

# Social Assistance Use in Canada: National and Provincial Trends in Incidence, Entry and Exit\*

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The use of social assistance (SA) is an important issue on Canada's social and economic policy agenda. For individual families, SA usage often reflects a situation of near-destitution and an exclusion from the social and economic mainstream. For children, being on SA can represent a critical period of disadvantage with potentially lasting effects. For governments, SA programs can be expensive. The incentive structures associated with SA also present a challenge to efforts aimed at integrating low-income individuals into the labour market. In short, while society wishes to care for the more disadvantaged through SA, it also cares about the attendant costs and disincentives. How has Canada fared in the nineties?

SA participation rose sharply during the recession of the early 1990s. In response, virtually all provinces, with varying degrees of intensity, instituted changes aimed at reducing SA dependency. Eligibility rules were tightened (especially for new entrants), benefit levels were cut, "snitch" lines were introduced, and other rule and procedural changes were adopted. That said, the more draconian elements of the US legislation that was adopted at about the same time were avoided. Meanwhile, the economy recovered, especially after 1995. Following these developments, the number of SA-dependent individuals fell quite remarkably, from a peak of 3.1 million to under 2 million by the year 2000, and the value of benefits received by SA recipients fell from \$14.3b in 1994 to \$10.4b in 2001 (current dollars).<sup>1</sup>

The contribution of this paper is to map this cycle of SA dependency by

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1. <http://www.hrdc-drhc.gc.ca/sp-ps/socialp-psociale/statistics/75-76/tabfig/tab438e.html> (HRDC 2002)

exploiting the unique properties of the recently available tax-based Longitudinal Administrative Database (LAD). The longitudinal nature of the data, which define individuals both before and after their participation in SA, as well as over the course of SA spells, allows us to track not only participation rates in any given year, but also entry and exit patterns.<sup>2</sup> At the same time, the large sample sizes available allow us to break this analysis down by family type and province. These breakdowns are particularly interesting in a context where policy developments varied by province and family type, and where not all provinces shared equally in the recession or the expansion that followed it. Accordingly, an analysis by province and family type should help illuminate the debate on the effects of these different experiences on SA participation, and the appropriate future direction that policy should take.

The precise causes of this wave in SA dependency are, however, not our concern in this paper. We do not, for example, attempt to apportion the movements in SA participation rates between causes related to economic growth on the one hand, and changes in the administration of SA programs on the other. That objective is part of our current research program, using the same data. Here, we focus on the empirical record of SA entry, exit, and annual participation rates, while placing these in the prevailing economic and policy context that characterised the period analysed.

The paper is organized as follows. The next section describes the LAD data in general terms, the sample selection and other editing procedures, the unit of analysis, the definition of SA participation employed, and our measure of entry onto and exit from SA. The third section describes the economic and policy backdrop to the SA wave in question. The fourth section presents the results at the national level – rates of incidence, entry and exit by year, broken down by family type. The fifth section presents the provincial-level findings. The concluding section summarizes the main findings and draws some implications. In summary:

- Incidence, exit and entry broadly follow the economic cycle at the national level.
- For entry and incidence, there are steady declines over most of the period for all family types, but the precise pattern and ultimate level of decline varies considerably by family type.
- Exit patterns, in contrast, are more variable, and exhibit pronounced differences across family types, with the presence of children appearing to play a decisive role.
- At the provincial level there exist important differences in these trends and patterns.

## **The Data and Definition of Terms**

### **The LAD Database**

The LAD is a 20 % representative sample of Canadian tax filers, constructed from Canada Customs and Revenue Agency (previously Revenue Canada) records that follows individuals over time and matches them into family units on an annual

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2. The recent literature has stressed the importance of mapping the flows into and out of dependence, as opposed to modelling simply the behaviour of the stock of dependents (Klerman and Haider 2001).



basis, thus providing individual- and family-level information on incomes, taxes, and basic demographic characteristics in a dynamic framework. The first year of data is 1982, but only the 1992-2000 period is employed in this study because SA is not sufficiently well captured on the file in the earlier years.

Individuals are selected into the LAD according to their social insurance number (SIN) by a random number generator, and then followed over time. The LAD's coverage of the adult population is very broad since, unlike some other countries (e.g. the U.S.), the rate of tax filing in Canada is very high: upper- and middle-income Canadians are required to file, while lower-income individuals have strong incentives to file (especially over the period covered by this analysis) in order to recover income tax and other payroll tax deductions made throughout the year, and to receive various tax credits. Furthermore, most non-filers are members of families where others do file, and for whom records have been imputed from those other individuals' tax records, thus boosting the coverage of the file still further. Overall, the full set of annual files from which the LAD is constructed is estimated to cover 95-97% of the adult population over these years, thus comparing very favourably with other databases.<sup>3</sup>

The large number of observations in the LAD (at least two million in any given year) allows for a robust and detailed analysis of SA participation and SA dynamics, including the breakdowns by family type and province presented here. The LAD is quite unique in this regard in Canada and rare on an international basis as well.

The income information on the LAD is detailed, and judged to be generally superior to what individuals typically provide in surveys.<sup>4</sup> Most pertinent to this study is SA income. Since 1992 individuals are required to report SA income on their tax forms, and are sent the appropriate T-5 tax forms to this end, copies of which are provided to federal tax authorities, thereby allowing them to verify this reporting (SA income enters various tax and tax credit calculations). This procedure results in an estimated 80-90% capture rate of social assistance payments on the LAD. This rate of capture is high by any standard.

### Sample selection

The full LAD varies from 3.344 million observations in 1992 to 3.703 in 2000. This growth reflects the increase in the underlying adult Canadian population over this period.

Our working samples are restricted to individuals who filed tax forms in any consecutive five-year period (1992-1996, 1993-1997, 1994-1998, 1995-1999 and 1996-2000). This restriction allows us not only to estimate entry and exit rates (which require at least two and three years of data, respectively, as described just below), but also to carry out various longitudinal checks and edits of family status which is subject to a margin of error in any given year.<sup>5</sup>

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3. See Finnie and Sweetman (2003), on these issues in the context of an analysis of low-income dynamics based on the LAD.

4. Primarily for this reason, Statistics Canada now generally seeks survey respondents' permission to use their tax records to obtain their (and their family's) income information, rather than asking them to provide it themselves. See Atkinson et al (1992), for further discussion of the general advantages of administrative data over survey in this regard and others.

5. For example, individuals matched into common law relationships in one year might not be matched in another year because the couple is no longer identified as such by the matching algorithm employed for these purposes (e.g., a change in address). Longitudinal checks allow such inconsistencies to be identified and resolved by either correcting the record or deleting it



We also restrict our analysis to individuals aged 18 to 64. The lower cut-off eliminates students and others in the early stages of the transition to economic independence who either are not eligible for SA (rules vary by province), or for whom SA status has a different significance than for others. Older individuals are deleted because they are not generally eligible for SA. (Instead, they qualify for Old Age Security (OAS), Canada/Quebec Pension Plan (C/QPP), and the Guaranteed Income Supplement (GIS) and Spousal Allowance for those at lower income levels.) Various family editing restrictions are then imposed to minimize any mismatches of individuals into families.

We also delete all individuals who show evidence of a disability at the family level (i.e., the individual or his or her spouse) over the given five-year period. While these represent an important and interesting class of SA recipients, we chose to restrict the present analysis to the able bodied class of SA recipient (or potential recipient), and to leave the disabled for a separate study.

Finally, post-secondary students are deleted based on various education-related tax deductions for the reasons mentioned above. Table A1 presents our selection rules and the number of households lost at each stage. It should be noted that the LAD is lacking with respect to one important sub-population which figures importantly in SA roles, especially in certain provinces (e.g., Saskatchewan): Indian (First Nation) beneficiaries who live and work on reserves are not generally included on the LAD because they are not required to file income tax returns, while the Native status of those who do elect to file (to collect tax credits or for other reasons) is not generally identified. Those living and working off-reserve are generally included in the LAD, since they are required to file tax forms, but are again not generally identifiable as such.<sup>6</sup>

## The Unit of Analysis and Definitional Issues

As mentioned above, family composition is determined in the LAD by matching individuals (which is how Canadians file taxes) according to the information given on their tax files, including the imputation of non-filing family members (spouses and children) where appropriate. In these editing procedures, declared common-law marriages are treated the same as registered unions (with matches made in every case for such individuals, including imputations where required). The process also involves matching individuals assumed to be in undeclared common-law relationships based on address matches, their names and ages, and the identification of other individuals resident at the same address (if any).<sup>7</sup> For this study,

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if the inconsistencies cannot be resolved.

6. Work at Statistics Canada continues to attempt to resolve these problems. Reservation-specific postal codes might help identify some First Nation individuals, but run the risk of mixing non-Indians with Indians – and cannot resolve the problem of non-filers. Certain income-exempt income fields might be used to identify others, including those living off-reserve, but this recently-added variable is likely to capture only selected individuals. Other administrative files used to construct the LAD (including CCTB files) could help – but again only to the degree First Nations individuals are included. Other possibilities are constantly being considered.
7. Anyone declaring their marital status to be married (registered or common law) is matched with their spouse by first searching over the full set (100 %) of tax files (i.e., all tax filers) for that individual, typically aided by individuals' reporting their spouses S.I.N. number on their tax forms (as required), but otherwise based on the same sort of name, address, and other information used to match common-law couples. In the small minority of cases in which a spouse is not found in this manner, one is imputed based on the information given in the filer's tax record. Children are added to the record in a similar manner – with filers matched in based on the information given in their tax records, and non-filers imputed based on the information



individuals were ultimately classified as belonging to one of the following family types: single (i.e., no spouse and no children), married with no children, married with children, or lone parent.<sup>8</sup>

An individual is defined as receiving SA in any particular year if he/she reports SA income of at least \$101 at the family level (i.e., the respondent and/or his or her spouse declare SA income in this amount). Using the \$101 cut-off minimizes the effects of reporting and coding errors, and otherwise counts very small amounts as being (effectively) zero.<sup>9</sup> The family basis of the measure is used because typically only one person in a family receives SA, and reports it on his or her tax form, while SA is awarded for the entire family.<sup>10</sup>

The definition of entry into SA is straightforward: for any two consecutive years, entry is deemed to have occurred in the second year if the individual is not on SA (as defined above) in the first year, but is on SA in the second. The exit definition is slightly more complicated: in any two consecutive years, an exit is defined to have occurred in the first if the person was on SA then, but not the next. This is because the data – given the annual reporting basis that characterises these tax data – imply that at some point in the first year the person went off SA. That is, they report SA income for the first year because they had some non-zero amount that year, but the absence of *any* SA income in the second year indicates they were no longer on SA at the end of the first year, leading into the second. In addition, we need to observe the individual in the year before any pair of years which define whether or not an exit has occurred in order to have their province and family status (the dimensions along which our analysis is broken down) at the beginning of this interval. The analysis of exits thus requires three-year sequences of data to ascertain whether an exit occurred for a person of a certain set of characteristics in the second year of any such triplet.

These definitions draw attention to the annual nature of the data: SA analyses are more frequently based on monthly data, which is how SA is administered (individuals qualify on a month to month basis), but here we examine participation, and entry and exit, on an annual basis. This approach, driven by the tax-based nature of the data, differentiates our analysis from studies based on the monthly time frame.

The principal disadvantage of the annual approach is that in cases where an individual moves on and off SA over the course of a year, we do not observe those movements, and instead simply record that the individual was on SA at some point

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given in the parents' tax files.

8. We also define "filing children", a smallish group consisting of unattached individuals over the age of 20 deemed to be living with their parents. These individuals, however, are not included in this analysis. This is for a number of reasons. First, their eligibility for SA varies from jurisdiction to jurisdiction (largely because they tend not to be household heads). Second, it is not clear how to measure SA participation for such individuals; for example, should they be considered to be on SA if they are on SA themselves, if their parents are on SA, or both? Third, the resulting policy implications are less clear for this group. Finally, their numbers are relatively small, while adding another group to the analysis would weigh it down commensurately, with limited benefit.
9. A large number of individuals tend to be grouped at values such as 1 and 100, but few between these and more substantial amounts, thus suggesting the possibility that these are errors. In any event, the amount of SA income is negligible, prompting us to call these individuals non-recipients.
10. The LAD uses a census definition of the family – one that consists of a husband and wife (with or without children who have never been married, regardless of age) or a parent with one or more children never married, living in the same dwelling. For a three-generation family, the second and third generation are treated as one family unit, while the first generation family is also treated as one family unit.



over the year in question. But while missing such intra-year dynamics might be considered a limitation, an annual perspective may also be seen as providing a more robust, longer-term measure of SA participation precisely because it ignores short-run movements. Such movements could be considered as part of what is truly a single longer spell of SA participation with some spurious shorter-run (i.e., month to month) variations in status.

In any event, while it might be desirable to conduct the analysis at the monthly level, and to compare the resulting findings to what is revealed at the annual level, this is not an option, and our analysis is restricted to the annualised measures afforded by the LAD data.

## **The Economic and Policy Environment**

Prior to the mid-1990s, in Canada as in many other countries, many social policy analysts had become almost fatalistic about the prospects of reducing the number of dependents on SA. The preceding two economic cycles had, for example, significantly ratcheted up the rate of SA dependence, but the rolls had declined only very modestly during the subsequent recovery periods.<sup>11</sup>

This pattern prompted Lindbeck (1995) to write in despair on 'hazardous welfare state dynamics', meaning that increases in the supportiveness or generosity of social programs could bring in their wake undesired and unforeseen dependence. A specific concern was that recessions have the capacity to reduce the stigma effects of SA programs, because such recessions put more people in a position of dependence. He also argued that SA programs might have been designed differently had the architects foreseen the consequences.

However, the experiences of Canada and the U.S. in the 1990s have illustrated that substantial reverses are indeed possible. What was the economic and policy context of these dramatic reversals?

In the first instance, the economy lingered through a deep recession and then, especially after 1995, recovered strongly, with the unemployment rate dropping five percentage points from its peak rate through the year 2000. This improvement in the job market provided many individuals a greater opportunity to escape from – or avoid – welfare dependency.

A second important development was that, for most family types in most provinces, the real value of SA benefits fell, and in many instances by large amounts. Table A2 shows these changes over the period 1989-2000, and although the trends varied by province and family type, some of the declines were quite precipitous, on the order of a quarter, a third, or even more. Furthermore, as a percent of Statistics Canada's low-income cut-off (LICO), by the end of this period, payments typically enabled recipients to reach only 30 % of those cut-off income levels rather than the 40 % average level that prevailed in 1985.<sup>12</sup> Such absolute and relative declines in the value of SA payments have provided strong incentives for individuals to seek alternatives to SA, and should therefore have had a significant effect on SA participation.

Third, provincial governments changed the rules governing the receipt of SA and related administrative procedures – such as the employment of additional monitors, the opening of 'snitch lines', the introduction of requirements that

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11. Courchene (1994), has chronicled this in detail.

12. National Council of Welfare (1999).



recipients collect their cheques rather than having these mailed out, and so on.<sup>13</sup> However, while most provinces moved to at least some degree in this direction, some adopted more aggressive reforms than others. For example, between 1986 and 1995 when the NDP and Liberals were in power, Ontario adopted a policy of high SA support levels. The Conservative government of Michael Harris in 1995 then reversed this policy while also introducing tighter eligibility rules. British Columbia provides a similar record of benefit level and rule changes over the same period. Alberta not only reduced support rates in 1993, but adopted a policy that was aimed at making it very difficult for young people to obtain support for the first time.

