497	37580	6607	6634	2889	53710
% panel total	52.01	14.11	19.24	14.63	100.00	69.97	12.30	12.35	5.38	100.00
% overall total	5.68	1.54	2.10	1.60	10.92	18.25	3.21	3.22	1.40	26.08
Single Parent Family										
0 children	14061	3453	4977	4549	27040	89331	13128	9598	2015	114072
% panel column	38.11	9.36	13.49	12.33	73.3	65.39	9.61	7.03	1.48	83.51
% panel total	72.61	68.44	71.44	82.47		87.2	80.29	70.59	47.87	
1 child	2093	637	772	366	3868	8187	1991	2461	1095	13734
% panel column	5.67	1.73	2.09	0.99	10.48	5.99	1.46	1.8	0.8	10.05
% panel total	10.81	12.63	11.08	6.64		7.99	12.18	18.1	26.02	
More than 2	3210	955	1218	601	5984	4929	1231	1538	1099	8797
% panel column	8.7	2.59	3.3	1.63	16.22	3.61	0.9	1.13	0.8	6.44
% panel total	16.58	18.93	17.48	10.9		4.81	7.53	11.31	26.11	
Total	19364	5045	6967	5516	36892	102447	16350	13597	4209	136603
% panel total	52.49	13.68	18.88	14.95	100	75	11.97	9.95	3.08	100.00
% overall total	9.40	2.45	3.38	2.68	17.92	49.75	7.94	6.60	2.04	66.34
Couples or Two Parent Families										
0 children	1191	255	416	558	2420	6161	770	615	170	7716
% panel column	28.77	6.16	10.05	13.48	58.45	21.78	2.72	2.17	0.6	27.27
% panel total	52.28	53.01	64.1	76.23		28.22	23.95	24.34	23.68	
1 child	426	91	82	68	667	5885	872	670	153	7580
% panel column	10.29	2.2	1.98	1.64	16.11	20.8	3.08	2.37	0.54	26.79
% panel total	18.7	18.92	12.63	9.29		26.96	27.12	26.51	21.31	
More than 2	661	135	151	106	1053	9785	1573	1242	395	12995
% panel column	15.97	3.26	3.65	2.56	25.43	34.59	5.56	4.39	1.4	45.93
% panel total	29.02	28.07	23.27	14.48		44.82	48.93	49.15	55.01	
Total	2278	481	649	732	4140	21831	3215	2527	718	28291
% panel total	55.02	11.62	15.68	17.68	100	77.17	11.36	8.93	2.54	100.00
% overall total	1.11	0.23	0.32	0.36	2.01	10.60	1.56	1.23	0.35	13.74
All Spells										

Table 3.1 - Kaplan-Meier Survivor Functions

	Months						
	1	3	6	12	24	48	72
Employable							
Single Man							
0 children	0.721	0.398	0.236	0.117	0.047	0.015	0.006
1 child	0.779	0.478	0.306	0.179	0.100	0.034	0.014
2+ children	0.741	0.483	0.326	0.195	0.121	0.060	0.043
Single Women							
0 children	0.711	0.381	0.226	0.116	0.052	0.019	0.009
1 child	0.825	0.598	0.446	0.310	0.192	0.092	0.045
2+ children	0.825	0.633	0.497	0.370	0.265	0.169	0.109
Couples							
0 children	0.678	0.365	0.216	0.116	0.051	0.019	0.010
1 child	0.703	0.384	0.236	0.120	0.049	0.017	0.008
2+ children	0.701	0.412	0.261	0.140	0.071	0.028	0.012
No Children							
Single Man	0.721	0.398	0.236	0.117	0.047	0.015	0.006
Single Woman	0.711	0.381	0.226	0.116	0.052	0.019	0.009
Couple	0.678	0.365	0.216	0.116	0.051	0.019	0.010
1 Child							
Single Man	0.779	0.478	0.306	0.179	0.100	0.034	0.014
Single Woman	0.825	0.598	0.446	0.310	0.192	0.092	0.045
Couple	0.703	0.384	0.236	0.120	0.049	0.017	0.008
2+ Children							
Single Man	0.741	0.483	0.326	0.195	0.121	0.060	0.043
Single Woman	0.825	0.633	0.497	0.370	0.265	0.169	0.109
Couple	0.701	0.412	0.261	0.140	0.071	0.028	0.012
Unemployable							
Single Man							
0 children	0.789	0.609	0.486	0.365	0.260	0.169	0.128
1 child	0.790	0.648	0.478	0.364	0.248	0.180	0.113
2+ children	0.838	0.601	0.403	0.244	0.136	0.058	0.037
Single Woman							
0 children	0.803	0.634	0.518	0.404	0.296	0.190	0.132
1 child	0.840	0.633	0.477	0.322	0.194	0.097	0.058
2+ children	0.843	0.638	0.476	0.321	0.185	0.082	0.043
Couple							
0 children	0.774	0.620	0.518	0.419	0.329	0.214	0.117
1 child	0.767	0.517	0.375	0.240	0.161	0.108	0.071
2+ children	0.740	0.511	0.377	0.251	0.151	0.078	0.051

