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Originally published by the IRC Press in 1985 in the School of Industrial Relations Research Essay Series No. 2



An Analysis of Dual-Earner Families in Canada

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ISBN: 0-88886-127-3
©1984, Cindy Harpell
Printed and bound in Canada.

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K7L 3N6

Canadian Cataloguing in Publication Data

Harpell, Cindy.
An analysis of dual-earner families in Canada

(School of Industrial Relations research essay
series ; no. 2)

Bibliography: p.
ISBN 0-88886-127-3

1. Married people - Employment - Canada. 2. Wives -
Employment - Canada. 3. Family - Economic aspects -
Canada. I. Queen's University (Kingston, Ont.).
Industrial Relations Centre. II. Title. III. Series.

HD6055.2.C2H37 1985 331.4'3'0971 C86-093134-X

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FOREWORD

The Industrial Relations Centre is pleased to include this study, *An Analysis of Dual-Earner Families in Canada*, in its new publication series *School of Industrial Relations Research Essay Series*. The series is intended to give wider circulation to selected student research essays, chosen for both their academic merit and their interest to industrial relations practitioners and policy makers.

A substantial research essay is a major requirement of the Master's Program in Industrial Relations at Queen's. The essay may be an evaluation of a policy oriented issue; a limited empirical project; or a critical analysis of theory, policy, or the related literature in a particular area of industrial relations. This particular essay was written under the supervision of Dr. Pradeep Kumar of the School of Industrial Relations.

The author of the essay, Cindy Harpell, graduated from the School of Industrial Relations in September 1984. She is a Human Resource Analyst with Esso Petroleum Canada in Vancouver, B.C.

I would like to express my appreciation to the author for granting permission to publish this excellent study.

D.D. Carter, Director,
Industrial Relations Centre
and School of Industrial Relations,
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December 1985

INTRODUCTION

Over the last 20-30 years, the Canadian family has changed quite dramatically in terms of its size and the number of earners. In particular, the increasing number of families in which both the husband and wife work (dual-earner) is fast becoming a trend in our society. Families in which just the husband works (traditional-earner) are steadily declining in number as more and more wives enter the labour market. In addition, families appear to be getting smaller in size as more and more married couples are choosing to have fewer children. Moreover, more couples are choosing not to have children at all compared to 20-30 years ago.

As the number of dual-earner families continues to rise, their impact on the economy and in particular, the labour market, will increase as well. The steady growth of dual-earner families has possible social and economic implications, in particular, for labour market policy, income distribution and child care. Hence, it is of the utmost importance that research in this area be stimulated in order to provide us with the required knowledge to deal with the potential problems and concerns of this growing family type.

The aim of this paper is to provide a general overview of dual-earner families in Canada. This paper is primarily a survey paper which provides an analysis of the existing literature and data on this topic. Unfortunately, little research has been done in Canada on dual-earner families specifically. However, much research has been undertaken with respect to the labour force behaviour of married women. By combining the findings of previous research on the labour force behaviour of married women, together with relevant family data, we can get a general descriptive profile of dual-earner families in Canada. It should be emphasized that the family data that is available is not sufficient to provide a detailed economic analysis in this respect. Furthermore, the methods in which family data have been collected over the years makes it difficult to draw comparisons from one year to the next. Despite this problem, data that is available from the Census publications, the Labour Force Survey and the Survey of Consumer Finances will be used in this analysis. (For a brief summary of the relevant data available from these publications, as well as concepts used in these various data sources, see Appendix 1.)

The outline of this paper is as follows: In order to provide a theoretical framework for this analysis, a discussion of relevant labour supply theories is presented first. Some of the predictions and implications of these theories are examined in light of some of the empirical evidence that exists with respect to the possible determinants of the labour force participation of married women. In order to gain some perspective of the historical trends of dual-earner families, an analysis of the data on dual-earner families and wives' labour force participation rates for the period from 1951 to 1981 is presented. Included in this analysis is a review of some of the major factors which have contributed to the historical rise in wives' labour force participation. This is followed by an analysis of selected data from the 1981 husband-wife family census publications. This data is used to provide a general descriptive profile of the major characteristics of dual-earner families in Canada including a comparison with traditional-earner families. Finally, some of the major implications of dual-earner families are investigated. Since the presence of children (especially preschool children) appears to be the most important determinant of wives' labour force participation, the implications for child care are emphasized.

LABOUR SUPPLY THEORY

The traditional theory of labour supply is based on the work-leisure choice model. This model views the "household" as synonymous with the "individual". The total time available to the individual is dichotomized into working and non-working time (the latter referred to as leisure). This simple model determines what will happen to the individual's choice between work and leisure (assuming leisure is a normal good) should the individual be faced with an increase in his or her wage rate.

On the one hand, the individual may choose to work more when faced with a higher wage rate because the opportunity cost of leisure or the income foregone by not working is higher. In other words, the individual may substitute away from leisure because leisure becomes more costly. This is called the substitution effect.

On the other hand, the higher wage rate implies a higher potential lifetime income for the individual. This potential addition to income will allow for the purchase of more normal goods including leisure. Hence, the individual may choose to work less and consume more leisure because he or she can afford not to have to work as much. This is called the income effect of a wage increase and it works in the opposite direction of the substitution effect to reduce hours worked. (However, whether the substitution effect dominates the income effect or vice versa is an empirical question that cannot be answered a priori.)