At the broader political level, this period also saw a major transformation in the manner of federal-provincial funding for this provincially-operated program. The federal government took two radical steps in its 1995 budget. First, it cut transfers to the provinces. Second, it altered the method of transferring funds, by introducing a lump-sum transfer to cover SA, health, and post-secondary education under the Canada Health and Social Transfer, CHST. From being a shared-cost program (called the Canada Assistance Plan, CAP), SA expenditures were now the full incremental responsibility of provincial governments, thus changing the financial incentives of provinces with respect to spending on SA.<sup>14</sup> These changes were seen both as a means of reducing the federal government's deficit, and as a way of imposing discipline on provincial governments.

It is worth noting that these changes in the method of transferring funds to the provinces and the operation of the system at the provincial level were mirrored by similar – if more extreme – developments in the US over the same period. They also switched from a federal-state shared-cost system to a lump-sum transfer, and that switch was accompanied by legislation that altered the fundamental character of welfare in the US. The Aid for Families with Dependent Children (AFDC) program was replaced with the Temporary Aid for Needy Families (TANF). This program contains many more sticks and rather fewer carrots for not being on welfare than its predecessor: in all states there is now a 5-year lifetime limit on the receipt of welfare, there are regulations on the time frame associated with the return to work after childbirth, there are 'workfare' requirements for individuals who cannot find employment, and penalties exist in the form of support-payment reductions for those who do not abide by the rules. In addition, many individual states experimented with 'waivers' both before and after the 1995 legislation that allowed them to implement greater incentives for individuals to return to work.

The consequences of this legislation are well-established: the number of caseloads in the US is now less than half of its 1994 peak, although this reduction has also been attributed to an expanding economy, an enhancement of the earned income tax credit (EITC), an increase in the minimum wage, and an expansion of benefits and support to individuals moving from welfare dependence to work.<sup>15</sup>

Two other developments in Canadian federal programs with implications for SA participation took place in the 1990s. The Canada Child Tax Benefit (CCTB)

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13. National Council of Welfare (1997).

14. The pre-existing system was, however, open-ended only up to a point. Increases in SA spending by provincial governments in principle meant an automatic commitment on the part of the federal government. But when increases in the CAP payments became too great in the eyes of the federal government in the late 1980s and early 1990s, it imposed a limit on annual transfer increases ("capping the CAP") to the provinces of Ontario, Alberta and British Columbia, thereby transferring spending responsibility at the margin wholly over to provincial governments.

15. In contrast to Canada, there now exists a large body of research work in the U.S. that investigates the impact of these various effects on welfare dependence. See, for example, Blank (2002), Mayer (2000) and Moffit (2001).



was introduced in 1992, and a supplement, put into place in 1998, was directed specifically to low-income families with children. Most provinces reduced SA payments to households with children by an amount equal to the supplement (although these savings were to be invested in other programs benefiting children and families with children). However the CCTB and its supplement may have induced a jump from no-work to work, and therefore possibly an exit from (or a deterred entry onto) SA participation, because of the resulting decrease in the claw-back of total benefits as individuals enter the labour market. (The effect on those already in the labour market is more ambiguous, especially since overall implicit tax rates have risen for some.)

The final significant policy development related to SA in this period was a general tightening of the rules governing the receipt of Employment Insurance (EI). Major changes made to EI in 1990, 1994 and 1996 effectively increased the barriers and reduced the benefits available to recipients.<sup>16</sup> The impact of tighter EI regulations on the number of SA recipients is, however, indeterminate *a priori*: individuals may substitute SA for EI as the latter becomes less available and less generous, thus driving SA participation upward. Alternatively, more stringent EI regulations may induce individuals to stay at their jobs longer (or search harder for an alternative job if faced with unemployment) rather than enter onto an EI-SA cycle.

To summarize, the 1990s environment was characterized by several well-defined economic and policy developments with potentially important implications for SA participation: the decade started with a lingering recession but this was then followed by strong growth after 1995; provinces generally reduced the generosity of SA benefits and instituted rule and procedural changes that made benefits more difficult and more onerous to obtain; federal funding for SA was combined into a lump sum payment that also covers health and post-secondary education, and overall payments were cut; the Child Tax Benefit and its associated low-income supplement were introduced partly with the objective of taking children off welfare; EI eligibility was tightened and benefit levels were reduced. Furthermore it can be assumed that there were interactions among these developments and that some may have operated with a long lag. For example, changes in SA program administration may have had an impact only when the economy provided a sufficient number of jobs for those on SA to exit.

The relative importance of these developments and reforms is critical for policy makers, but these are described here only to set the context for the results reported below. In later work, we will attempt to identify the contribution of each of these factors – the economic cycle, SA benefit levels, SA rule changes, and other policy measures – to the SA wave of the 1990s. Here we attempt only to document that wave, looking at entry and exit rates along with annual participation rates, and breaking these trends down by province and family type.

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16. EI operates on the basis of variable work requirements and variable weeks of benefits: individuals living in higher unemployment regions require a smaller number of hours of work (formerly weeks of work) to qualify for benefits, and qualify for more weeks of benefits than individuals living (or more precisely, filing) in low unemployment regions.



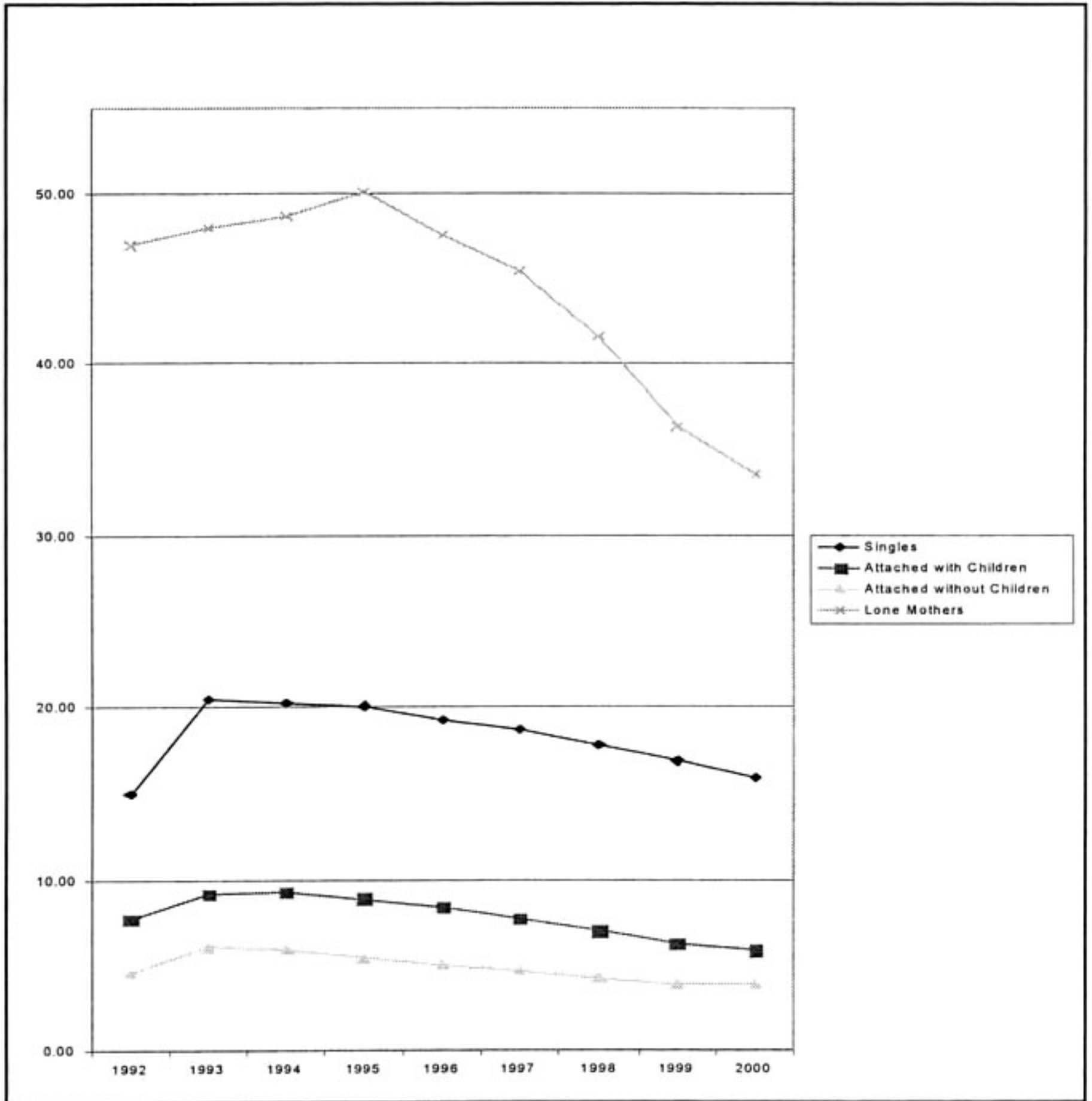


FIGURE 1 SA Rates (%), by Family Type

## Findings at the National Level

### Incidence: Annual Participation Rates

We begin by considering patterns at the national level. Figure 1 and Table A3 (the first row in each of the four panels) show SA participation rates by family type and year. Singles, couples with children, and couples without children all experienced peaks in SA use in 1993, while lone mothers experienced a peak in 1995. Thereafter, all groups experienced significant and steady declines, and all had lower dependency rates at the end of our period of analysis than at the beginning, except for single individuals, whose rates were about the same at each endpoint.<sup>17</sup>

Single mothers constitute the group with the most dramatic change. By 2000, their rate of SA use was 33.6 %, compared to a peak of 50.1 %, for a relative

17. Similar changes have been observed by Statistics Canada (2002).



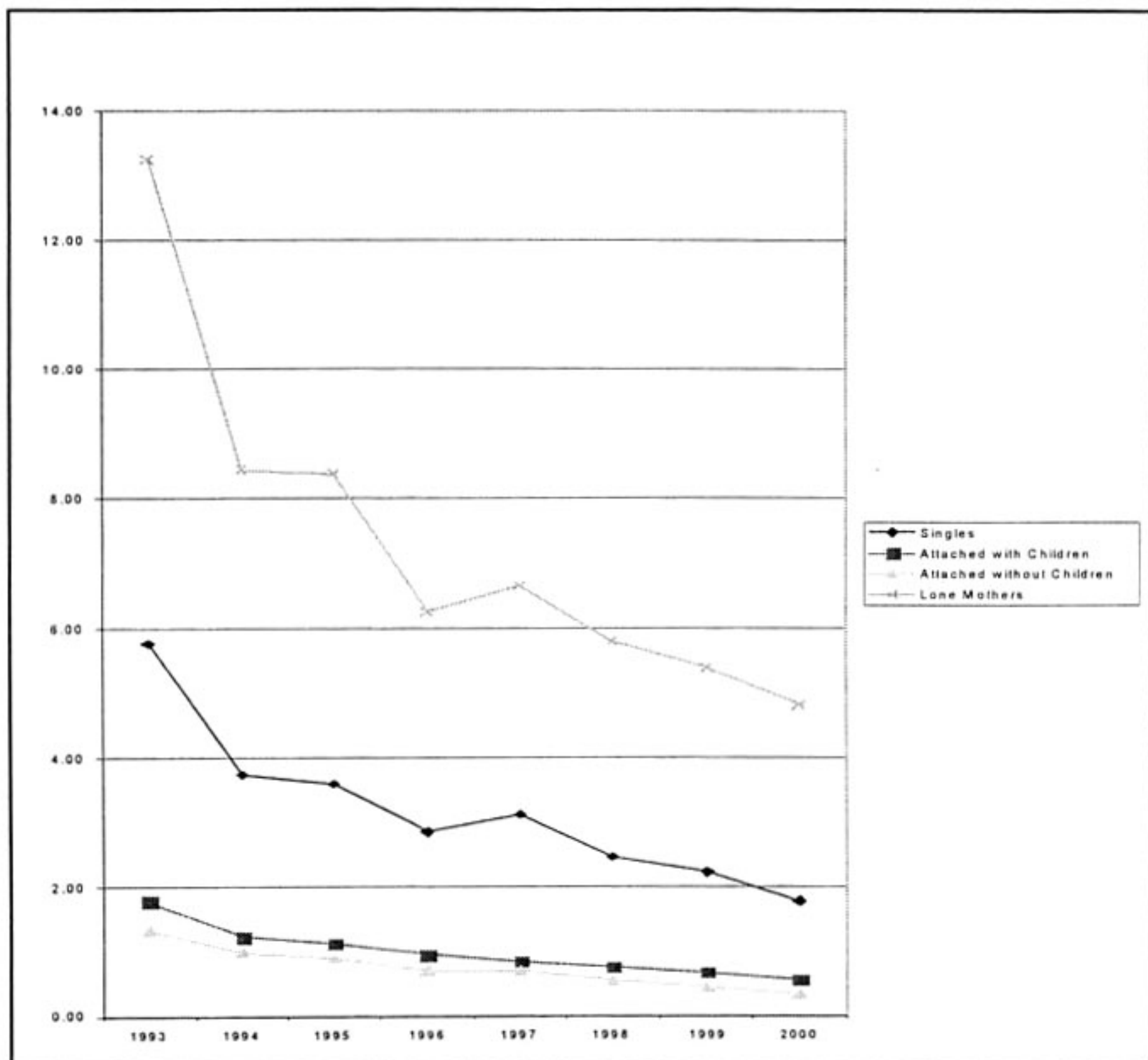


FIGURE 2 SA Entry Rates (%) , by Family Type

decline of 33 %. Couples without children generally had the lowest rates, ranging from 4 to 6 %; couples with children had moderately higher rates than this, from 6 to 9 %, while unattached individuals had rates between the others, varying from 15 to 20 % over time.

## Entry

We begin to get at the dynamics underlying these annual participation rates with the entry rates shown in Figure 2 and Table A4.<sup>18</sup> The overwhelming pattern that emerges is a strong decline in entry rates among all family types over time. Lone mothers are again especially notable: while they have the highest entry rate in every year, they also exhibit the largest absolute decline through time. 13.3 % of all lone mothers not on SA in 1992 became dependent on SA in 1993, whereas the entry rate had decreased to 4.8 % by 2000, a relative decline of 64 %.

18. Entry rates are defined by family type in the first of each pair of years. Individuals who become dependent upon SA when they divorce, become single parents, or otherwise change their family type are counted according to their status before entry. Other work currently underway focuses on entry and exit dynamics as family status changes.