Table 4.1 - Survivor Functions for Return to Welfare									
Child Status	Spell Number	MONTHS							
		1	2	3	6	12	24	48	72
Couple									
with	First	0.88	0.83	0.78	0.70	0.58	0.48	0.40	0.37
	> First	0.84	0.76	0.71	0.59	0.44	0.34	0.27	0.23
without	First	0.90	0.85	0.82	0.74	0.64	0.56	0.50	0.47
	> First	0.84	0.76	0.71	0.60	0.47	0.37	0.29	0.25
Single Male									
with	First	0.87	0.80	0.76	0.66	0.54	0.44	0.38	0.35
	> First	0.83	0.74	0.68	0.55	0.40	0.30	0.22	0.20
without	First	0.89	0.82	0.78	0.69	0.57	0.47	0.40	0.37
	> First	0.84	0.75	0.68	0.55	0.38	0.27	0.20	0.17
Single Female									
with	First	0.87	0.81	0.77	0.68	0.57	0.48	0.40	0.36
	> First	0.82	0.74	0.68	0.57	0.43	0.34	0.26	0.22
without	First	0.89	0.84	0.81	0.73	0.63	0.54	0.46	0.43
	> First	0.86	0.78	0.72	0.60	0.46	0.35	0.27	0.23
Overall									
all	all	0.86	0.78	0.73	0.62	0.48	0.39	0.31	0.28
with	all	0.84	0.78	0.72	0.62	0.49	0.39	0.32	0.28
without	all	0.86	0.79	0.73	0.62	0.48	0.38	0.31	0.28

Table 5.1 - Survivor Functions for Return Welfare Experiences

Child Status	Spell Number	MONTHS						
		1	3	6	12	24	48	72
Couple								
with	first	0.69	0.40	0.26	0.15	0.07	0.03	0.02
	> first	0.71	0.42	0.26	0.14	0.07	0.03	0.02
without	first	0.69	0.43	0.30	0.20	0.14	0.08	0.04
	> first	0.71	0.43	0.28	0.18	0.11	0.06	0.04
Single Man								
with	first	0.76	0.45	0.29	0.16	0.10	0.04	0.02
	> first	0.78	0.52	0.35	0.22	0.13	0.06	0.03
without	first	0.69	0.39	0.25	0.14	0.08	0.04	0.03
	> first	0.75	0.45	0.29	0.16	0.08	0.04	0.03
Single Female								
with	first	0.83	0.62	0.47	0.33	0.21	0.11	0.06
	> first	0.83	0.62	0.47	0.33	0.21	0.11	0.06
without	first	0.73	0.45	0.31	0.20	0.13	0.07	0.05
	> first	0.75	0.46	0.32	0.21	0.13	0.07	0.05
Overall								
all	all	0.74	0.46	0.31	0.19	0.11	0.06	0.04
with	all	0.78	0.53	0.38	0.25	0.15	0.07	0.04
without	all	0.73	0.44	0.29	0.17	0.10	0.05	0.03
with	first	0.77	0.52	0.37	0.25	0.15	0.08	0.04
	> first	0.78	0.53	0.38	0.25	0.15	0.07	0.04
without	first	0.70	0.41	0.27	0.17	0.10	0.05	0.03
	> first	0.75	0.45	0.30	0.17	0.09	0.05	0.03