In terms of labour supply, it has been argued that on average the income effect is stronger than the substitution effect.¹ This notion is behind the theory of the "backward-bending" supply curve for labour.² As wages begin to increase the substitution effect dominates and the individual increases hours worked. However, over time, as wages continue to rise the income effect begins to dominate the substitution effect and the individual reduces hours worked. In other words, at low wage rates people have unmet needs so when wages increase they work more in order to make money to fulfill these needs. Once these needs are met, additional increases in wages can be used to buy more leisure thus leading to a decrease in hours worked. (As we will observe later on in this paper, the steady rise over the last 30 years in the labour force participation of females, notably of married women, appears to contradict the theory of the backward-bending supply curve.)

In analyzing the labour force participation of married women the simple work-leisure choice model needs to be modified. The basic framework of the traditional model has been extended, most notably by the work of Gary Becker and Jacob Mincer.³ In particular, two major modifications have been introduced. First, labour supply decisions are not based on just individual choices but rather, they are perceived as family choices. Second, households are viewed to be producers as well as consumers. One important difference between the modified theory and the traditional theory is that, the former recognizes that the relevant allocation of time is not just between paid market work and leisure (traditional theory), but instead involves a three-way choice between leisure, paid market work and work at home. In other words, time can be used to earn income in the labour market, which can be used to buy goods or used to produce and consume commodities at home. Becker suggests that households combine time and market goods to produce household commodities that yield satisfaction such as cooking, entertaining, childrearing and so forth.

According to Becker, the new approach to the conventional consumer theory has certain implications for the division of labour within families:

Instead of simply allocating time efficiently among commodities, multi-person households also allocate the time of different members. Members who are relatively more efficient at market activities would use less of their time at consumption activities than would other members. Moreover, an increase in the relative market efficiency of any member would affect a reallocation of the time of all other members towards consumption activities in order to permit the former to spend more time at market activities. In short, the allocation of the time of any member is greatly influenced by the opportunities open to other members.⁴

Therefore, operating as one unit, family members choose between paid market income and the demands of other facets of life.

Space is too limited here to derive the modified work-leisure choice model. An empirical explanation of the model can be found in Becker's article. Nicholas Skoulas provides a rigorous discussion of the model from a Canadian perspective in his econometric analysis of the determinants of the labour force participation rate of married women.⁵ A brief description of the structure of this model is provided as follows:⁶

For simplicity, assume that the family consists of just the husband and the wife. The utility function of this family (U) is a function of leisure time of each member as well as market and home goods:

$$U=U(L_h, L_w, H_k, X)$$

where:

L_h =husband's leisure time

L_w =wife's leisure time

H_k =amount of home goods

X =amount of market goods

The family attempts to maximize its utility subject to three constraints.⁷ The budget constraint states that expenditure on market goods and inputs must not be greater than the family's income; the time constraint states that for each member of the family, leisure, market work and work done at home cannot be greater than total available time; and the goods constraint which involves a home good production function, shows the combination of market goods and time used to produce goods at home.

There have been many studies in the U.S.A. and Canada that have attempted to explain the labour force behaviour of married women. In most cases the studies were based on a modified version of the traditional work-leisure choice model such as the one described above.⁸ Technically speaking, there are three types of studies: studies based on time series data; studies based on cross-sectional data and; panel data studies. Each of these types of studies will be discussed briefly in turn emphasizing both the advantages and disadvantages associated with each.⁹

Much of the data on labour force behaviour collected by Statistics Canada and other government agencies is collected from individuals or households. Usually the data is aggregated and if the same aggregated

data is available over a period of time it is referred to as time series data. An advantage of time series data is that changes in certain variables such as the national unemployment rate can only be observed over time, and it is only with the passing of time that changes in the unemployment rate can be related to labour force behaviour. Time series data is particularly useful in analyzing the trends in the participation rates of women because the steady rise in participation is a phenomenon that has occurred over time. A major disadvantage associated with time series studies is that it is difficult to control for and measure shifts or changes over time in the proportions of the population with certain types of characteristics. For instance, over the last 20-30 years, there has been an increasing number of married couples having fewer children. In studies of the labour force behaviour of married women it is difficult to control for the impact of such changes on the labour force activity of these women.

Cross-sectional studies based on micro or individual data make it possible to include the individual characteristics of each person in the data base. An advantage associated with cross-sectional studies of the labour force activity of married women is that the observable individual characteristics of these women can be related to their labour force behaviour. However, unobservable individual factors are difficult to control and measure. For instance, a married woman's "value" or importance attached to non-market activities at various stages of her life cycle, will no doubt influence her labour force behaviour over the years yet, the effects of such are difficult to control for and measure.

Panel data which makes it possible to observe the same individual over successive time periods (of at least two consecutive years) is generally used in studies that attempt to control such unobservable individual effects.¹⁰ Unfortunately, panel data is not yet publicly available in Canada. A disadvantage with panel data studies is that in many cases the time period over which information is available from the data bases is sometimes not long enough to allow for much variation over time in certain variables such as the national unemployment rate.

Although it is clear that there are technical differences associated with each of these types of studies, all of these studies have contributed to our growing knowledge of the labour force behaviour of married women.