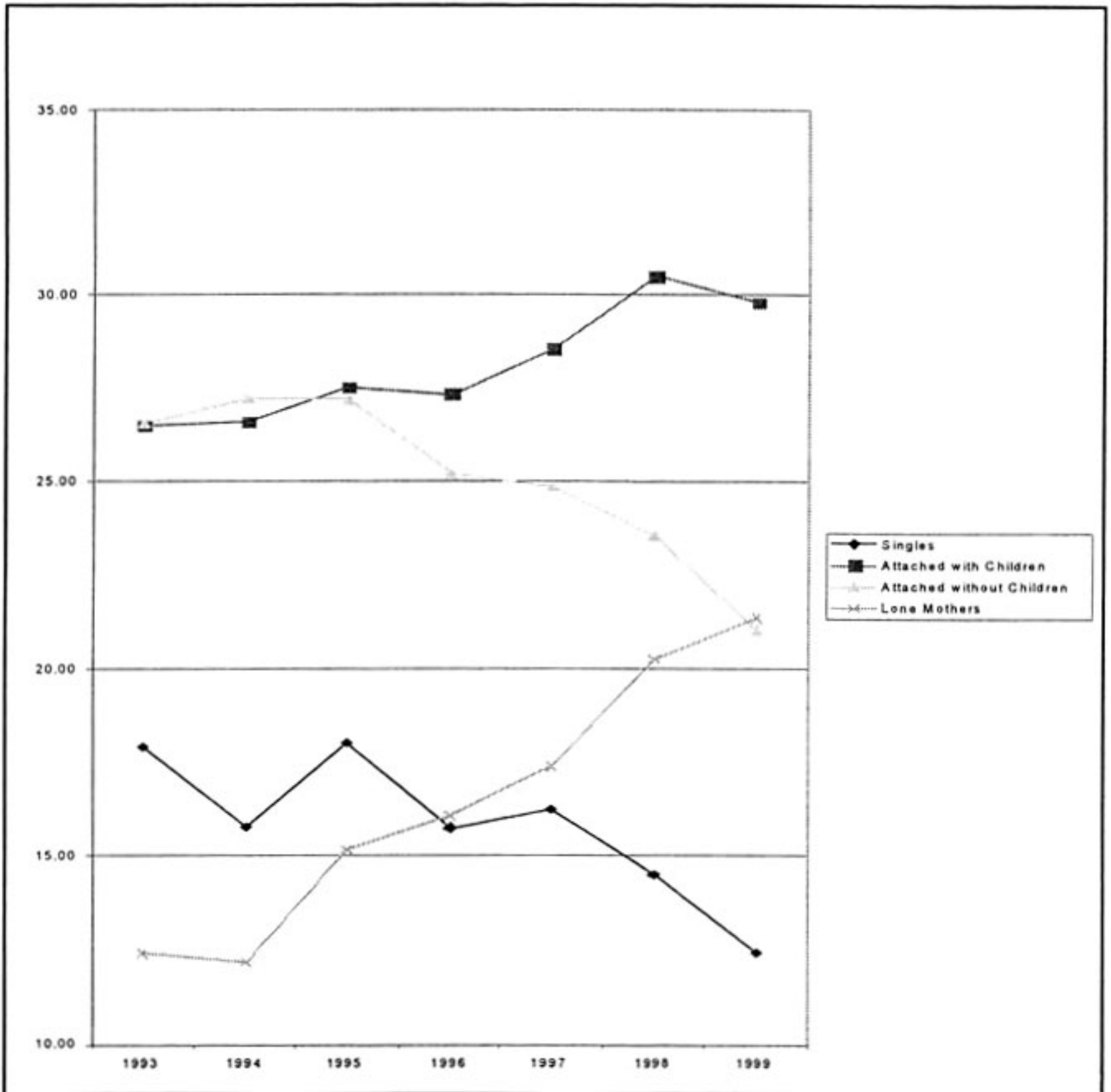


FIGURE 3 SA Exit Rates (%), by Family Type

As with the incidence rates, couples had lower entry rates in every year than lone-mothers and singles, and more moderate declines over time. The declines are, however, still very large in relative terms. For example, couples with children experienced a decline in entry rates from 1.8 % in 1992 to a mere 0.55 % in 2000, a reduction of 67 %. Couples without children had similar levels and trends. Singles again lie between the other groups, their entry rates declining from under 6 % to just under 2 %.

Overall, these data clearly indicate that declining entry rates played a significant role in explaining the fall in SA use.

## Exits

Exit rates, on the other hand, have been less uniform in their trends. Exit rates would normally be expected to rise as the economy improves, but with the rapidly declining entry rates just noted, the stock of SA participants is likely to change in character. Depending on these composition effects, exit rates may either increase or decrease. Figure 3 and Table A5 show the trends.

For lone mothers there was in fact a sizeable increase in exits rates. In 1992,



they were at the bottom, among family types, in terms of the probability of exiting SA with a rate of 12.4 %. By 2000, though, they were in the middle range, with a rate of 21.4 %. Singles, in contrast, experienced steady decreases in exit rates and had the lowest rates at the end of the period. Couples with children had the highest exit rates in almost all years, these increasing over time. Couples without children started with the highest exit rates, but by 2000 had the same level as lone mothers.

Overall, then, exit rates by family type have shown considerable variability and different time trends, especially when compared to entry rates. The large falls in annual SA participation rates seen above thus appear to be explicable in terms of i) dramatically declining entry rates for all family types, and ii) reinforcing trends in exit rates (i.e., lower) for lone mothers and couples with children, but counteracting decreases in exit rates for singles and couples without children.

## The Provincial Experience

### The Context

The LAD's enormous sample size allows us to examine incidence, entry, and exit by year and family type at the provincial level. While there have been a number of studies of welfare dynamics for individual provinces in Canada (e.g., Charette and Meng 1994; Duclos et al 1999; Lacroix 2000; Barrett and Cragg 1998; Christophides et al 1998), we are unaware of any study that has analysed the province-by-province experience in a consistent manner using the same database.

A nation-wide analysis provides a consistent set of descriptive statistics, and also helps us learn how different policy measures may have affected welfare experiences across the economy. For example, and as described earlier, Ontario and Alberta have been especially vigorous in making SA less attractive to potential claimants: what has been the effect of these measures on SA dynamics and annual participation rates? In addition, the strength of the economic recovery through the latter part of the 1990s was not uniform across all provinces, and this too would be expected to affect SA dynamics.

### Incidence

Figure 4 shows annual SA participation rates by province for singles. (See also Tables A3-A5 for participation, entry, and exit rates at the provincial level for each family type.) Every province experienced an upward movement in SA rates from 1992 to 1993 (reflected in the national trend previously seen) and a downward trend beginning a year or two after that, yet the data show some important differences. Alberta had the lowest rate in practically all years, falling to 9.2 % by 2000, PEI coming second at 12.1 %. Quebec and Newfoundland show the most opposing patterns to this, their rates not only rising sharply in 1993, but then remaining high through 2000, to finish well above the other provinces at rates of 21.4 and 21.0 % respectively.

Ontario, which carries the largest population weight in the national-level statistics, is distinguished by a change in its relative position - from having one of the highest SA rates in the earlier years to having one of the lowest in the later years. The Prairie and Maritime provinces are generally concentrated close to the mean in terms of both levels and trends - characterising an "average" set of experiences.

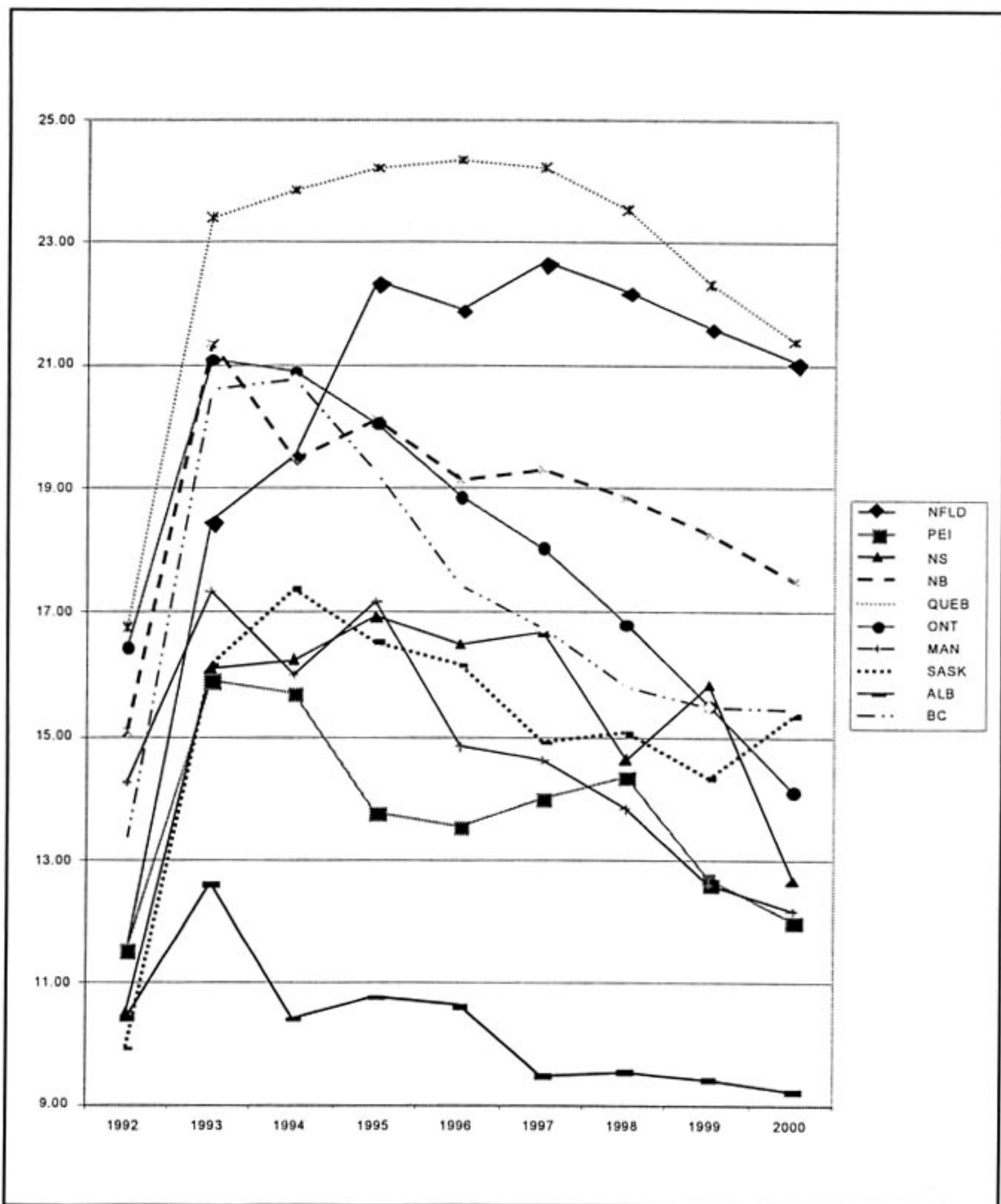


FIGURE 4 SA Rates (%) by Province, Singles

The patterns for *couples with children*, described in Figure 5, are broadly similar to those just seen for singles. Some provinces however – Ontario and Alberta in particular – had greater relative declines than others. Newfoundland is again an exception, while Quebec is less of an outlier and more like the other provinces for this family type.

Figure 6 displays the results for *couples without children*. Alberta no longer stands out as having a uniquely lower rate, and has similar rates to Saskatchewan, PEI and Manitoba. Newfoundland and Quebec have maintained the higher rates that emerged in 1993, and Ontario had the largest decreases.