Figure 2.1 - Income Assistance Caseload

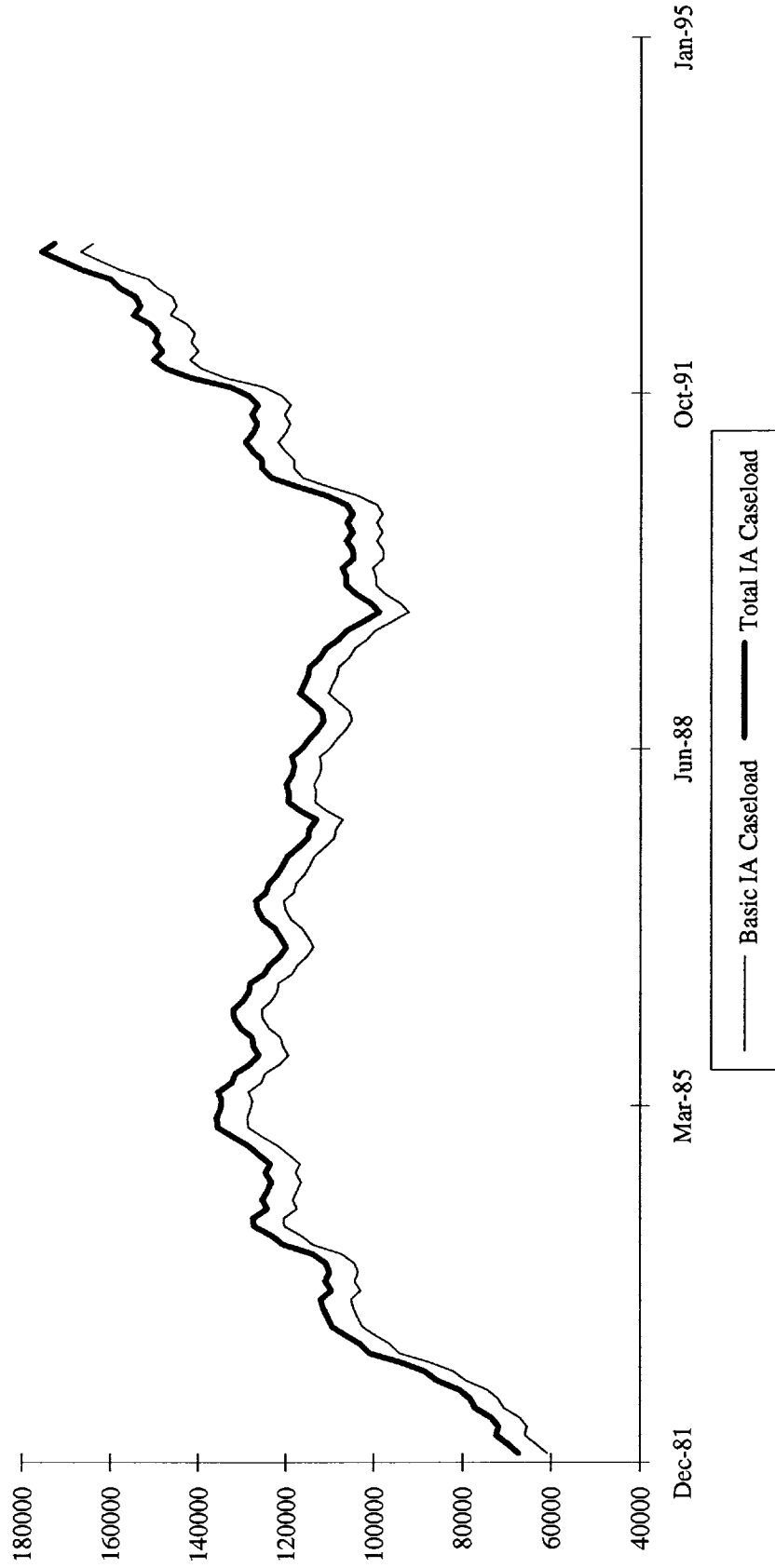


Figure 3.1 - Kaplan-Meier