Throughout the literature there has been some consensus with respect to some of the major determinants of the labour force behaviour of married women. In many studies it has been hypothesized that the wife's decision to enter the labour market will depend on variables such as total family income including current family income and the potential income of the wife, total family assets, total time available as well as the importance attached to non-market activities, including the amount and nature of work to be done at home. In addition, many demographic variables such as the age and education of the wife, employment and occupational status of the husband, and the presence and number of children at home have been hypothesized throughout the literature as factors which influence the labour supply of married women.

The following section will examine how some of these economic and demographic factors affect the labour force participation of married women. Much of this analysis is based on a review of the existing literature and research on this topic.

POSSIBLE DETERMINANTS OF THE LABOUR FORCE PARTICIPATION OF MARRIED WOMEN

Income and Earnings

According to the modified version of the work-leisure choice model the family rather than the individual is the decision making unit. In other words, the wife's decision to participate in the labour force is strongly influenced by her family. Therefore, in any analysis of wives' labour force activity one must take into account not only the wife's characteristics but also those of her husband and family as well.

Many studies have suggested that the husband's income plays a major role in the decision of whether the wife will work. Most of the early research concludes that the higher the husband's income the less likely the wife will enter the labour force. Similarly, an increase in family income (exclusive of the wife's contribution) will increase the demand for non-market activity (assuming non-market activity is a normal good) and decrease the amount of labour supplied in the labour market. This negative relationship between the husband's income and the wife's participation has been found in cross-sectional studies in both Canada and the U.S.¹¹ The findings of such research appear to suggest a backward-bending supply curve of labour. However, over the last 30 years female labour force participation rates (especially for married women) have increased steadily as real income levels have improved. Hence, it would appear that there is an apparent contradiction between cross-sectional and time series studies.

In the early 1960's Jacob Mincer investigated the apparent contradiction between these two types of studies.¹² His results using cross-sectional data suggest as others have, that wives' labour force participation rates respond negatively to husbands' incomes - the more husbands earn, the less wives work. However, using time series data he found that for each interdecennial comparison that he investigated, his model predicted increases in the labour force participation of married women. Therefore, he observed no apparent contradiction between the results using cross-sectional and time series data. According to Mincer, the impression of a contradiction arises from the way in which cross-section has been looked at, in terms of gross relations between husbands' incomes and the labour force activity of the wives.¹³ The apparent contradiction was based on two factors: to the existence of transitory components in income which reinforced the negative income effect and to the weak covariation of wives' earnings with the husbands' so that the negative income effect outweighed the positive relationship between the wives' labour force activity and their own respective earnings.

Several studies in both Canada and the U.S. have found a positive relationship between the wife's earning power and her labour force participation. (In many of these studies education of the wife was used as a proxy for earning power.) Generally speaking, the positive effect of the wife's earning power has been found to be much stronger than the negative effect of the husband's income.¹⁴ In terms of the work-leisure model, these empirical findings tend to suggest that the substitution effect has dominated the income effect over time. Hence, the negative relationship between husbands' incomes and wives' participation appears to be getting weaker. A possible explanation is the higher educational attainment of wives (which is positively correlated with wives' incomes). Also, as previously noted, the positive effect of the wife's earning power may be greater than the negative impact of the husband's income.

It also appears that the net wealth of a family as well as the income flow affects the wife's tendency to enter the labour market. Hence, ceteris paribus, the larger the family's stock of assets, the less likely the wife is to work outside the home, but the greater the amount of its debt, the more likely she is to enter the labour force.¹⁵

Labour Market Conditions

Labour force participation is responsive to changes in unemployment. Hence, the wife's decision to enter the labour force will be influenced by labour market conditions. Generally speaking, in periods of high unemployment when it is difficult to find a good job, individuals may become discouraged from looking for work and consequently decide to drop out of the labour force for awhile (the discouraged worker effect). However, on the other hand, some individuals may decide to enter the labour force when economic activity declines, in order to supplement family income that may have deteriorated because of periods of high unemployment (the added worker effect).

Changes in unemployment are a proxy for transitory changes in expected wages and other income, and thus the discouraged and added worker effects can be interpreted as short-run substitution and income effects respectively.¹⁶ In other words, when economic activity declines (unemployment is high), opportunities in the labour market are temporarily lowered: the price of leisure temporarily falls and people will substitute leisure for market work. However, on the other hand, when unemployment is high, chances are that family income will be lowered temporarily (this is certainly the case if the head of the household becomes unemployed), and additional family members may have to enter the labour market in an attempt to stabilize family income and consumption standards. Whether the discouraged worker (substitution) or added worker (income) effect dominates is an empirical question therefore, we must look at some of the empirical evidence on this topic to see which effect dominates.

There has been an ongoing debate with respect to which of these effects dominates for married women. The cross-sectional studies conducted in the U.S. clearly indicate that the discouraged worker effect dominates. In Canada, however, the evidence has been inconclusive. For instance, cross-sectional studies such as the work of Sylvia Ostry in 1968 and Bryon Spencer and Dennis Featherstone in 1970, cited evidence of an added worker effect.¹⁷ In the latter study, three possibilities for unemployment status of the husband were used: employed, unemployed and self-employed. Results gave support to the added worker effect - that is, a wife was more likely to be in the labour force if her husband was unemployed than if he was employed; the wife of a self-employed husband was less likely to work than a wife whose husband was employed. Using 1961 census aggregative data, Skoulas found support for the added worker hypothesis for all married women in the 35-44 and 55-64 age groups. However, using 1971 census data, Gunderson in 1977 found no evidence of any substantial added worker effect but rather, the results supported a weak discouraged worker effect.¹⁸ Studies based on time series data also show mixed results.¹⁹ These studies often cite evidence of the added worker effect being dominant; however, the discouraged worker effect appears to become more predominant over time.