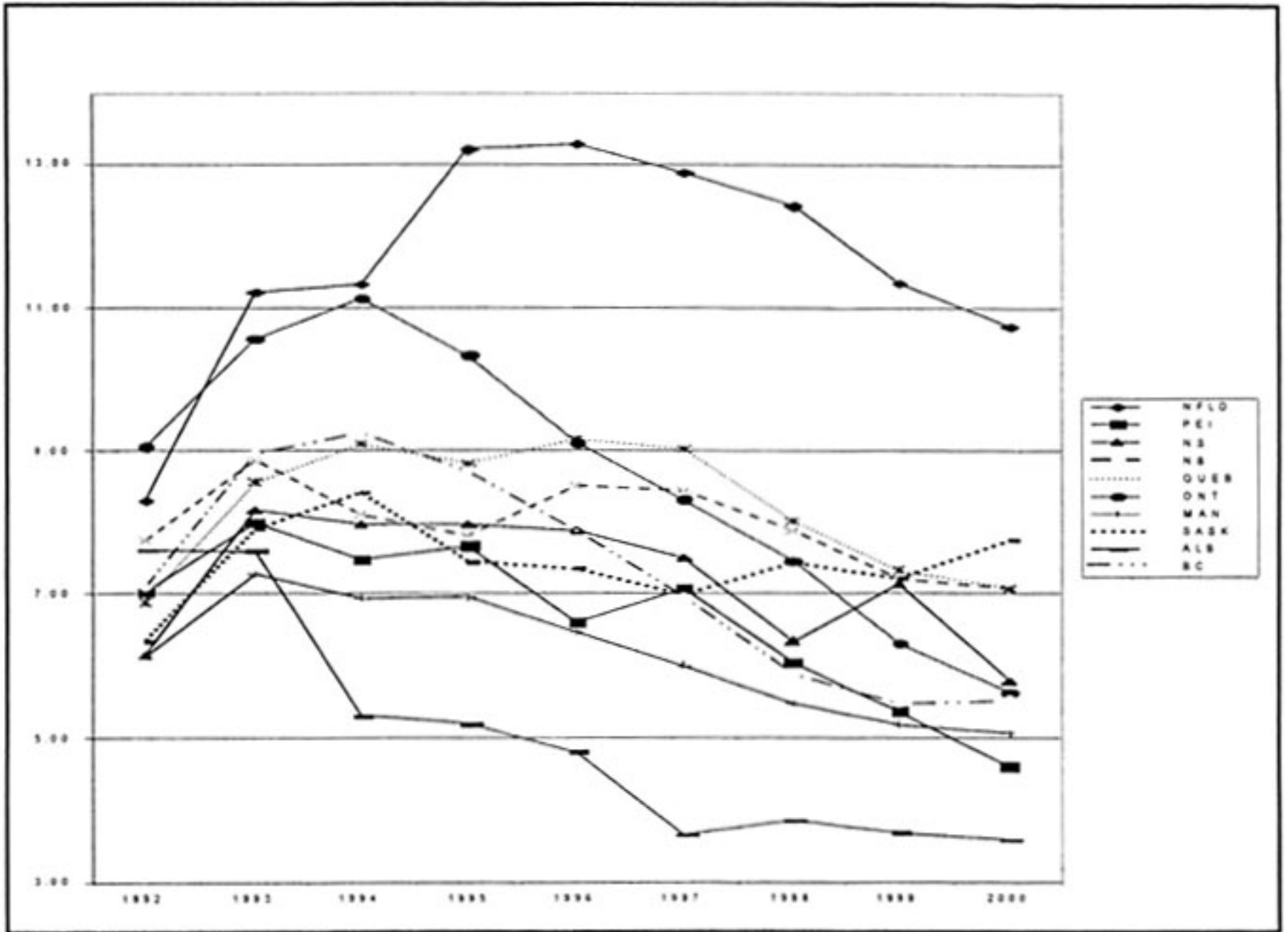


FIGURE 5 SA Rates (%) by Province, Attached with Children

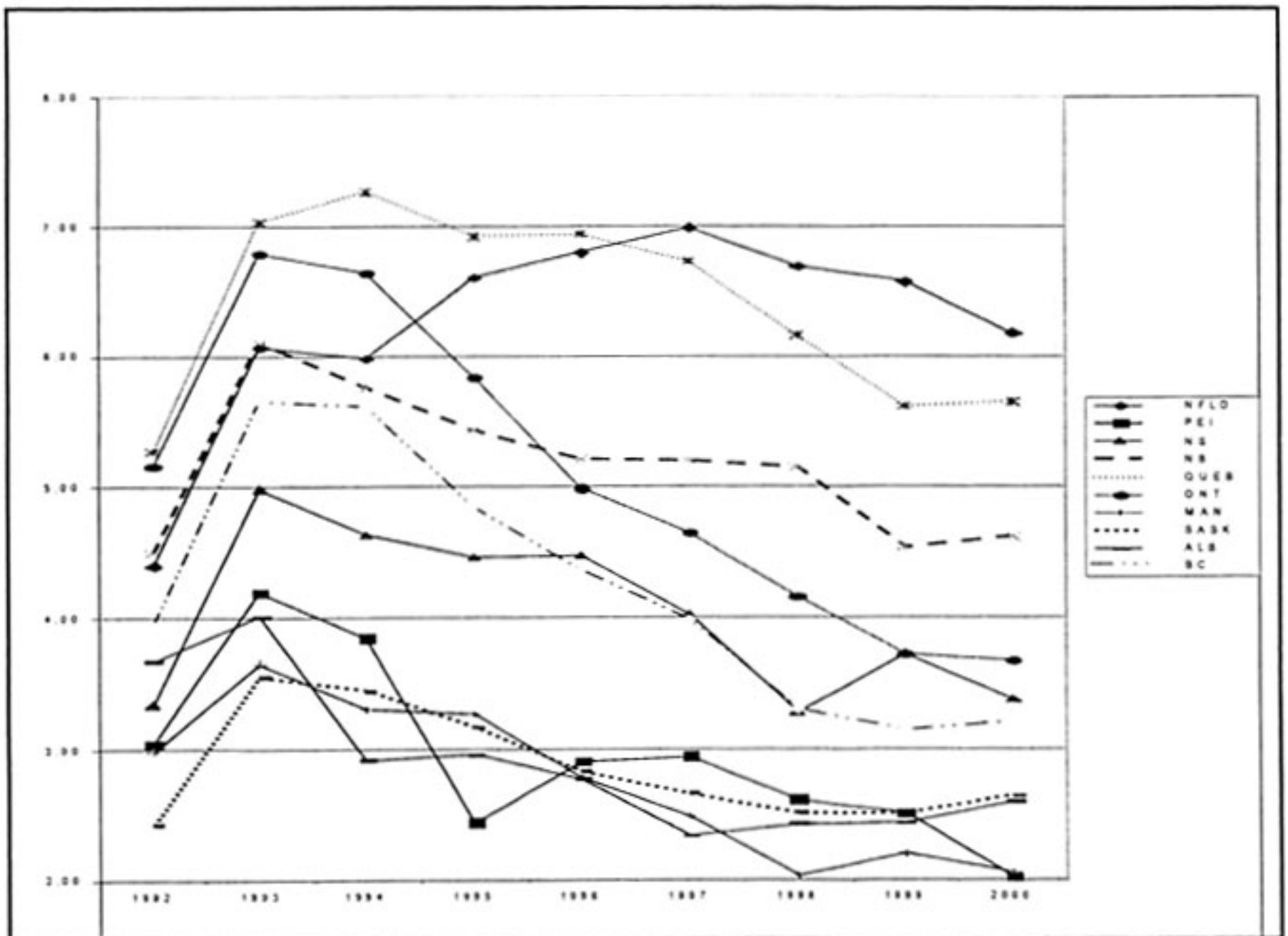


FIGURE 6 SA Rates (%) by Province, Attached without Children

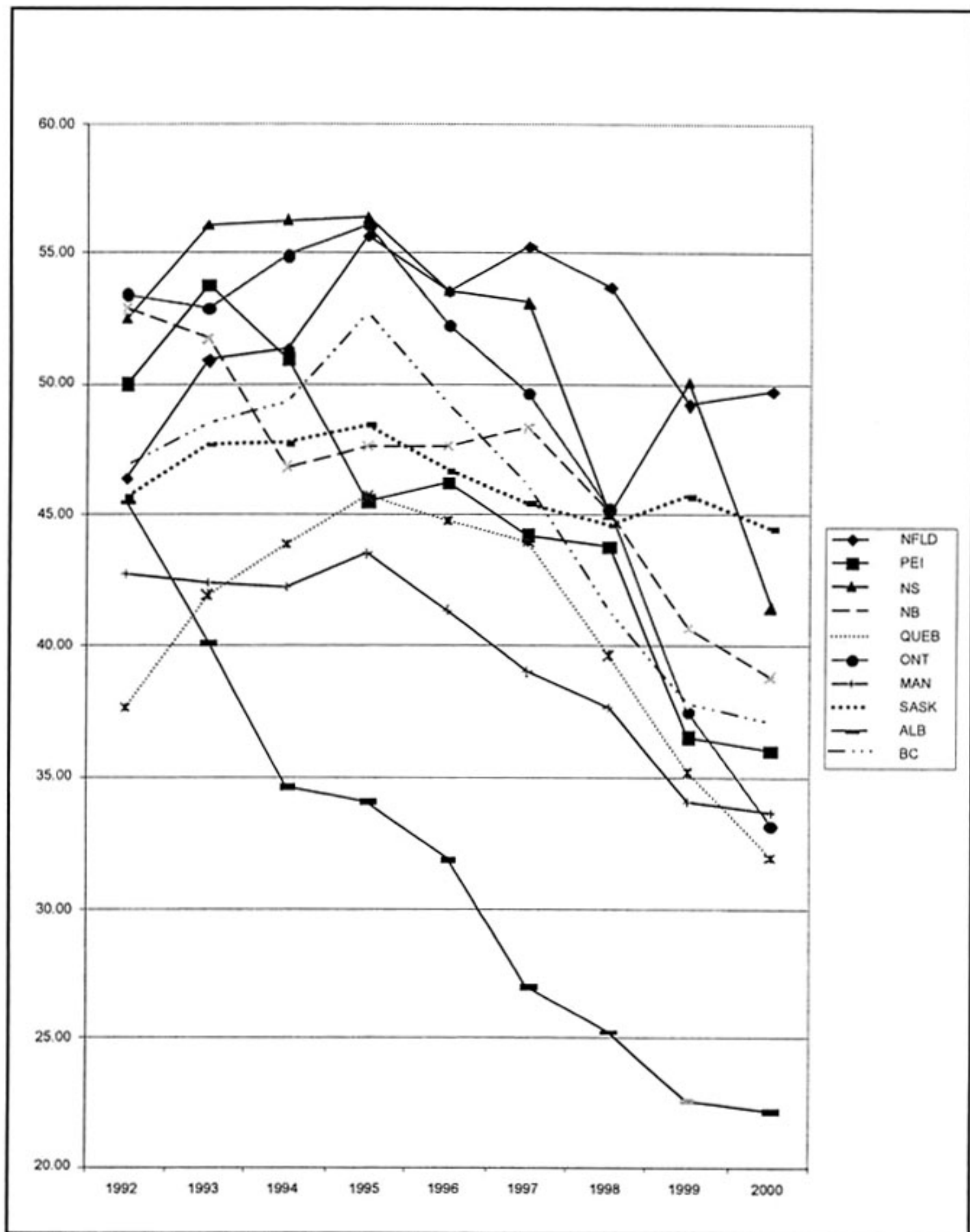


FIGURE 7 SA Rates (%) by Province, Lone Mothers

For the *lone mother category* shown in Figure 7, both the initial peaks and subsequent declines are more dispersed. Alberta and Ontario again experienced steep declines, though from different peaks. Newfoundland maintained the highest rates over time. Quebec is notable in having attained one of the lowest rates by the end of the decade. The remaining provinces are characterized by an inverted U-shaped dependency rate to varying degrees.

While these characterizations of SA use by province and family type are useful, they do not indicate if the developments are attributable to changes on the entry side or the exit side of the equation. We now turn to these.



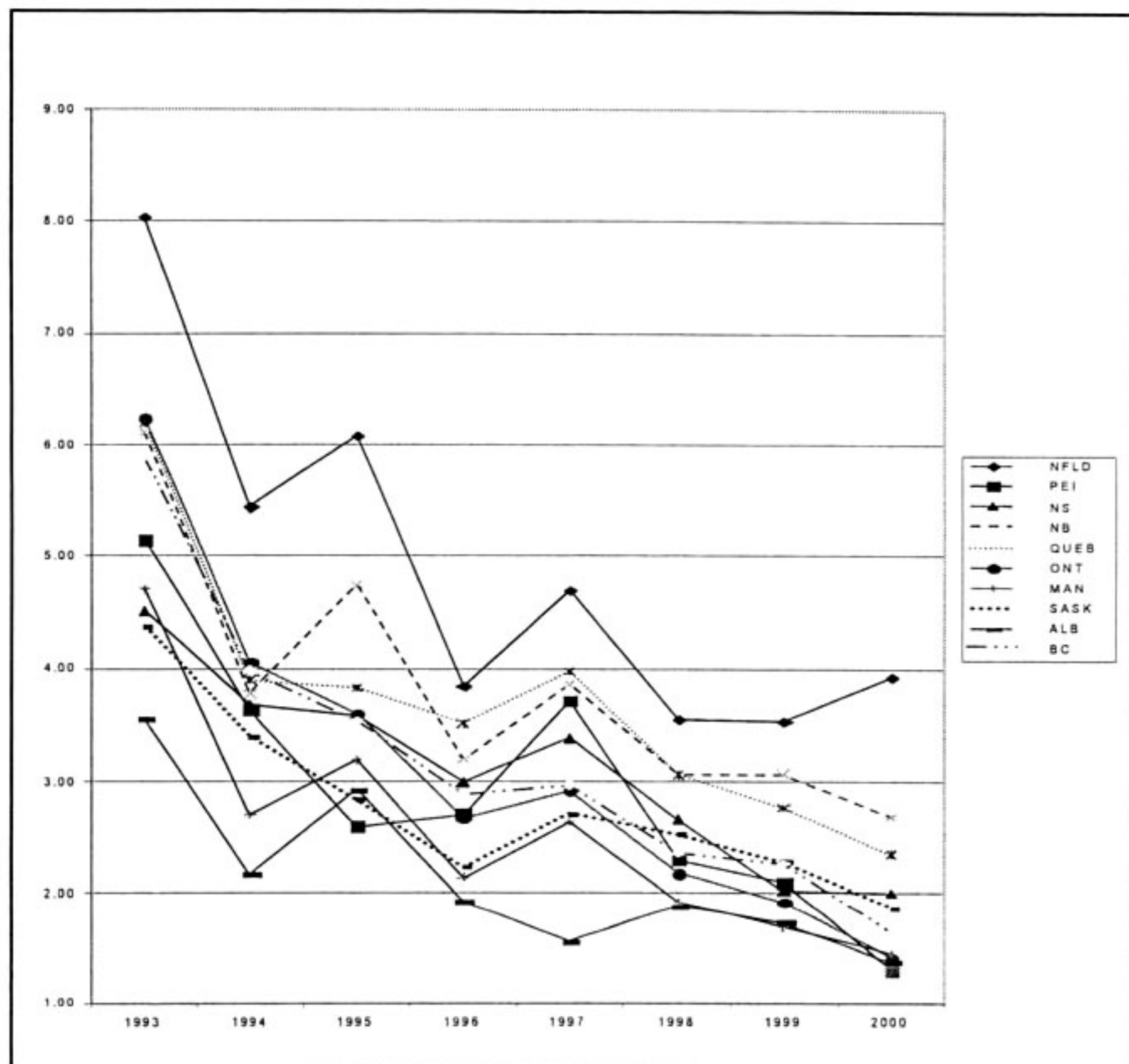


FIGURE 8 SA Entry Rates (%) by Province, Singles

## Entry

We have previously examined entry rates into SA at the national level, and found large decreases for all family types, especially lone-mothers. Figure 8 (as well as Table A4) reveals entry rates by province for *singles*. All provinces experienced substantial decreases – a rather remarkable conformity of experiences. Similar to the annual participation rates seen above, Newfoundland had the highest rates and Alberta the lowest in most years, although the latter not uniquely so, and the former showing declines, rather than increases, over time. Ontario again shows the greatest decline – from 6.2 % in 1992 to 1.4 % in 2000, the latter being approximately the same rate as Alberta, Manitoba and BC.

Figure 9 shows entry rates for *couples with children*. Newfoundland again has the highest rates, but this time after also showing the largest decline over time, with a decrease of 61 % between 1992 and 2000. Most other provinces show relatively weaker downward trends over time, with the exception (again) of Ontario, which, by 2000, attained the lowest entry rate of all provinces. Saskatchewan's experience is also noteworthy for moving from being in the middle rank towards having higher than average entry rates by the end of the period.

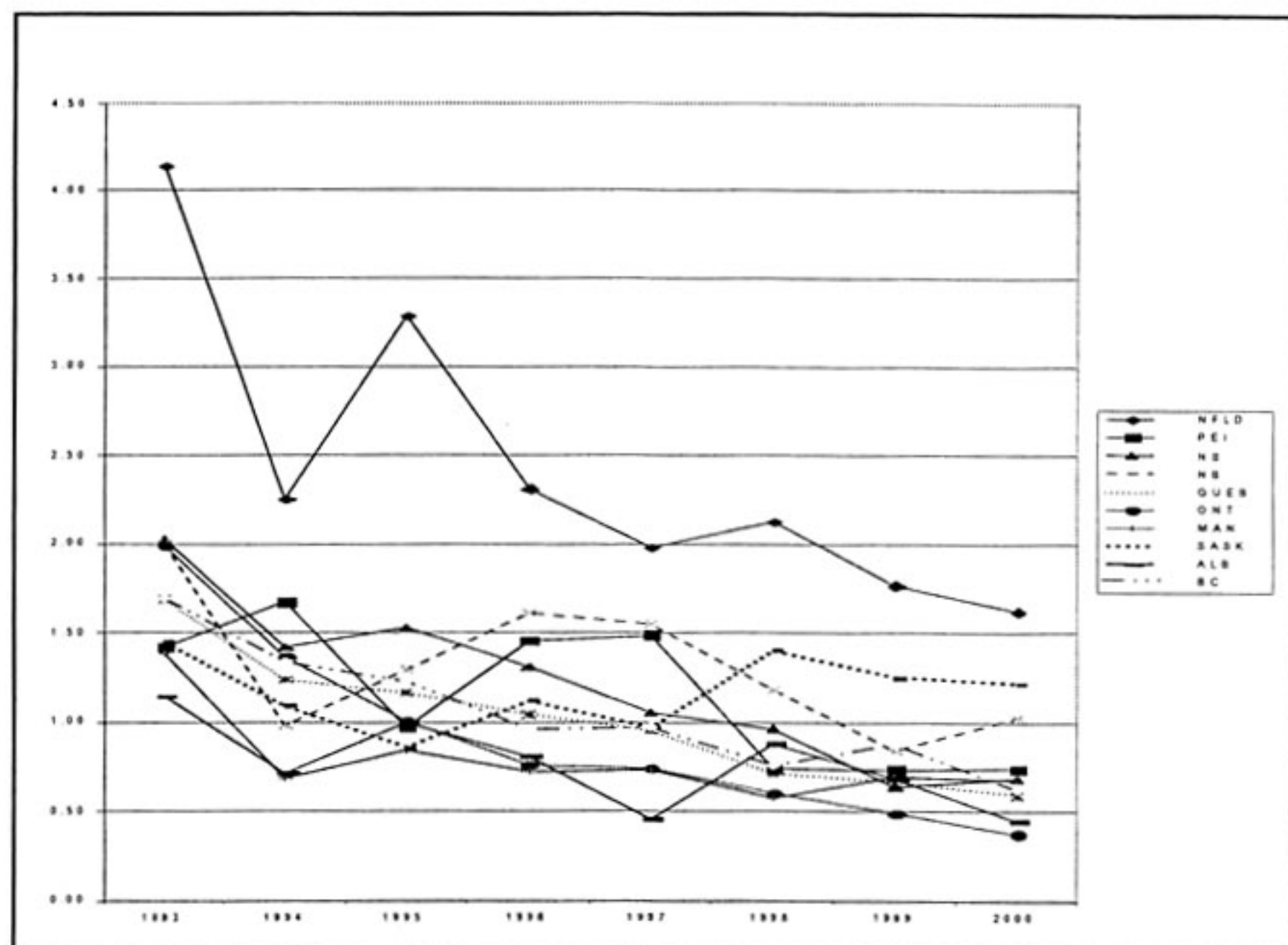


FIGURE 9 SA Entry Rates (%) by Province, Attached with Children

For *couples without children*, Figure 10 displays a broad and fairly uniform pattern of decline. Newfoundland again has the highest rates throughout, even as they decline over time; Ontario has the greatest decreases, and Quebec and BC show significant declines as well.