Welfare Exit Rates

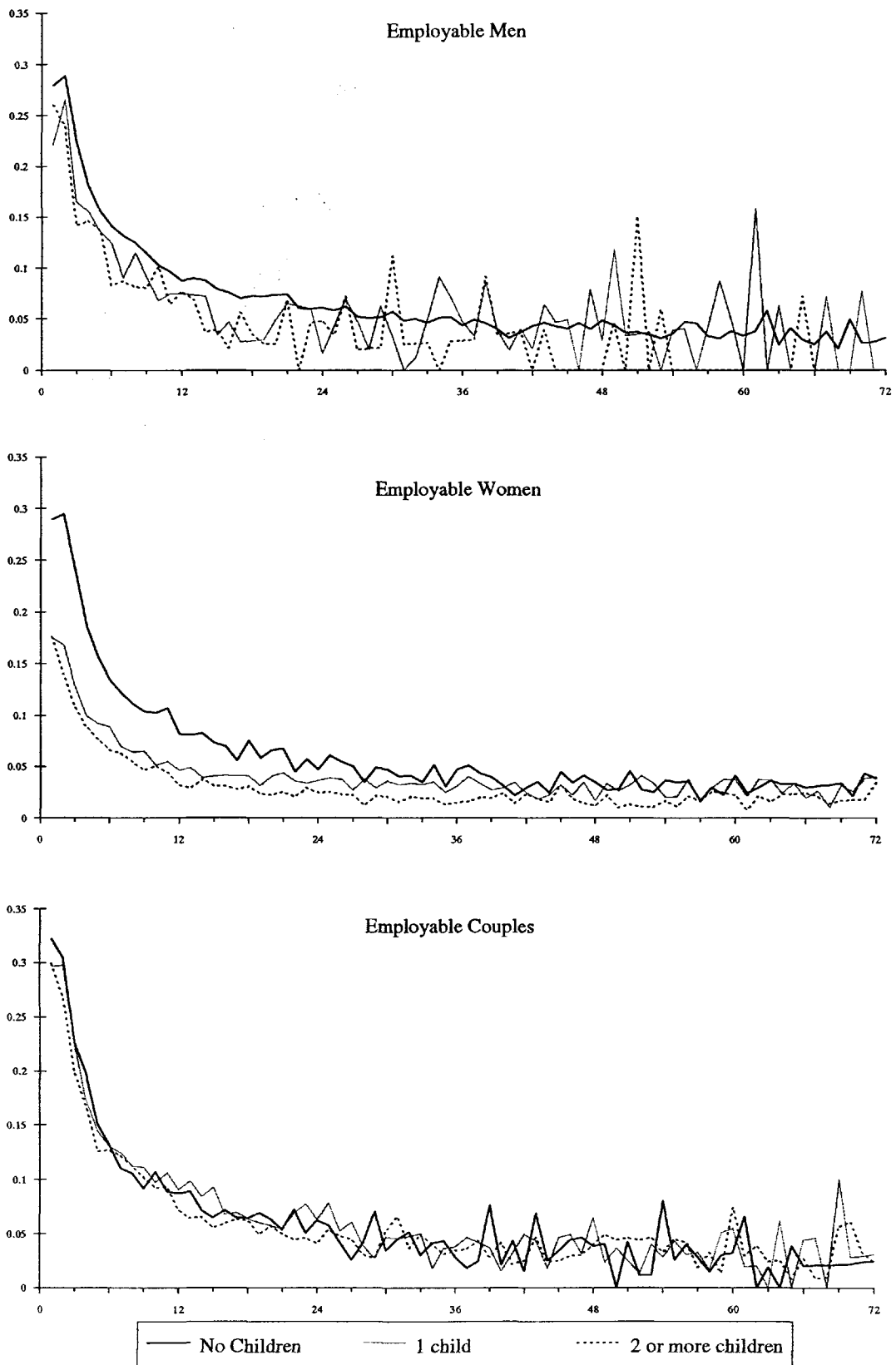


Figure 3.2 - Kaplan-Meier Welfare Exit Rates