Education

It is generally suggested in the literature that the better educated is the wife, the more likely it is that she will be in the labour force. In cross-sectional and panel data studies of the labour force behaviour of

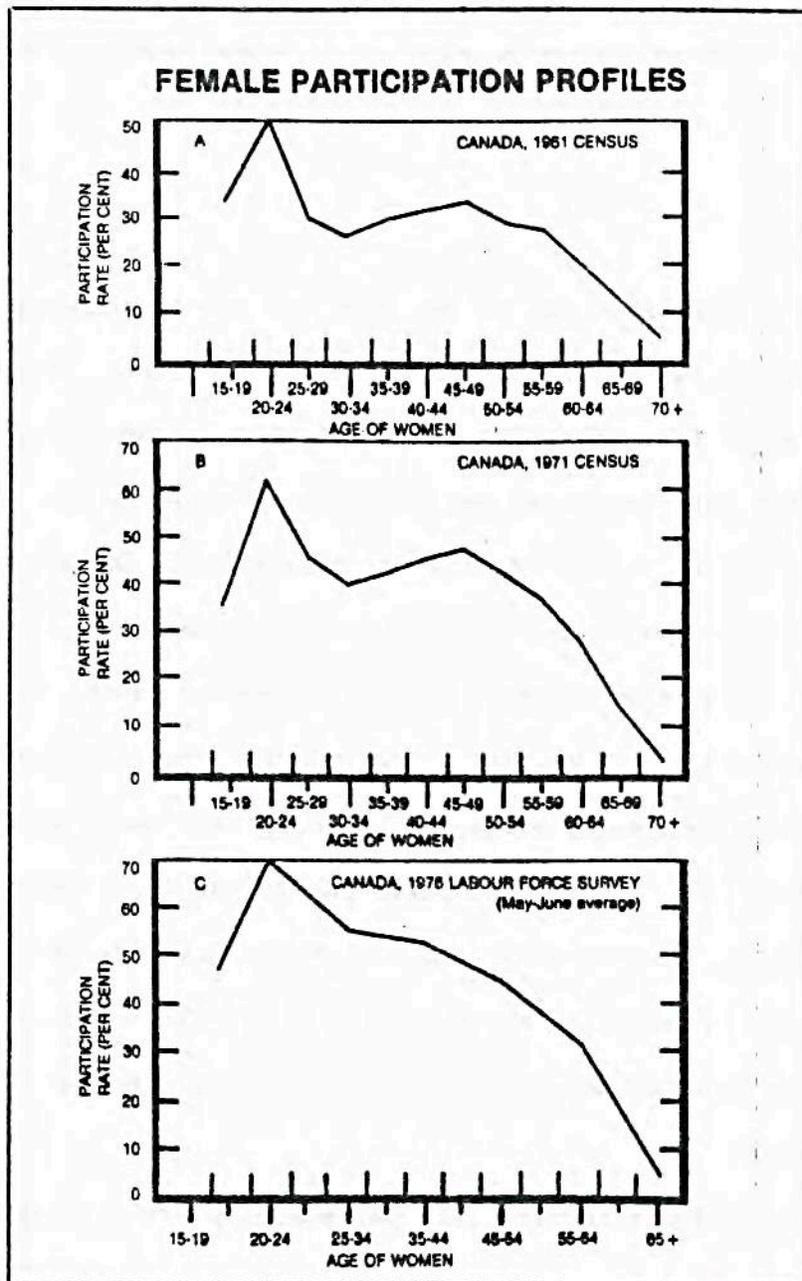
women, education was found to be the variable with the largest impact on the wage rates of working women.²⁰ Generally speaking, the higher the level of education, the higher is the opportunity cost of not working. Hence, women with higher levels of education are more likely to substitute market work for non-market work relative to women with lesser amounts of education.

Age

Throughout her life, age of the wife can act to encourage or discourage labour force participation. Several factors that influence the wife's labour force decision such as family income and responsibilities, education, work experience and the presence of children are all either directly or indirectly tied-in with the wife's age. Several studies have suggested that a negative relationship exists between the wife's age and her labour force participation. Moreover, studies in the late 1950's, 1960's and early 1970's observed a "two-peaked" participation profile for women. That is, young women, having completed their schooling will often work for a few years, then leave the labour force temporarily to have children, then re-enter the work force sometime after having their children - hence, the two-peaked profile. The existence of this two-peaked profile for married women was found in both the Ostry and Skoulas studies.