*Lone mothers* (Figure 11) show a broad, though in some cases an erratic, pattern of declines. The Newfoundland profile is particularly volatile, but it is also characterised by generally high rates throughout. Ontario – once again – experiences the greatest declines in entry rates, with Quebec not far behind this time. Saskatchewan is, for a second time, an outlier in showing increases, rather than decreases, which in this case leave them with the highest entry rates of all at the end.

In sum, the provincial experiences have been relatively similar, in that entry rates have declined for virtually all family types and provinces, even though the rates of decline have shown a certain degree of variation. In contrast, a very different pattern emerges when exit rates are examined.

## Exits

In Figure 3, we observed that exit rates – unlike annual participation and entry rates – did not behave uniformly across the different family types at the national level: rates for lone-mothers and for couples with children increased, while rates for singles and couples without children showed significant declines.

This pattern suggests that heterogeneity may have been at work on the exit side. In particular, as a result of improved economic conditions and some provinces making it more difficult for certain types of individuals to obtain SA, at least



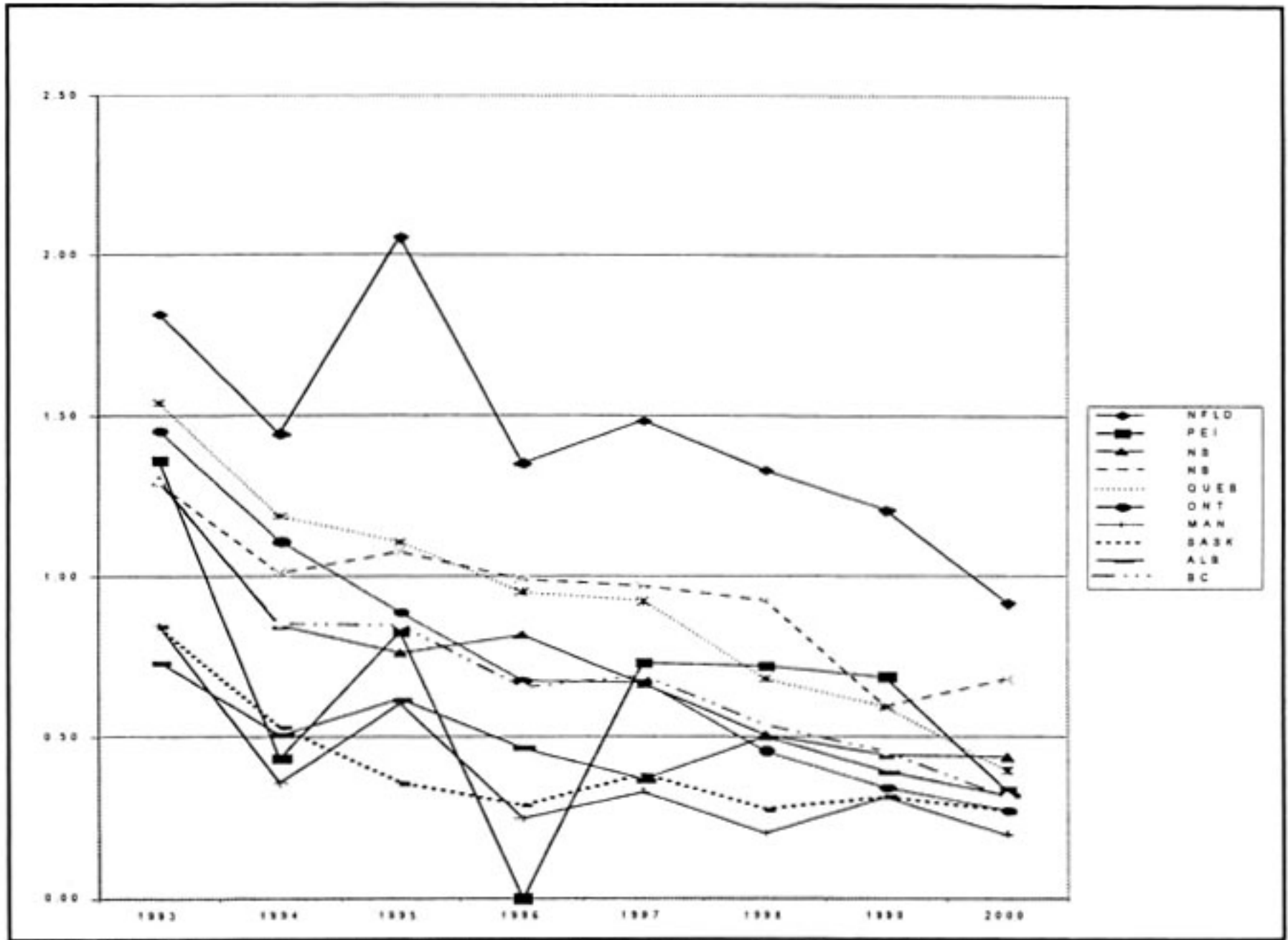


FIGURE 10 SA Entry Rates (%) by Province, Attached without Children

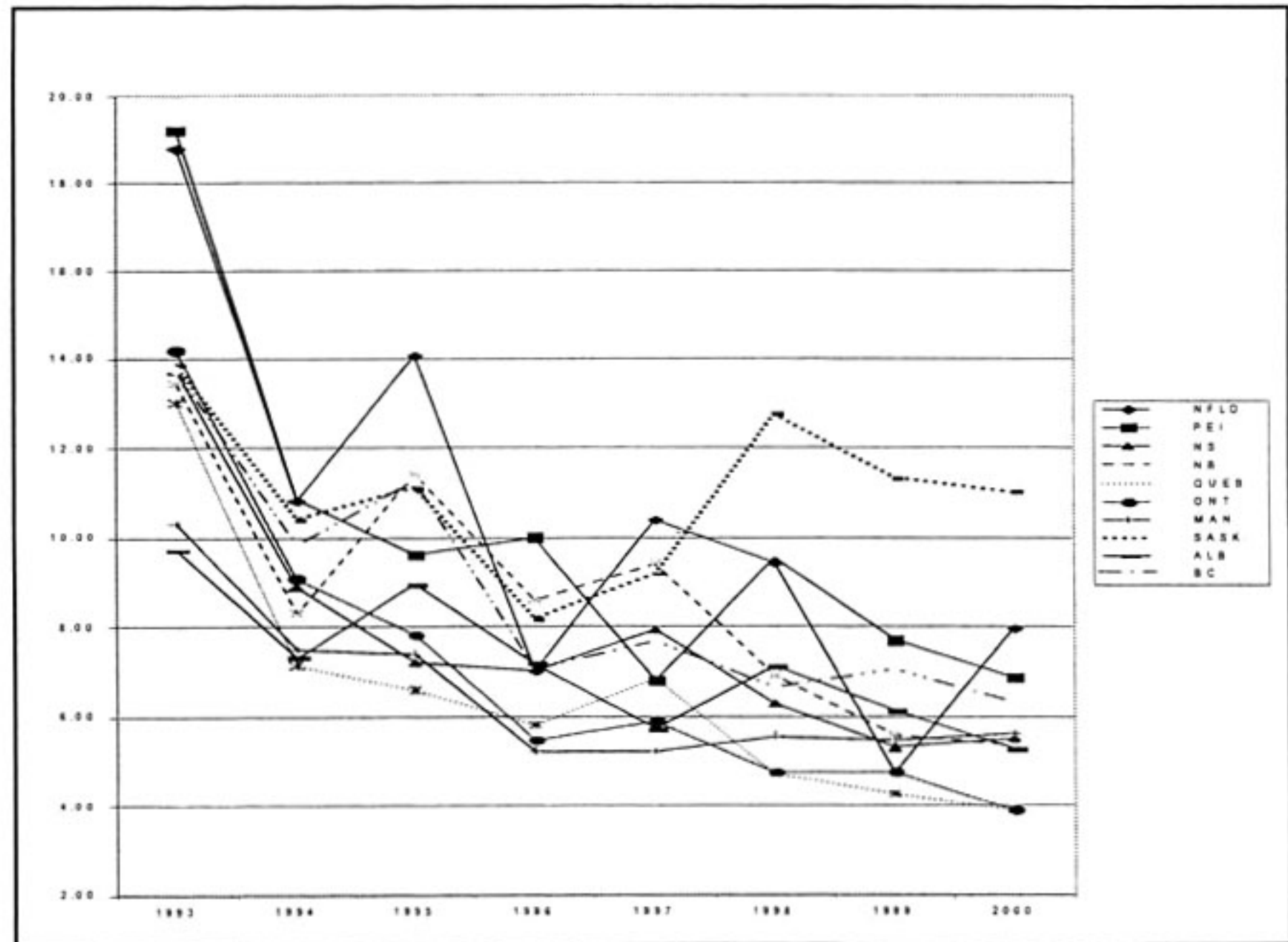


FIGURE 11 SA Entry Rates (%) by Province, Lone Mothers

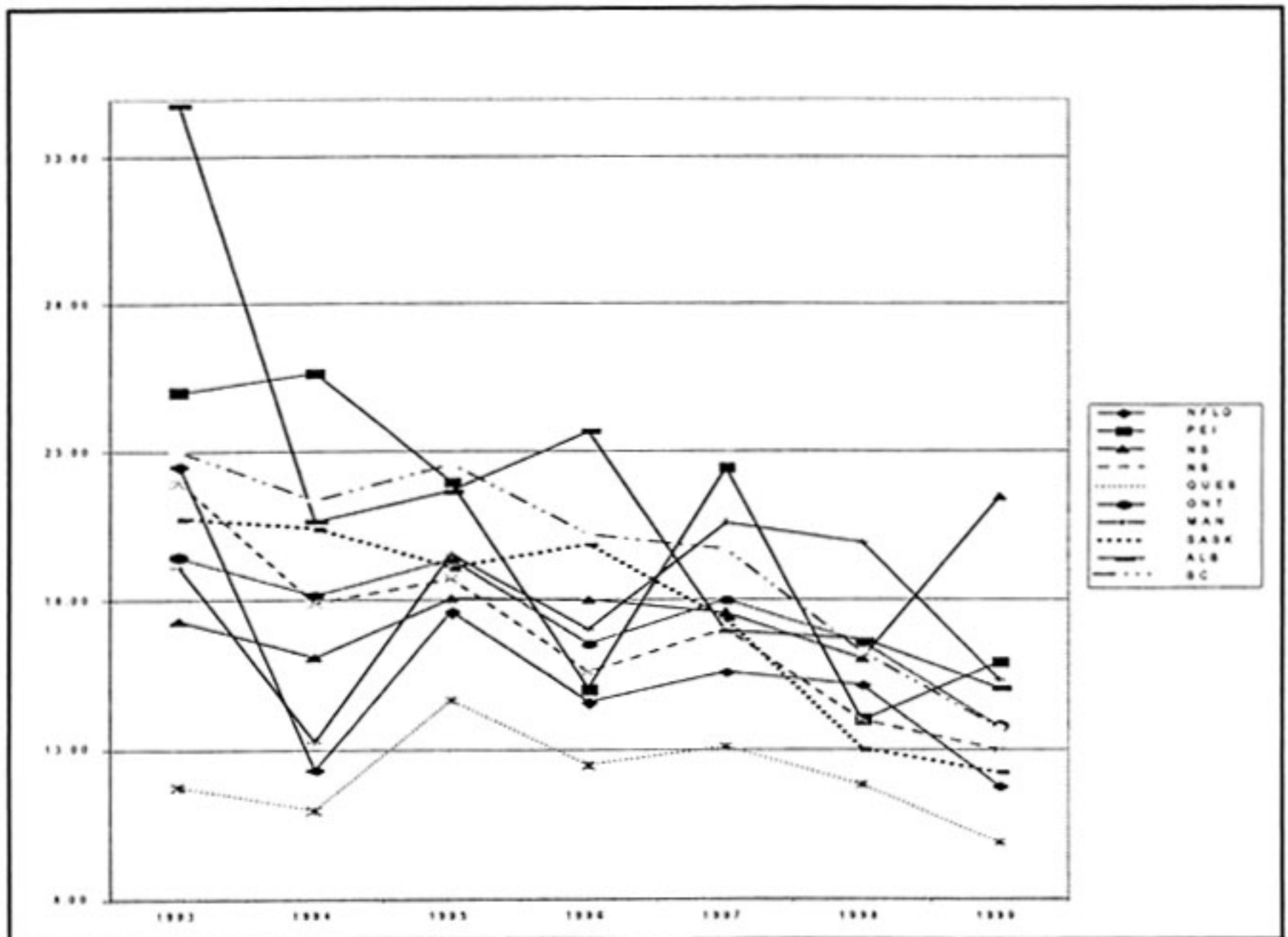


FIGURE 12 SA Exit Rates (%) by Province, Singles

some populations of SA recipients likely included increasing proportions of individuals who would have greater difficulty in exiting SA in any given year, thus driving exit rates down from what they would have been in the absence of such composition effects.<sup>19</sup> Family types at the national level have reflected these dynamics in the different trends in exit rates.

Space considerations restrict us to the most noteworthy aspects of the exit rates at the provincial level. Readers can inspect the results more closely for other specific findings.

Figure 12 and Table A5 illustrates the findings for *singles*. Quebec has the lowest exit rates in all years. Putting these together with their relatively high entry rates (seen above) yields the highest annual incidences of SA participation of all provinces, with relatively little fall-off during the growth years of the latter half of the 1990s. In short, the high annual rates of SA participation among singles in Quebec are driven by both entry and exit-side dynamics. Newfoundland has a very similar pattern: consistently low exit rates and high, though declining, entry rates, giving high annual incidences with only a small decline near the end of the 1990s.