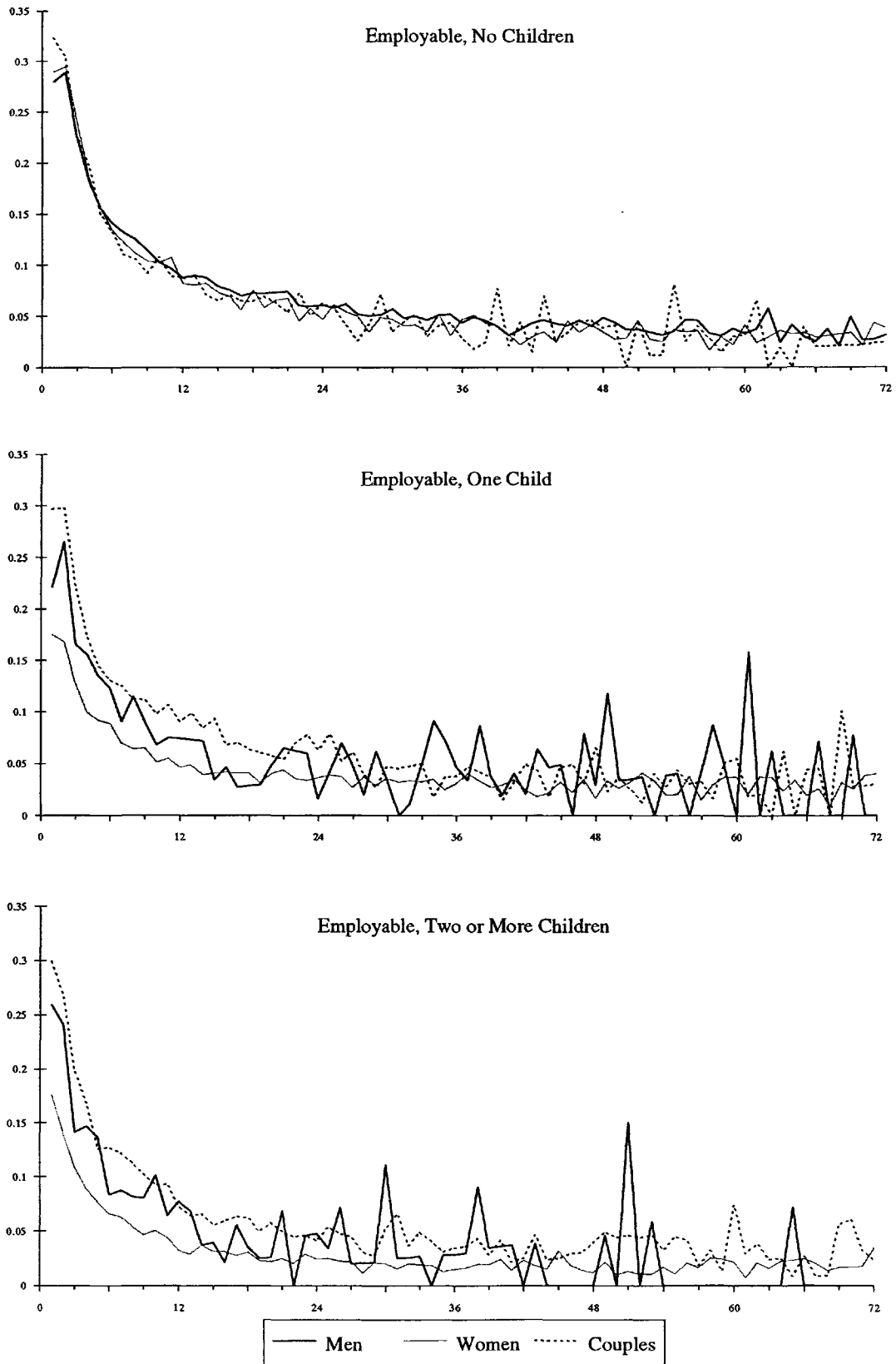


Figure 3.3 - Kaplan-Meier Welfare Exit Rates