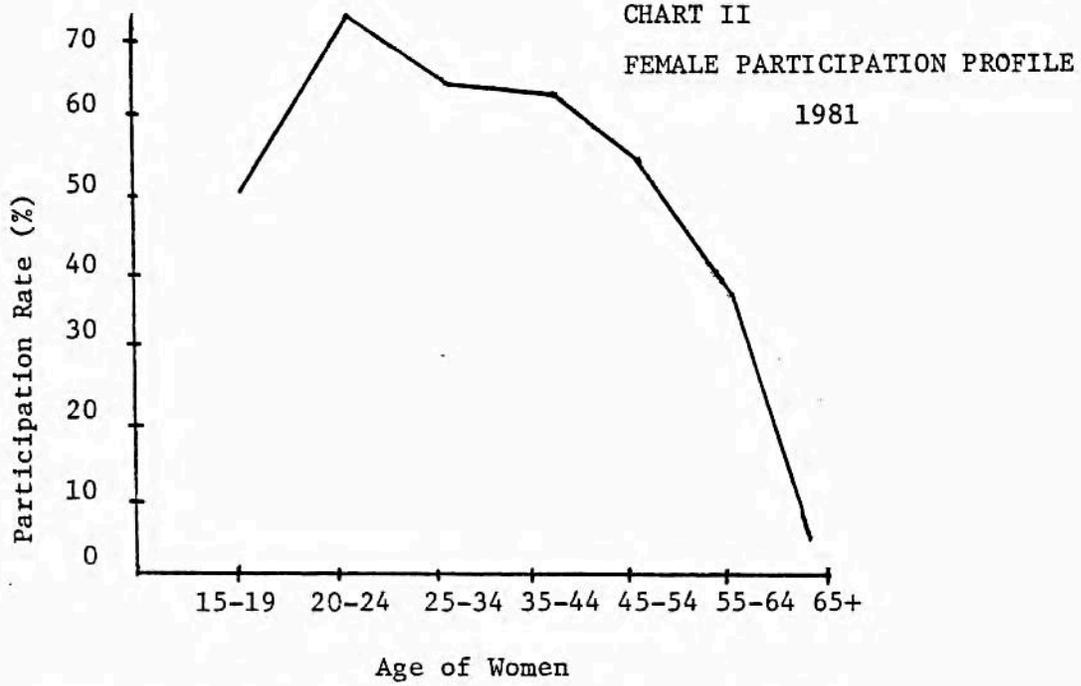
By the mid-1970's however, the two-peaked profile started to disappear (see Chart I). As can be seen from this chart, the two-peaked profile was observable in the 1960's and early 1970's (the top two frames in Chart I) but, by 1976 (bottom frame), the two-peaked profile disappeared. There is still peak participation among women in their early twenties but, after this age, participation rates do not drop as drastically, but appear to plateau at round 50%, then decline after age 54 indicating the tendency toward earlier retirement among women in this age group. More recent data was used to produce the female participation profile in Chart II. By using data for 1981, a profile of similar shape but with higher participation rates than the 1976 profile figure is presented. More specifically, the peak participation is again among women in their early twenties (with a participation rate of 73% for those women aged 20-24 years). Again, after this age, participation rates do not drop drastically, but appear to plateau at around 60%, then decline after age 54 (as in the 1976 profile). Unfortunately, there has been little research done in Canada to explain why the dual-peaked phenomenon has disappeared. One obvious observation that can be made is that many women appear to be remaining in the labour force during their childbearing years. Recall that it was mentioned in the introduction that today many more couples are choosing to have fewer children compared to 20-30 years ago.

Chart I



Source: Ostry and Zaidi (1979), p.46.

Chart II



Source: Canada, Labour Canada (1983), p.65, table 23.

Chart III depicts the labour force participation rates for married women, by age groups, based on census data from 1961, 1971, 1976 and 1981. The data are recorded in Table 1. A two-peaked participation profile existed in 1961 and 1971, but by the mid-1970's it started to disappear and had virtually vanished by 1981. Historically the first peak occurred in the "less than 25" age group. The rate then declined during the main child-bearing years peaking again after age 34. However, over time this two-peaked phenomenon eroded as children became less of a barrier to participation - women delayed having children, had fewer children, and more returned to the workforce after bearing children. During 1961 and 1971 there was a plateau in participation rates for the age groups 35-44 and 45-54, rapidly declining after age 54. However, over the last decade this plateau shifted to the 25-34 and 35-44 age groups, suddenly declining after age 44. This unexplainable phenomenon is illustrated in Chart III.

Presence of Children

The presence of preschool children (under 6 years of age) appears to be the primary determinant of the labour force participation of married women. In the Spencer and Featherstone study, the presence of children was the primary determinant of labour force participation for wives less than 25 and 25-44 years of age, becoming less important for those 45-54 years of age and was almost nil for those women over 54. Similarly, in the Coates study, the presence of young children was found to be the most important determinant explaining labour force participation of married women. Skoulas also found a negative relationship between the labour force participation of younger wives and the presence of children, although a weaker negative effect was found for married women between the ages of 35-54. According to Ostry and Zaidi, the deterrent effect on participation exercised by the presence of older children in the home is weak but when both older and younger children are present, older children do not mitigate the deterrent effect of the younger.²¹ However, from the data presented in table 1, it is clear that today more married women are in the labour force during their main child-bearing years compared to the early 1960's. Hence young children may now be less of a deterrent to the labour force participation of married women.