Ontario, in contrast, experienced middle rank exit rates, with moderate declines over time; yet when this is combined with strong reductions in entry rates, the overall result is a vigorous reduction in incidence. A similar picture describes

19. In other work we are currently pursuing we model the entry and exit processes as a function of various individual characteristics (age, family status, area size of residence, and so on), a measure of economic conditions, SA benefit levels available to those who qualify, a measure of EI generosity (to capture the interplay of SA and EI programs), and other factors. Those models allow us to control for the heterogeneity of SA recipients to the degree this is captured by the explanatory variables included in the models, as well as through the application of standard methods for controlling for unobserved heterogeneity.



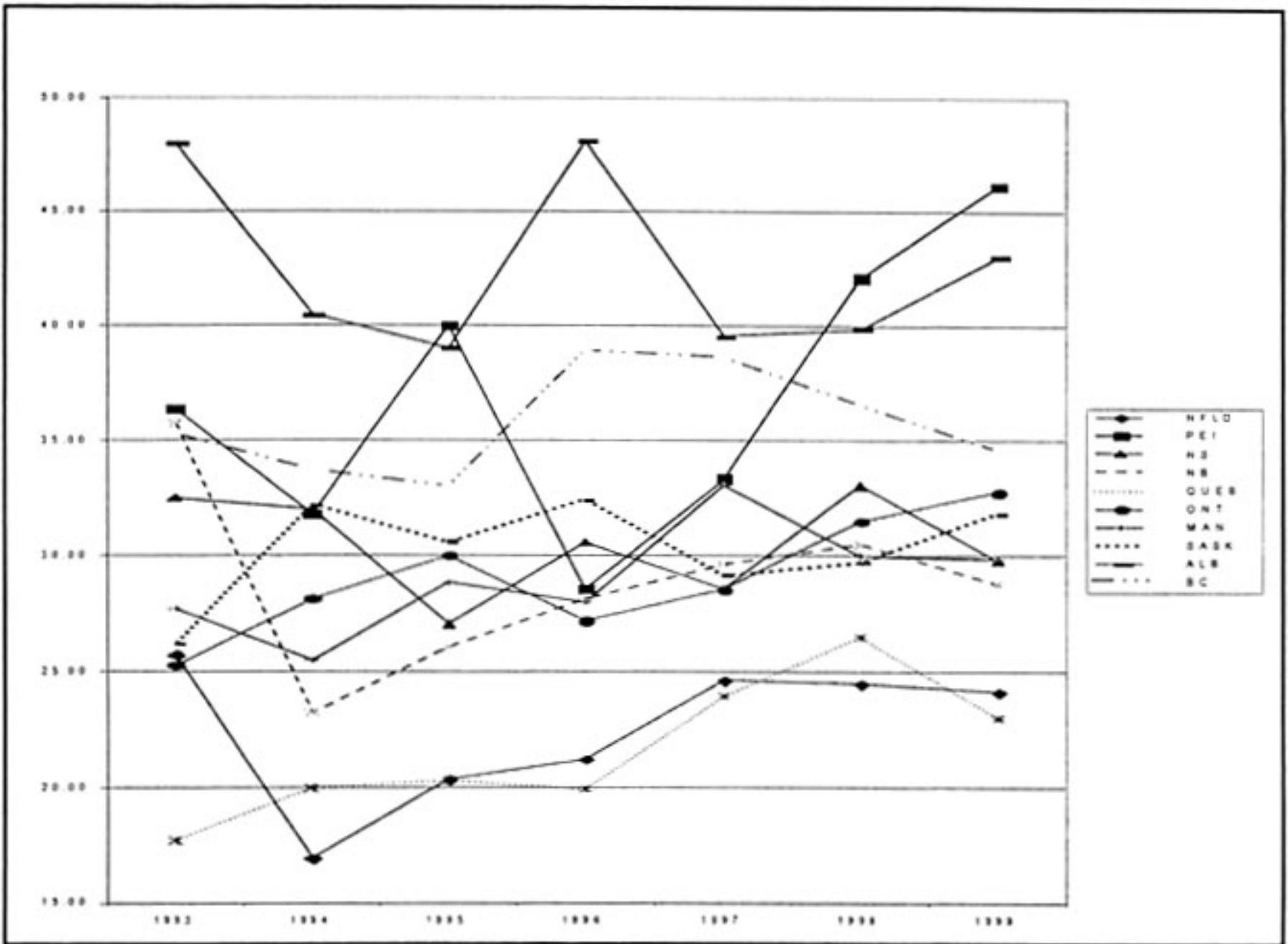


FIGURE 13 SA Exit Rates (%) by Province, Attached with Children

the experiences of several other provinces, although the changes are less dramatic than for Ontario.

Alberta is a different sort of outlier, experiencing an unusually large decline in exits – from 34.8 % in 1992 to 15 % in 2000. However, this is consistent with the interpretation of the Alberta welfare reforms of 1993/94 as described by Boessenkool (1997). Alberta concentrated on reducing entrants by making it particularly difficult for those of school-leaving age to gain access to welfare. Instead, many such individuals were rerouted back to school. The pool of SA participants would therefore have been very different after the 1993 changes – a pool characterized by a lower overall level of human capital. Accordingly it is not surprising that exit rates fell. Nonetheless, the net result was for Alberta to have by far the lowest SA participation rates among singles by the end of the decade.

*Couples with children* – as seen at the national level – have experienced broadly upward-trending exit rates for the period, as illustrated in Figure 13. But again there are significant provincial differences. Quebec and Newfoundland have the lowest exit rates, Alberta by far the highest (although with no additional increase over time), while the other provinces have had a fairly uniform pattern of moderately rising rates over time. The differences in exit rates between provinces are large, of the order of two-to-one.

With low, and rather unchanging exit rates over time, and high, although declining entry rates, the change in incidence for couples with children in Newfoundland, which was well above those of other provinces by the end of the period, was again driven by both entry and exit dynamics. Conversely, with Alberta's consistently high exit rates, it was the large decline in entry rates from 1.1 % in 1992 to 0.5 % in 2000 that drove its decline in incidence to uniquely low levels by 2000. Ontario's significant decline in annual incidence from relatively high to

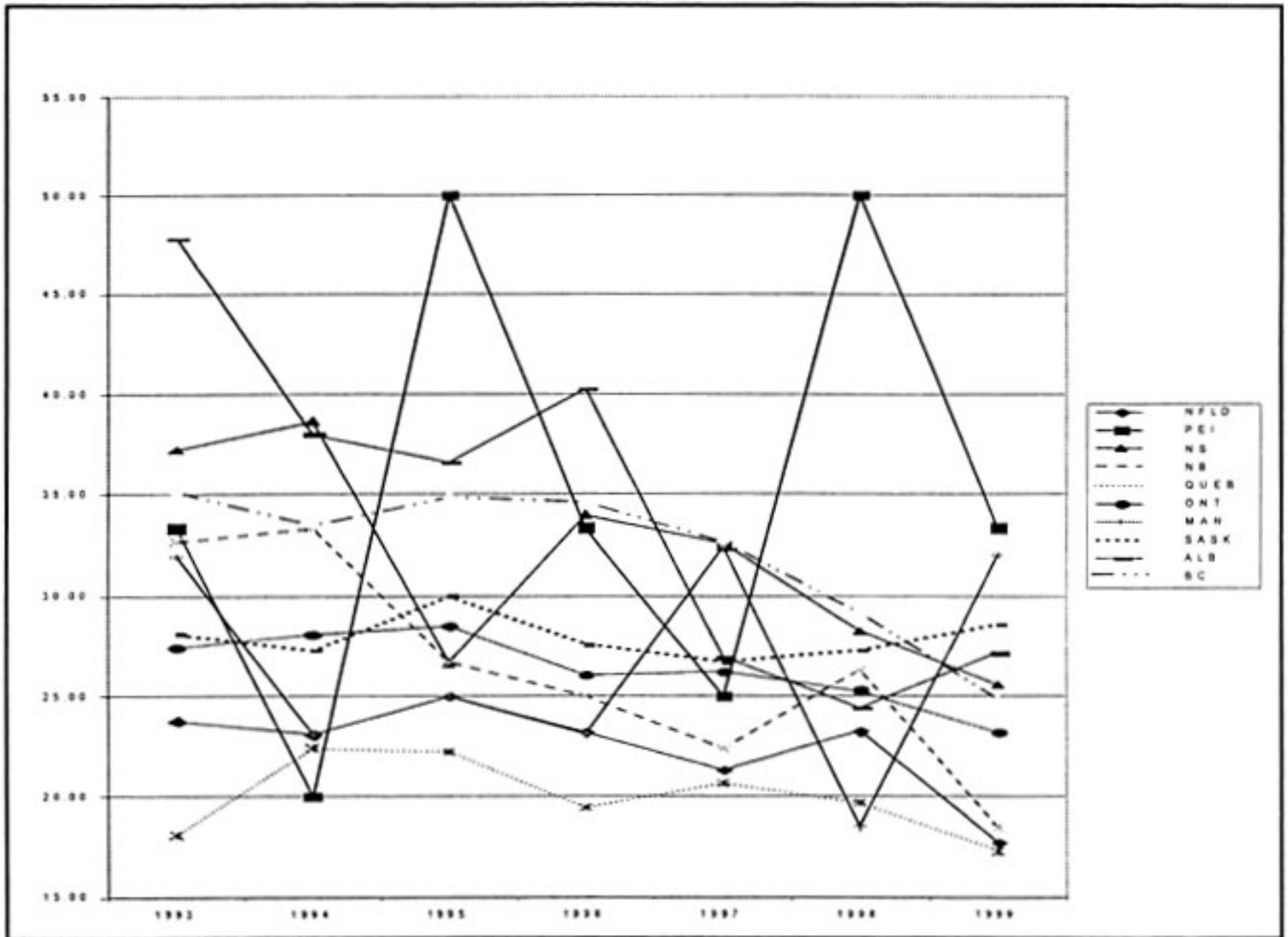


FIGURE 14 SA Exit Rates (%) by Province, Attached without Children

relatively low levels was driven by a moderate rise in exit rates and dramatic decreases in entry. Quebec's low exit rates were the main contributor to its relatively high incidences in the later years. More or less average levels and trends in entry and exit dynamics drove the other provinces' records.

Figure 14 reveals that for *couples without children*; virtually every province experienced a modest decline in exit rates. This group thus appears more akin to singles than couples with children, in that the general trend in exit rates is downward, though not strongly so.

Newfoundland's high annual participation rates, especially in the later years, are clearly driven by the trends in both its very high entry and relatively low exit rates. A similar story holds for Quebec, except that its particularly low exit rates play a more significant role in this dynamic. Ontario's movement from relatively high to relatively average participation rates is, in contrast, driven almost entirely by its declines in entry rates. Its exit rates remain in the middle rank, declining moderately over time. Alberta had the highest exit rates in the early years, but the greatest declines over time. Their low incidence is thus seen to be the result of a combination of their generally low entry rates and these high, though declining, exit rates.

Finally, for *lone mothers* (Figure 15), exit rates increased in all provinces from 1993 onwards, making them resemble couples with children rather than singles or couples without children, whose rates declined. Alberta's rates are again the highest, and Newfoundland's and Quebec's among the lowest. For this family type, Ontario shows the greatest increase over time.

Ontario's significant decreases in incidence over time are now seen to be a combination of both higher exit and lower entry side factors, while Newfoundland's increases in incidence were similarly driven from both sides. Alberta's dramatic declines in incidence are, in contrast to Ontario and also in contrast to the



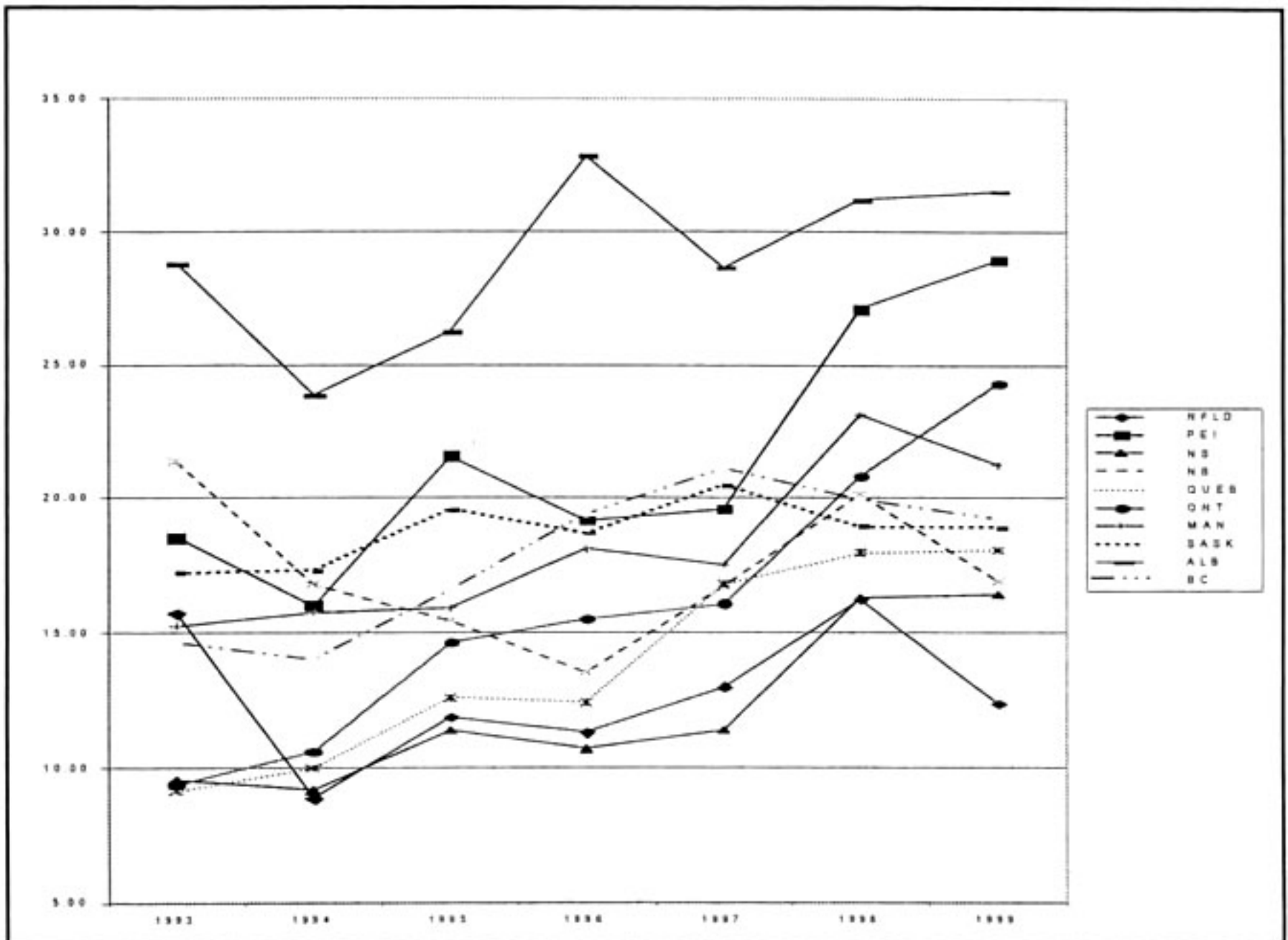


FIGURE 15 SA Exit Rates (%) by Province, Lone Mothers

other family types, driven mostly by the exit side, not entry.