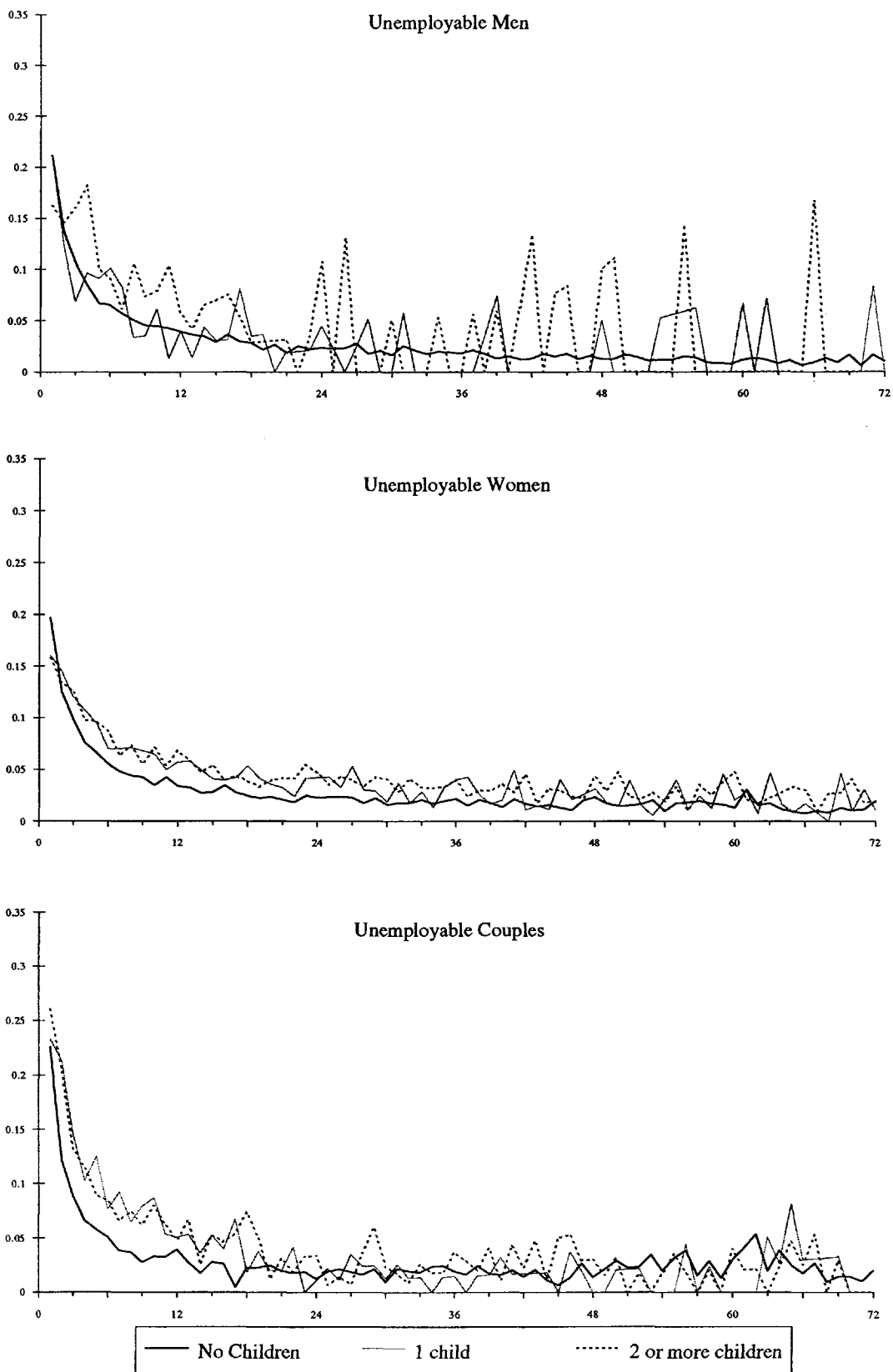


Figure 4.1 - Kaplan-Meier Return to Welfare Rates