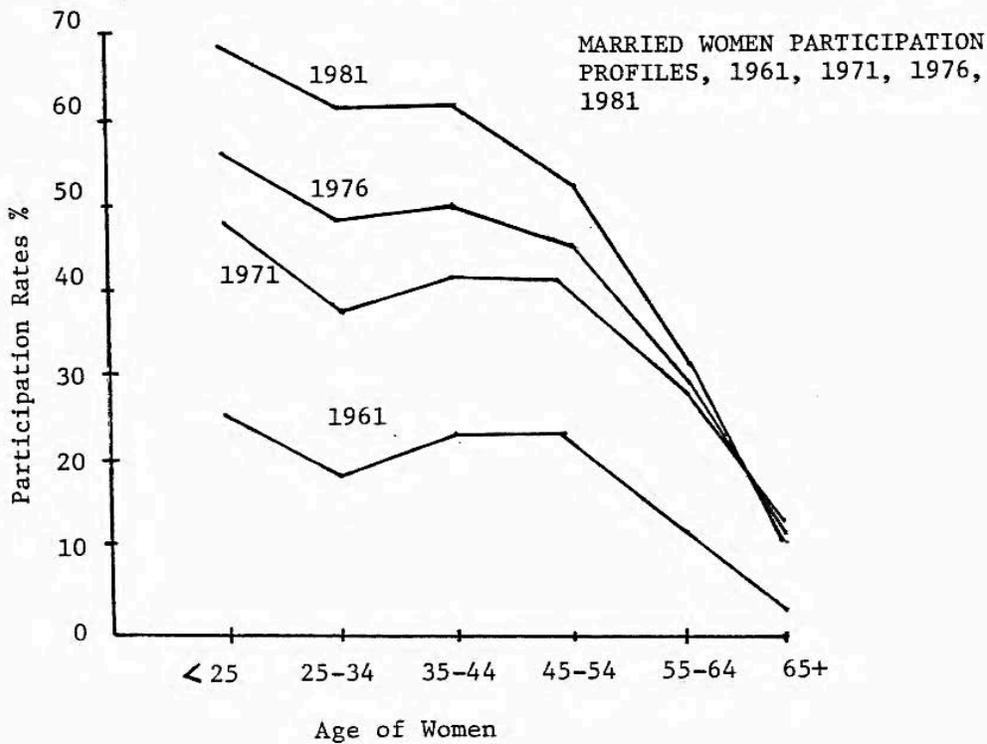
In a recent Canadian study of changes in participation rates, Harvey Sims found that many more married women with preschool children present in the home are working compared to the early 1970's. In particular, he concluded that during the period 1975-1982, married women with preschool children present in the home represented the most dramatic increases in participation than any other female group during that period.²²

Table 1, Labour Force Participation Rates for Married Women, By Age Groups, Canada, 1961, 1971, 1976

Age	1961	1971	1976	1981
Less than 25	24.4	48.7	56.9	68.2
25-34 years	18.7	38.7	48.6	61.5
35-44	21.0	40.4	50.9	62.2
45-54	21.1	40.4	46.1	53.2
55-64	11.9	28.5	29.4	31.6
Over 65	2.2	6.9	6.0	5.3
Total (all ages)	18.5	36.9	43.7	51.9

Sources: Spencer and Featherstone (1970), p.27; Canada, Statistics Canada (94-773), table 6, (94-804), table 11, and (92-915), table 1.

Chart III



Sources: See Table 1 above.

In summary, we have examined some of the major determinants of the labour force participation of married women. It should be noted however, that this does not cover all the possible determinants because space limitation makes such a task impossible. Suffice it to say that the major determinants such as family income and earnings, labour market conditions including the employment status of the husband, education and age of the wife and the presence of young children provide valuable insights into what influences the wife's decision to participate in the work force. The main empirical findings of cross-sectional and panel data studies of the labour force behaviour of married women can be summarized as follows. Wives are less likely to participate in the labour market if they have preschool children and/or the more their husbands' earn and the greater the family assets. Generally speaking, the more educated is the wife, the more likely it is that she will be in the work force and the higher will be her wage rate if she works. In addition, there appears to be a negative relationship between the wife's age and her labour force participation. Several other possible determinants such as occupation of the husband, place of residence and mother tongue of the wife, have been investigated in several studies but the findings have generally been inconclusive.²³

PERSPECTIVE ON THE GROWTH OF DUAL-EARNER FAMILIES AND THE RISE IN THE LABOUR FORCE PARTICIPATION OF WIVES

In the previous section, it was concluded that in general, a negative relationship exists between the husband's income and the wife's participation (although this negative relationship appears to be getting weaker). However, over the years we have witnessed a steady increase in the labour supply of Canadian wives as real incomes have risen. The steady rise in the participation of wives has contributed to the growth of dual-earner families in Canada over the years. This section will attempt to give some understanding of why we have observed an increase in the number of dual-earner families over time, by focusing on some of the major factors that have contributed to or possibly caused the historical increase in the labour force participation of Canadian wives.

For the most part, this analysis will emphasize the trends covering the period from 1961 to 1981. However, some relevant data from 1951 is available and will be used to provide a historical perspective for the thirty year period from 1951 to 1981.

Trends: 1951-1981

Over the thirty year period from 1951 to 1981, the Canadian family has changed, in terms of its size and the number of income earners. In 1951 the typical family consisted of the mother, father and 2.2 children. In 1981 the average family had 1.4 children and there were many more married couples with no children compared to 1951.²⁴

Until recently, husbands have generally been the sole income earner for their families. Traditionally wives remained at home caring for their families and few entered the labour market. In 1951 only about 10% of married women worked. In 1981 more than one half of all married women were in the labour force. As a result, the number of families in which both the husband and wife work has grown significantly over the last 20-30 years.