## Conclusion

This paper has mapped social assistance participation in Canada using longitudinal tax-based data that are uniquely well suited to this undertaking. The major findings are as follows. For incidence and entry, rates peaked between 1993 and 1995, and then declined dramatically over the rest of the decade for all family types (singles, couples with children, couples without children, and lone mothers), although there was considerable variation in the precise pattern and extent of these declines. Exit patterns, in contrast, differed much more strongly across family types: couples with children and lone mothers experienced an increase in their exit rates, whereas unattached individuals and couples with no children experienced the opposite. There were, furthermore, important differences in these rates at the provincial level – in terms of magnitude, timing and even the direction of changes.

These findings thus show both that social assistance participation in Canada has been characterised by some important common trends and by heterogeneity with respect to the particular dynamic in question: incidence/entry/exit, family type, and province.

There have been many changes in provincial SA systems, but until now there has been limited empirical evidence on the effects they may have had at the national and cross-provincial level. Our findings will allow students of the SA system to see how SA participation rates have evolved, including the underlying entry and exit rates which generate these patterns, and thus begin to see where policy developments have had greater or lesser effects. Being able to make comparisons across different family types and provinces should be especially useful in this respect. For

example, some provinces radically cut SA benefit levels to certain family types in specific years. Our findings allow at least an initial assessment of the effects these policy changes may have had.

One important caveat is that our analysis is descriptive rather than econometric. Although the results have been placed in the context of the important economic and policy developments that occurred over the last decade, we have not attempted to disentangle the specific factors that have generated the observed patterns. In particular, we have not sought to explain whether the results are predominantly due to the tightening of rules and regulations and reductions in benefit levels, or whether they are more due to the improved economic conditions that occurred over this period. Nevertheless, the analysis should provide a useful point of departure for such endeavours and related policy formation.

On a more concrete level, the results – descriptive as they are – provide an interesting context for discussions of recent policy initiatives aimed at reducing welfare dependency in Canada. Two of the more important measures of the last decade have been i) the introduction and subsequent expansion of the National Child Tax Benefit, which was in part aimed at “getting children off welfare” and otherwise helping working poor families with children, and ii) the Self Sufficiency Experiment, which tried various means of helping single mothers get into the labour force. Indeed the final report of the Self Sufficiency project (HRDC-SRDC) indicated that there was very little difference in the labour market behaviour of the control and target groups several years after the initiation of the experiment.

Both these undertakings were aimed at families with children. This is obviously a worthy and important targeting. Yet these are also the family types that experienced the most significant decreases in welfare participation rates through the 1990s, driven not only by lower entry rates, but also substantially higher exit rates. This experience contrasts with the experiences of unattached individuals and childless couples, whose SA participation rates fell less, and whose entry rates were offset by declines – not increases – in their exit rates. These diverse outcomes materialized in a context where the different family types faced the same economic conditions and roughly similar policy developments (e.g., reduced benefit levels, tighter entry rules, and so on).

We might then ask: is policy being directed where need is greatest? Or more modestly: are unmarried individuals and childless couples being left behind as our policy energies are directed at families with children, who might be well on the path to recovery even in the absence of new means of assistance?

Beyond being able to break down what has been happening to SA participation in terms of the underlying entry and exit dynamics at the national level, our analysis also facilitates comparisons at the provincial level to test – even if in only a very informal manner – what programs appear to have had stronger or weaker effects, and what might work for the different family types studied here.

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## Appendix

TABLE A1 Sample Size and Sample Exclusions

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Full LAD	3,355,675	3,444,185	3,477,365	3,516,100	3,541,345	3,753,525	3,596,685	3,648,720	3,703,995
Filing at least 5 yrs	499,190 14.88%	435,535 12.65%	340,445 9.79%	249,030 7.08%	144,480 4.08%	280,110 7.84%	411,220 11.43%	566,775 15.53%	725,300 19.58%
Meet age restriction	1,540 0.05%	1,650 0.05%	1,765 0.05%	2,245 0.06%	3,530 0.10%	3,175 0.09%	2,715 0.08%	2,050 0.06%	875 0.02%
Meet family edit restriction	175,580 5.23%	250,785 7.28%	310,960 8.94%	369,160 10.50%	369,145 10.42%	307,475 8.60%	234,005 6.51%	167,745 4.60%	159,780 4.31%
Not disabled	352,820 10.51%	391,025 11.35%	428,530 12.32%	464,295 13.20%	509,275 14.38%	461,055 12.90%	426,415 11.86%	385,885 10.58%	333,010 8.99%
Not a student	112,865 3.36%	112,810 3.28%	115,800 3.33%	181,750 5.17%	317,820 8.97%	312,760 8.75%	294,070 8.18%	285,220 7.82%	144,303 3.90%
Final sample	2,210,680 65.88%	2,252,380 65.40%	2,279,865 65.56%	2,249,620 63.98%	2,197,095 62.04%	2,208,950 61.81%	2,228,260 61.95%	2,241,045 61.42%	2,341,000 63.20%



**TABLE A2 Social Assistance Rates in Constant 2000 Dollars**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>NF</b>												
Single employable	4,877	4,851	4,775	5,011	4,949	4,940	4,836	2,752	1,200	1,206	1,204	1,679
Disabled	9,825	9,727	9,431	9,638	9,507	9,490	9,291	9,141	9,068	9,022	8,938	8,807
Single parent & child	12,417	12,400	12,535	13,046	12,884	12,861	12,591	12,388	12,303	12,271	12,122	11,904
Couple, two children	14,365	14,339	13,874	14,119	13,941	13,916	13,624	13,405	13,439	13,387	13,153	12,813
<b>PEI</b>												
Single employable	9,087	9,049	9,043	9,171	9,102	8,177	6,300	5,700	5,757	5,704	5,603	5,744
Disabled	10,575	10,473	10,320	10,443	10,351	10,223	9,836	9,065	8,889	8,807	8,651	8,711
Single parent & child	12,527	12,631	12,528	12,722	12,643	12,402	11,811	11,266	10,800	10,375	9,778	9,844
Couple, two children	18,658	18,665	18,768	18,993	18,843	18,481	17,735	16,360	16,409	15,715	14,715	15,005
<b>NS</b>												
Single employable	7,697	7,347	6,984	6,878	6,754	6,742	6,601	6,514	4,796	4,751	4,610	4,488
Disabled	10,132	10,072	9,923	9,786	9,610	9,757	9,579	9,425	9,279	9,193	9,031	8,791
Single parent & child	12,315	12,230	12,081	12,079	11,861	12,029	11,806	11,616	11,436	11,140	10,700	10,304
Couple, two children	15,666	14,976	14,470	14,483	14,268	14,243	13,944	14,962	15,153	14,696	13,486	13,195
<b>NB</b>												
Single employable	3,681	3,627	3,549	3,551	3,501	3,522	3,461	3,445	3,431	3,399	3,339	3,250
Disabled	9,645	9,497	9,218	9,227	9,166	7,190	7,164	7,131	7,216	7,185	7,058	6,870
Single parent & child	9,980	9,827	9,606	9,674	9,701	10,100	10,594	10,530	10,657	10,648	10,460	10,180
Couple, two children	10,797	10,617	10,515	10,855	10,882	11,278	11,860	11,782	12,091	12,159	11,944	11,622
<b>QUE</b>												
Single employable	4,601	6,531	6,781	6,983	7,001	6,852	6,708	6,600	6,401	6,309	6,349	6,238
Disabled	8,272	8,583	8,825	9,094	9,088	9,236	9,042	9,095	9,084	9,168	9,182	9,074
Single parent & child	11,179	11,915	10,901	12,376	12,886	13,165	12,888	12,681	12,012	11,613	11,110	10,558
Couple, two children	14,599	14,290	14,706	15,203	15,650	15,444	15,120	14,876	14,116	13,617	12,840	12,298
<b>ONT</b>												
Single employable	8,228	8,987	9,220	9,537	9,502	9,508	8,829	7,242	7,173	7,107	6,981	6,795
Disabled	11,880	12,677	12,954	13,167	13,087	13,094	12,819	12,613	12,418	12,303	12,085	11,764
Single parent & child	14,767	16,553	16,956	17,262	17,230	17,242	15,994	13,134	12,955	12,508	11,879	11,381
Couple, two children	18,635	21,719	22,119	22,596	22,531	22,340	20,595	16,971	16,741	16,036	15,041	14,277
<b>MAN</b>												
Single employable	7,879	7,984	7,886	8,045	7,912	7,365	7,220	6,677	5,796	5,743	5,641	5,491
Disabled	8,567	8,458	8,316	10,224	9,205	9,133	8,940	8,797	8,661	8,581	8,502	8,328
Single parent & child	11,498	11,362	11,170	12,370	11,093	11,004	10,773	10,600	10,436	10,015	9,424	9,204
Couple, two children	18,661	20,083	20,086	20,668	18,838	19,167	18,753	16,800	15,543	14,670	13,688	13,181
<b>SASK</b>												
Single employable	6,362	6,220	6,033	6,262	6,589	6,578	6,440	6,336	5,709	5,674	5,839	5,797
Disabled	10,367	10,042	9,653	9,565	9,472	9,456	9,257	9,372	8,379	8,380	8,601	8,473
Single parent & child	12,994	12,627	12,153	12,012	11,876	11,855	11,606	11,419	11,243	9,966	9,995	9,700
Couple, two children	18,030	17,511	16,829	17,106	16,866	16,902	16,550	16,283	15,097	14,526	14,495	13,813

**TABLE A2 Social Assistance Rates in Constant 2000 Dollars (continued)**

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>AL</b>												
Single employable	6,287	5,999	6,523	6,571	6,191	5,399	5,286	5,201	5,151	5,176	5,084	4,949
Disabled	7,775	7,419	7,811	7,759	7,530	7,501	7,365	7,247	7,165	7,172	7,228	7,572
Single parent & child	11,789	11,248	11,803	11,771	11,298	10,497	10,277	10,110	10,037	9,854	9,569	9,201
Couple, two children	17,369	16,573	18,268	18,268	17,606	16,527	16,347	16,084	15,911	15,522	14,739	14,233
<b>BC</b>												
Single employable	7,090	7,249	7,133	7,349	7,371	7,554	7,420	6,744	6,640	6,579	6,462	6,342
Disabled	9,783	10,122	9,888	10,317	10,384	10,626	10,439	10,271	10,112	10,019	9,841	9,659
Single parent & child	12,807	12,945	12,683	13,250	13,292	13,619	13,376	13,160	12,903	12,459	11,837	11,446
Couple, two children	15,996	16,110	15,735	16,763	16,857	17,368	17,058	16,784	16,416	15,723	14,748	14,109



TABLE A3 Social Assistance Participation Rates

	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Singles</b>									
Canada	15.03	20.47	20.26	20.09	19.25	18.69	17.84	16.88	15.92
NF	11.50	18.47	19.53	22.34	21.90	22.67	22.20	21.61	21.04
PE	11.54	15.91	15.71	13.77	13.54	14.02	14.37	12.71	12.01
NS	10.52	16.10	16.24	16.93	16.48	16.68	14.64	15.83	12.67
NB	15.08	21.35	19.46	20.11	19.14	19.28	18.83	18.25	17.49
QC	16.76	23.42	23.85	24.22	24.34	24.23	23.55	22.32	21.38
ON	16.44	21.09	20.89	20.06	18.85	18.03	16.82	15.50	14.11
MA	14.26	17.33	16.00	17.17	14.84	14.62	13.83	12.61	12.17
SK	9.93	16.16	17.38	16.53	16.16	14.92	15.08	14.35	15.35
AB	10.43	12.62	10.42	10.78	10.64	9.48	9.55	9.43	9.23
BC	13.28	20.61	20.76	19.25	17.43	16.75	15.81	15.49	15.44
<b>Attached with Children</b>									
Canada	7.76	9.22	9.35	8.91	8.39	7.78	7.04	6.29	5.92
NF	8.31	11.21	11.33	13.21	13.29	12.88	12.42	11.35	10.75
PE	7.02	7.99	7.48	7.66	6.61	7.06	6.04	5.37	4.62
NS	6.15	8.17	7.97	7.96	7.88	7.50	6.34	7.13	5.80
NB	7.74	8.86	8.10	7.80	8.51	8.44	7.88	7.21	7.08
QC	6.88	8.56	9.08	8.82	9.16	9.03	8.01	7.33	7.06
ON	9.05	10.57	11.13	10.33	9.10	8.31	7.45	6.30	5.63
MA	6.12	7.27	6.93	6.95	6.47	6.00	5.48	5.20	5.07
SK	6.35	7.91	8.41	7.44	7.35	6.98	7.43	7.21	7.75
AB	7.61	7.59	5.31	5.21	4.82	3.66	3.86	3.70	3.59
BC	7.10	8.95	9.25	8.71	7.88	6.96	5.89	5.48	5.53
<b>Attached without Children</b>									
Canada	4.64	6.14	6.00	5.47	5.05	4.76	4.33	3.98	3.99
NF	4.41	6.07	5.98	6.61	6.80	6.99	6.69	6.58	6.18
PE	3.05	4.20	3.85	2.44	2.89	2.94	2.61	2.51	2.02
NS	3.34	4.98	4.63	4.46	4.48	4.02	3.28	3.72	3.38
NB	4.50	6.10	5.76	5.43	5.21	5.20	5.15	4.54	4.62
QC	5.27	7.03	7.26	6.92	6.93	6.73	6.16	5.62	5.65
ON	5.16	6.79	6.65	5.84	4.99	4.65	4.16	3.72	3.67
MA	2.98	3.65	3.30	3.27	2.77	2.49	2.03	2.20	2.05
SK	2.43	3.55	3.45	3.17	2.83	2.66	2.51	2.51	2.64
AB	3.67	4.01	2.92	2.96	2.77	2.34	2.42	2.43	2.60
BC	3.95	5.65	5.62	4.85	4.37	3.99	3.30	3.15	3.20
<b>Lone Mothers</b>									
Canada	46.92	47.96	48.63	50.11	47.55	45.41	41.61	36.32	33.58
NFLD	46.37	50.91	51.35	55.68	53.55	55.25	53.74	49.20	49.71
PEI	50.00	53.79	50.98	45.52	46.21	44.22	43.75	36.55	36.00
NS	52.52	56.09	56.27	56.38	53.56	53.12	44.99	50.05	41.46
NB	52.88	51.74	46.82	47.61	47.60	48.31	45.06	40.67	38.84
QUEB	37.66	41.92	43.87	45.70	44.77	43.93	39.65	35.19	31.97
ONT	53.42	52.91	54.91	56.08	52.27	49.66	45.18	37.49	33.18
MAN	42.71	42.39	42.22	43.49	41.36	39.01	37.65	34.09	33.66
SASK	45.69	47.68	47.73	48.43	46.67	45.43	44.58	45.71	44.44
ALB	45.47	40.17	34.68	34.10	31.93	26.98	25.26	22.61	22.20
BC	46.90	48.53	49.31	52.73	49.22	46.16	41.32	37.83	37.06