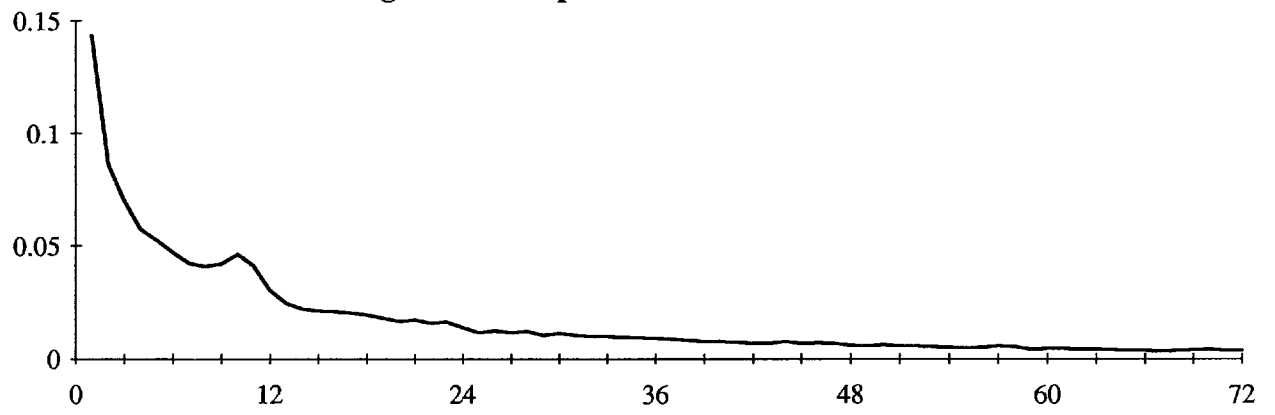
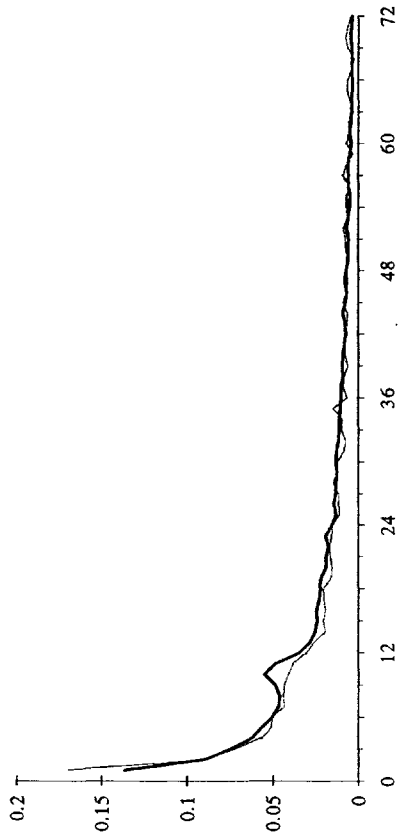
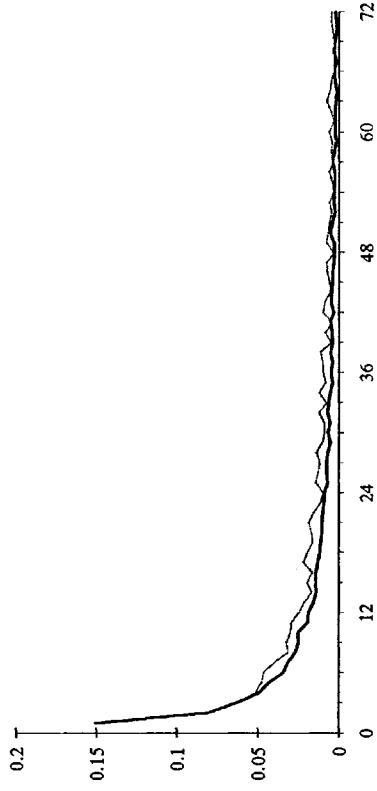