Table 2 provides data on the labour force activity of members of husband-wife census families for 1961, 1971 and 1981.²⁵ According to this table, in 1961, more than 68% of these families were traditional-earner families and less than 20% were dual-earner families. Since 1961 the percentage of traditional-earner families has fallen dramatically. In particular, in 1971, about one half of husband-wife families had just the husband in the work force. By 1981, the percentage figure had fallen to 27.4. In contrast, the percentage of families in which both the husband and wife worked grew over this period. In 1981, almost 40% of all husband-wife families were dual-earner families, twice the percentage in 1961.

The growth in the number of dual-earner families between 1961 and 1981 resulted directly from the steady increase in wives' labour force participation. The proportion of husband-wife families in which the wife was in the labour force more than doubled between 1961 (20.8%) and 1981 (51.4%) (see Table 3).

Table 4 provides data on female participation rates by marital status for selected years 1960-1983. We can observe from this table that during the 1960's and 1970's there was a steady growth in the total female participation rate. In 1960 the rate was 27.9 and by 1980 the rate was 50.6. The rate for single women fluctuated during this time period as did the rate for widowed and divorced women (the "other" category). Perhaps the most dramatic changes occurred in the rate for married women. The participation rate for married women increased significantly during the 1960's and 1970's. For instance, in 1960, the rate was 19.0 but by 1980 the rate had increased to 48.9.

It would appear from Table 4 that the 1981-82 recession had a negative effect on participation rates for all groups except married women. That is, the rate for single women dropped from 68.0 in 1981 to 65.6 in 1982. The rate for widowed and divorced women, as well as the overall rate, also declined, but by a lesser amount. However, the rate for married women actually increased during the recessionary period - rising from 50.5 in 1981 to 51.2 in 1982. The data seem to suggest that in times of economic downturn, in general, a discouraged worker effect may be evident among non-married women. At first glance it may also appear that an added worker effect prevails for married women. However, the increase in the rate for married women may not be simply the result of an added worker effect. In fact, the nature of the recession itself may have been conducive to the growth in employment for married women. That is, the increase in the demand for part-time workers relative to full-time workers and the fact that the service industries were not hit hard by the recession compared to other industries, are both factors that may have contributed to the increase in demand for married women. Moreover, the increase in the participation rate may also be the result of the continuing, historical upward trend for this group (for all of the reasons previously mentioned, such as increased education and so on).

Table 2, Husband-Wife Census Families by Labour Force Activity of Members, for Canada, 1961, 1971, 1981

	1961	1971	1981
Total husband-wife families	3800026	4605490	5611500
(in percent)	(100.0)	(100.0)	(100.0)
Husband only in labour force (traditional-earner)	68.3	51.1	27.4
Husband and Wife only in labour force (dual-earner)	19.5	34.1	39.1
Three or more persons in labour force	na	na	12.7
Husband not in labour force	1.3	14.8	4.5
No persons in labour force	9.0	na	11.7

Sources: Canada, Dominion Bureau of Statistics (93-520); Canada, Statistics Canada (93-723), (92-935), (92-936).

Na - Data not available

Table 3, Husband-Wife Census Families by Wife's Labour Force Activity for Canada, 1961, 1971, 1976, 1981

	1961	1971	1976	1981
Total husband-wife families	3,800,026	4,605,485	5,175,215	5,611,500
(in percent)	(100.0)	(100.0)	(100.0)	(100.0)
Wife not in labour force	79.2	63.7	56.2	48.6
Wife in labour force	20.8	36.3	43.8	51.4

Sources: Canada, Dominion Bureau of Statistics (93-520); Canada, Statistics Canada (93-720), (93-832), (92-935).

Table 4, Female Participation Rates by Marital Status For Canada, Selected Years, 1960-1983

Year	Single	Married	Other ¹	Total
1960	51.9	19.0	27.7	27.9
1962	50.7	22.0	26.8	29.4
1964	48.8	24.4	27.5	31.8
1966	50.1	26.6	27.9	34.5
1968	49.1	29.6	27.7	34.5
1970	49.8	32.5	28.5	36.5
1972	50.0	33.8	27.9	37.3
1974	53.1	36.7	29.7	40.1
1976	60.7	42.5	31.2	45.4
1978	62.2	46.4	33.1	48.2
1979	63.6	46.9	33.5	48.9
1980	65.4	48.9	34.2	50.6
1981	68.0	50.5	35.5	52.5
1982	65.6	51.2	35.4	52.3
1983	66.3	52.7	35.4	53.2

Sources: Canada, Statistics Canada (71-001), May-June averages (1976-83 revised Labour Force Survey, excludes 14 year-olds); Ostry and Zaidi (1979), p.43.

¹ Widowed and divorced.

Referring to Table 4 once more, it can be observed that in 1983, the rate for single women recovered slightly, increasing to 66.3. The rate for married women continued to increase reaching 52.7 in that year. Hence, it would appear from this data that the recession had a negative impact on participation rates for non-married women. In the 1983 study of Sims, he concludes that the 1982 departure of participation rates from their historical trends is a cyclical phenomenon.²⁶ He also suggests that there still remains a strong upward trend in the participation rate of married women. The data in Table 4 give support to his findings.