TABLE A4 Social Assistance Entry Rates

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Singles</b>								
Canada	5.79	3.76	3.61	2.86	3.12	2.46	2.23	1.79
NF	8.04	5.44	6.08	3.84	4.70	3.55	3.54	3.93
PE	5.14	3.64	2.60	2.71	3.71	2.29	2.10	1.29
NS	4.51	3.68	3.59	2.99	3.38	2.66	2.02	2.01
NB	6.11	3.77	4.75	3.20	3.87	3.06	3.07	2.69
QC	6.19	3.90	3.83	3.52	3.98	3.06	2.77	2.35
ON	6.24	4.06	3.60	2.68	2.91	2.18	1.92	1.42
MA	4.70	2.71	3.19	2.14	2.64	1.91	1.69	1.45
SK	4.38	3.40	2.84	2.24	2.72	2.53	2.29	1.87
AB	3.56	2.17	2.93	1.93	1.56	1.88	1.73	1.37
BC	5.88	3.98	3.53	2.88	2.97	2.36	2.27	1.65
<b>Attached with Children</b>								
Canada	1.79	1.23	1.13	0.94	0.85	0.76	0.67	0.55
NF	4.14	2.25	3.28	2.31	1.98	2.12	1.77	1.62
PE	1.42	1.67	0.97	1.45	1.49	0.74	0.73	0.74
NS	2.02	1.42	1.53	1.31	1.05	0.96	0.64	0.68
NB	2.00	0.98	1.29	1.61	1.55	1.18	0.84	1.02
QC	1.69	1.23	1.16	1.04	0.95	0.71	0.66	0.59
ON	1.98	1.36	1.00	0.76	0.74	0.60	0.49	0.38
MA	1.38	0.68	0.84	0.72	0.73	0.57	0.69	0.68
SK	1.45	1.09	0.85	1.12	0.97	1.40	1.25	1.21
AB	1.14	0.71	1.00	0.81	0.46	0.88	0.69	0.45
BC	1.69	1.33	1.23	0.96	0.97	0.76	0.88	0.62
<b>Attached without Children</b>								
Canada	1.34	0.99	0.90	0.71	0.70	0.55	0.45	0.34
NF	1.82	1.45	2.05	1.36	1.48	1.33	1.21	0.92
PE	1.36	0.43	0.83	0.00	0.73	0.72	0.69	0.33
NS	1.30	0.85	0.76	0.82	0.67	0.51	0.45	0.44
NB	1.29	1.01	1.08	0.99	0.97	0.92	0.59	0.68
QC	1.54	1.19	1.11	0.95	0.92	0.68	0.59	0.40
ON	1.45	1.11	0.89	0.68	0.67	0.46	0.34	0.27
MA	0.85	0.36	0.60	0.25	0.33	0.20	0.31	0.20
SK	0.84	0.53	0.36	0.29	0.38	0.28	0.31	0.27
AB	0.73	0.51	0.62	0.47	0.37	0.50	0.39	0.32
BC	1.30	0.85	0.85	0.65	0.69	0.54	0.46	0.32
<b>Lone Mothers</b>								
Canada	13.25	8.45	8.39	6.26	6.66	5.80	5.40	4.83
NFLD	18.81	10.82	14.05	7.02	10.38	9.44	4.74	7.96
PEI	19.23	10.87	9.62	10.00	6.78	9.52	7.69	6.85
NS	13.74	8.88	7.19	7.00	7.94	6.28	5.31	5.50
NB	13.44	8.31	11.40	8.58	9.41	6.92	5.57	5.36
QUEB	13.00	7.14	6.59	5.81	6.82	4.69	4.27	3.90
ONT	14.18	9.08	7.82	5.47	5.89	4.74	4.75	3.88
MAN	10.32	7.48	7.39	5.23	5.21	5.56	5.47	5.60
SASK	13.85	10.41	11.11	8.17	9.17	12.74	11.32	11.02
ALB	9.72	7.31	8.94	7.16	5.71	7.11	6.12	5.27
BC	13.74	9.84	11.29	7.05	7.68	6.66	7.04	6.32



TABLE A5 Social Assistance Exit Rates

	1992	1993	1994	1995	1996	1997	1998
<b>Singles</b>							
Canada	17.93	15.80	18.04	15.75	16.24	14.52	12.41
NF	22.49	12.33	17.58	14.56	15.58	15.14	11.76
PE	25.00	25.64	21.95	15.00	22.45	14.00	15.91
NS	17.29	16.06	18.06	17.98	17.57	16.02	21.45
NB	21.94	17.86	18.73	15.60	16.98	14.00	13.01
QC	11.75	10.99	14.64	12.47	13.10	11.83	9.91
ON	19.44	18.14	19.38	16.50	18.00	16.57	13.78
MA	19.11	13.28	19.51	16.99	20.60	19.94	15.29
SK	20.72	20.39	19.06	19.86	17.35	13.02	12.22
AB	34.81	20.66	21.67	23.67	16.95	16.67	15.04
BC	22.98	21.37	22.58	20.17	19.71	16.23	13.71
<b>Attached with Children</b>							
Canada	26.48	26.60	27.51	27.32	28.55	30.49	29.81
NF	25.77	16.93	20.36	21.27	24.64	24.49	24.14
PE	36.36	31.82	40.00	28.57	33.33	42.11	46.15
NS	32.52	32.03	27.07	30.60	28.57	33.06	29.79
NB	35.76	23.26	26.09	28.17	29.66	30.50	28.81
QC	17.73	20.00	20.35	19.97	23.97	26.52	23.03
ON	25.32	28.14	30.02	27.21	28.56	31.50	32.77
MA	27.74	25.52	28.86	28.06	33.09	30.00	29.90
SK	26.24	32.24	30.61	32.43	29.20	29.73	31.85
AB	47.94	40.48	39.04	48.10	39.56	39.90	43.02
BC	35.34	33.72	33.05	38.96	38.63	36.59	34.58
<b>Attached without Children</b>							
Canada	26.54	27.21	27.18	25.20	24.86	23.54	21.06
NF	23.81	23.08	25.00	23.19	21.33	23.26	17.72
PE	33.33	20.00	50.00	33.33	25.00	50.00	33.33
NS	37.21	38.64	26.67	34.00	32.61	28.26	25.58
NB	32.69	33.33	26.67	25.00	22.39	26.32	18.46
QC	18.11	22.41	22.21	19.45	20.68	19.68	17.30
ON	27.44	28.11	28.48	26.04	26.19	25.27	23.18
MA	31.91	23.08	25.00	23.08	32.43	18.52	32.00
SK	28.13	27.27	30.00	27.59	26.67	27.27	28.57
AB	47.83	37.97	36.56	40.23	26.92	24.42	27.16
BC	35.09	33.51	34.84	34.60	32.69	29.17	24.83
<b>Lone Mothers</b>							
Canada	12.41	12.17	15.16	16.08	17.40	20.26	21.37
NFLD	15.71	8.87	11.89	11.31	13.00	16.22	12.38
PEI	18.52	16.00	21.57	19.15	19.57	27.08	28.95
NS	9.56	9.17	11.40	10.70	11.38	16.30	16.43
NB	21.38	16.78	15.41	13.54	16.72	20.13	16.92
QUEB	9.15	9.98	12.59	12.41	16.80	17.95	18.07
ONT	9.39	10.59	14.64	15.47	16.07	20.82	24.29
MAN	15.26	15.72	15.90	18.10	17.50	23.15	21.22
SASK	17.22	17.31	19.57	18.67	20.48	18.94	18.90
ALB	28.80	23.84	26.24	32.82	28.63	31.20	31.52
BC	14.62	14.03	16.60	19.41	21.10	19.93	19.22

easily reduce the connection prices and stimulate the demand by a pricing effect. This latter induces a reinforcement of the interaction effect, and so on. In the context of balkanization of telecommunications infrastructures, networks of metropolitan regions become more and more attractive for users to the detriment of networks of peripheral or sparsely populated areas where a critical mass of users is more difficult to obtain. In consequence, the market dynamic does not generate good incentives for suppliers or local communities in peripheral regions to invest in local networks. We illustrate this tendency with the help of maps published by the French regional observatory of ICT (Ortel), which describe broad bandwidth access and MAN projects in 2002 and 2003.

Finally, we discuss the possibilities of improving territorial planning through the interconnection of networks of metropolitan and peripheral regions. In the context of political decentralization and the increasing power of local public communities, competition and co-operation between these latter are the key-features of balanced territorial planning. Using game theory, and the specific game of interconnection, we show that the interconnection of networks of metropolitan and peripheral regions can reduce inequalities of access and increase the aggregate level of welfare if and only if a central regulator imposes this interconnection.

We conclude with the observation that in spite of the *technological* virtues of decentralization and distance reduction of ICT, the development of Internet infrastructures reinforces the *economic* process of polarization. The preconditions of Internet-based territorial planning are probably more *institutional* than economic and market-driven ones.

R. FINNIE, I. IRVINE and R. SCEVIOUR: "Social Assistance Use in Canada: National and Provincial Trends in Incidence, Entry and Exit". Canada witnessed a dramatic decline in welfare participation from 1993/94 to the end of the nineties – one almost on a par with the U.S., but without the sort of landmark legislation adopted there. We explore the dynamics of Social Assistance usage in Canada over this period using data based on tax files for between 2 and 4 million individuals in each year from Canada's Longitudinal Administrative Data – the LAD. The unique attributes of this base – size, longitudinal nature and income information availability – allow us, for the first time, to calculate annual incidence, entry and exit rates both at the national and provincial level, broken down by family type. We discuss the variety of experiences of these groups; we identify the policy context and discuss the implications of the findings.

M. FOUGÈRE, S. HARVEY, M. MÉRETTE and F. POITRAS: "Ageing Population and Immigration in Canada: An Analysis with a Regional CGE Overlapping Generations Model". This paper uses both a demographic model and a regional overlapping generations model calibrated on Canadian data to evaluate the potential economic-welfare and intergenerational equity implications of increasing the number of immigrants on national and regional labour markets, real per-capita income and wages. The simulations are performed according to alternative scenarios of regional residential location decision of immigrants in Canada.



## *Résumés*

J. VICENTE : « « Balkanisation » des infrastructures de télécommunications et aménagement du territoire : une approche par l'économie des réseaux ». L'article étudie les liens qu'entretiennent aménagement du territoire et réseaux numériques en s'appuyant sur le cas du déploiement des réseaux métropolitains haut débit. En mobilisant les outils de l'économie des réseaux, l'article se consacre à la dynamique de marché des infrastructures de réseaux et à leur diffusion des espaces métropolitains vers les espaces périphériques. Cette dynamique de marché montre que la possibilité offerte aux collectivités locales d'être opérateur de télécommunication ne pourra atteindre les objectifs d'aménagement du territoire que si sont instaurés des mécanismes de régulation de la coopération décentralisée entre collectivités.

R. FINNIE, I. IRVINE et R. SCEVIOUR: « L'utilisation de l'aide sociale au Canada: Les tendances nationales et provinciales en termes de fréquence, et les taux d'entrée et de sortie » [Social Assistance Use in Canada: National and Provincial Trends in Incidence, Entry and Exit]. Durant la récession du début des années 1990, le taux de participation à l'aide sociale (AS) a augmenté de façon considérable. En réponse à cette hausse, la majorité des provinces canadiennes, chacune à leur mesure, ont instauré des changements notables à leur programme afin de diminuer la dépendance à l'AS. Suite à ces changements, et alors que l'économie commençait à remonter la pente, particulièrement après 1995, le Canada a été témoin d'une diminution drastique dans les taux de participation aux programmes sociaux de 1993/94 jusqu'à la fin des années 1990 – une diminution quasi similaire à celle des Etats-Unis, sans les mesures draconiennes qui y ont été adoptées.

Dans cette étude, nous nous attardons à la dynamique de la participation à l'aide sociale au Canada durant cette période en utilisant des données relatives aux dossiers fiscaux d'environ 2 à 4 millions d'individus par années recueillies dans la banque de Données Longitudinales Administratives (DAL). L'aspect longitudinal des données, qui définit les individus autant avant, pendant qu'après leur participation à l'AS, nous permet pour la première fois non seulement de calculer les taux de participation à chaque année mais aussi les taux d'entrée et de sortie. De plus, l'ampleur de l'échantillon nous permet de segmenter l'analyse en deux parties, soit par types de famille et par provinces. Cette segmentation est particulièrement intéressante dans un contexte où le développement des politiques

varie par province et par type de famille et où chaque province n'a pas traversé la récession et l'expansion qui a suivi de la même manière.

Dans cette étude, nous analysons l'ensemble des expériences relatives à chacun des groupes. Les conclusions principales qui en découlent sont les suivantes. Pour ce qui est de la fréquence et de l'entrée, les taux ont atteint des sommets entre 1993 et 1995, et ont ensuite diminué de façon drastique durant le reste de la décennie et ce pour tous les types de familles (célibataires, couples avec enfants, couples sans enfant et mères seules) malgré des variations considérables dans la forme et dans l'étendue de ces diminutions. Les taux de sortie, par contre, diffèrent beaucoup entre types de familles. Les couples avec enfants et les mères seules ont vu leur taux de sortie s'accroître alors que les célibataires et les couples sans enfant ont expérimenté le contraire. Également, on constate des différences importantes au niveau provincial dans ces taux – en terme d'amplitude, de temps et même de direction des changements. Finalement, dans cette étude, nous discutons du contexte politique de l'époque et de l'implication de ces résultats.

M. FOUGÈRE, S. HARVEY, M. MÉRETTE et F. POITRAS: « La population vieillissante et l'immigration au Canada : Une analyse avec un modèle régional calculable d'équilibre général à générations imbriquées » [Ageing Population and Immigration in Canada: An Analysis with a Regional CGE Overlapping Generations Model]. La population canadienne est vieillissante. Cette situation n'est pas unique au Canada, puisque l'ensemble des pays industrialisés devrait connaître à divers degrés un phénomène démographique similaire au cours des prochaines décennies. Selon le point de vue conventionnel, le vieillissement démographique pourrait conduire à une baisse significative du niveau de vie, à une rareté relative de la main-d'œuvre et créer des pressions sur les finances publiques, via une hausse des dépenses de pensions publiques et du financement nécessaire pour maintenir un régime de santé adéquat. Parmi les politiques qui visent à amoindrir les conséquences socio-économiques du vieillissement, l'immigration est un des instruments utilisés par le Canada depuis plusieurs années. En plus des objectifs d'ordre humanitaire et de reconstitution des familles, la politique canadienne d'immigration vise des objectifs de croissance économique en cherchant à attirer des travailleurs immigrants qualifiés.

Dans ce contexte, cet article présente une analyse de l'impact à long terme sur le bien-être au Canada et dans les régions d'augmenter le nombre d'immigrants, tout en prenant en compte les pressions démographiques. L'étude se penche également sur les répercussions sur le marché du travail, ainsi que les implications sur l'équité intergénérationnelle. Afin d'étudier cette question, les auteurs utilisent deux principaux outils d'analyse, soit un modèle de projection démographique ainsi qu'un modèle régional calculable d'équilibre général à générations imbriquées. Les valeurs des paramètres du modèle régional à générations imbriquées ont été calibrées afin de représenter l'économie canadienne. La structure du modèle à générations imbriquées est dynamique et est composée de six régions : l'Atlantique, le Québec, l'Ontario, les Prairies (Manitoba et Saskatchewan), l'Alberta et la Colombie-Britannique. Chaque région produit un