Figure 4.1 - Kaplan-Meier Return to Welfare Rates

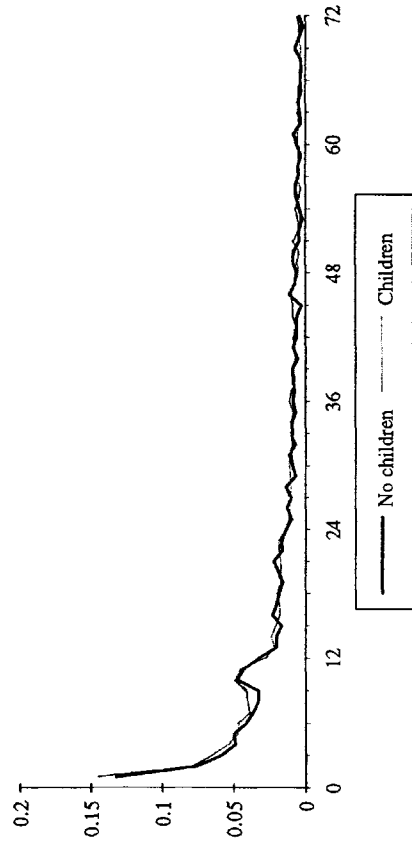
Employable - Singles



Unemployable - Singles



Employable - Couples



Unemployable - Couples

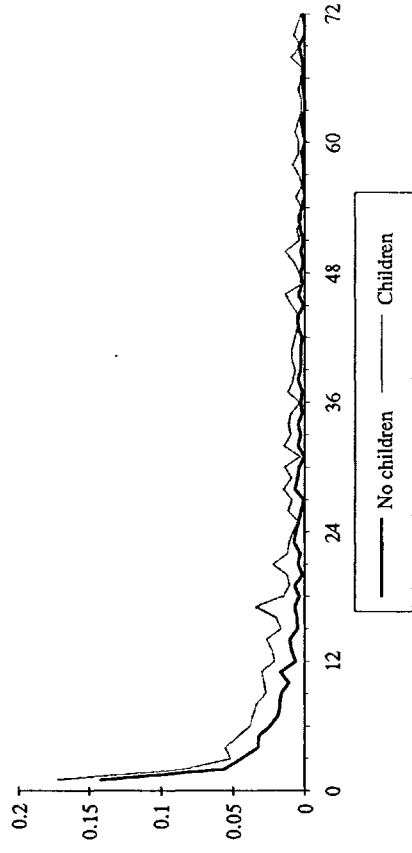
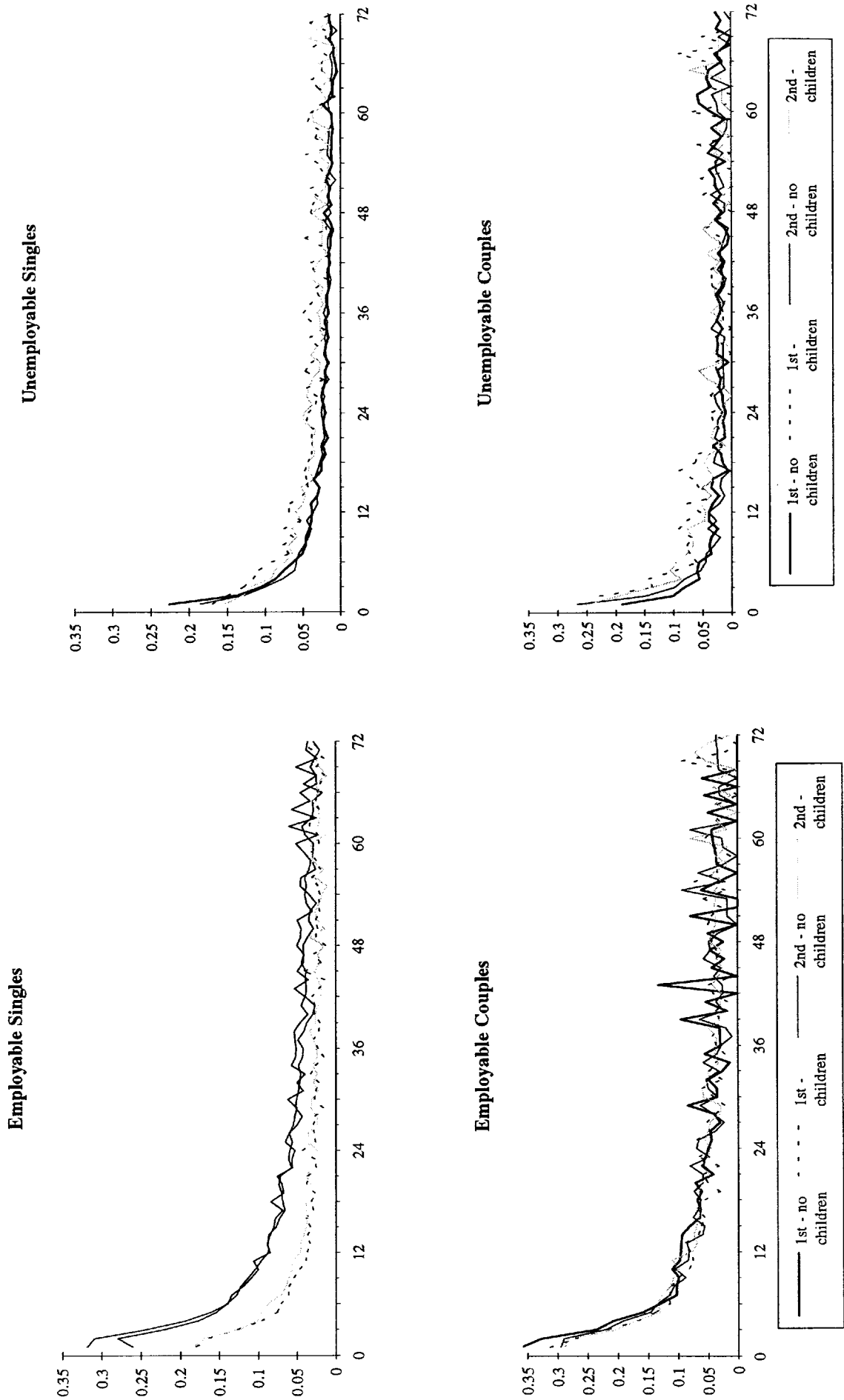


Figure 5.1 - Kaplan-Meier Welfare Exit Rates - First Spells versus Repeat Spells



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