At this point it is worth investigating some of the factors that have contributed to the change in the labour force participation of women (especially married women) over the last 20 years. From the vast amount of empirical research on this topic it is clear that the changes in participation rates are accounted for by a multiplicity of factors. The rapid growth of white-collar jobs, the expansion of the service sector, the reduction in the average work week and the rise in the availability of part-time employment have been conducive to the growth of female employment. In particular, there has been a substantial growth over time in those industries and occupations where women have traditionally made up substantial proportions of the work force. For instance, in the Nakamura et al. study, it was found that for the period 1951-1971, female-oriented industries such as Finance, Community-Personal Services, and Trades (where more than 60% of all women in the labour force worked) grew at a greater rate during this time period relative to industries with small percentages of women.²⁷ The growth in demand for products in such female-oriented industries over this period increased the job opportunities for women which in turn led to higher offered wage rates for women.²⁸ With respect to occupations, these researchers also found that women generally have made up 40% or more of the total labour force in Teaching, Medicine and Health, Clerical and Services and 10% or less of the total labour force for Natural Sciences and Engineering, Other Primary, Construction and Transportation occupations.²⁹ In fact, women in Teaching, Medicine and Health, Clerical and Service groups together represented more than 60% of the female labour force. Again, the increase in demand for products in these industries led to an increase in demand for workers in these industries. Since the early 1950's, Teaching, Finance, Medicine and Health, Clerical and Service occupations have all grown faster than most other occupations. Hence we find that women are represented most heavily in occupations that have grown quite rapidly since the early 1950's. Although these figures are for the industrial and occupational segregation of all women, excluding married women, the researchers note that similar patterns have persisted for married women; however, comparatively more wives are found in Agriculture, Manufacturing and Trade industries.³⁰

The educational trends for Canadian women show that more and more women are attending post-secondary institutions compared to 15-20 years ago. From Table 5 it can be observed that in 1966, women represented 33.7% and 18.0% of the total full-time university enrollment for undergraduate and graduate programs respectively. By 1980, the percentage figures had risen to 46.0 and 36.1 respectively. Moreover, the percentage of women receiving university and college degrees has increased significantly over the last 15 years (see Table 6). For instance, 34.1% of all Bachelor and First Professional degrees awarded by Canadian universities and colleges in 1966 were awarded to women. By 1980, the figure had increased to over 50%. The percentage of women receiving Masters and Doctorate degrees also increased significantly. In 1966, about 20% of all Masters degrees and about 8% of all Doctorate degrees awarded in that year were awarded to women. By 1980, the figures had jumped to 39.2 and 24.2 respectively. Recall that the empirical studies support a positive relationship between higher education and labour force

participation. Hence, it would appear from these educational trends that young women are preparing themselves for career-oriented employment.

As previously noted, women appear to be having less children compared to a few decades ago. This tends to reduce the "home wage" and enable labour force participation. Substantial improvements in household technology which have made housework easier have also been conducive to female employment. Recent years have witnessed a number of legislative changes such as equal pay for equal work and equal opportunity employment for women. In addition, changing social attitudes and increased acceptance of women working outside the home may have contributed to the growth of female participation, especially for married women.

In summary, it is evident that many factors have contributed to the growth in female participation rates over the last 30 years. The phenomenal increase in the rate for married women has caused a significant growth in the number of dual-earner families in Canada over the last 2030 years. An interesting question then, is what are the characteristics of dual-earner families in Canada? To help answer this question, the following section will provide an analysis of relevant data from the 1981 Census of Canada. By combining this data with the material already presented, we can determine some of the major characteristics of dual-earner families in Canada. Recall that it was stressed in the introduction that there is a lack of appropriate data on this topic hence, one should take caution in interpreting the following analysis and regard it as suggestive rather than conclusive.

Table 5, Women as a Percentage of Total Full-Time University Enrollment, Canada, Selected Years 1966-1981

Year	Undergraduate	Graduate
1966	33.7	18.0
1970	36.7	22.3
1975	42.4	29.0
1978	44.9	33.3
1981	46.6	37.3

Source: Nakamura and Nakamura (1984), table 8.

Table 6, Women as a Percent of Total Recipients of Degrees Awarded by Canadian Colleges and Universities, Selected Years, 1966-80

Year	Bachelor and First Professional	Masters	Doctorate
1966	34.1	20.0	8.1
1970	38.0	22.0	9.3
1975	46.3	30.5	18.8
1978	49.2	36.0	20.5
1980	50.3	39.2	24.2

Source: Nakamura and Nakamura (1984), table 9.

MAJOR CHARACTERISTICS OF DUAL-EARNER FAMILIES IN CANADA

In 1981, almost 45% of all husband-wife families in the labour force were dual-earner families (see Table 7). According to table 7, approximately 31% were traditional-earner families. Hence, in that year, dual-earner families outnumbered traditional-earner families by almost 14%.³¹ Because the number and proportion of dual-earner families continues to grow, it is useful to investigate some of the characteristics of this growing family type. The following is intended to provide a general descriptive profile of dual-earner families in Canada including a comparison with traditional-earner families.

Table 8 provides data on work activity for all husband-wife families (in which the husband was less than 65 years of age), for 1980. By using the data in this table we can make general comparisons between traditional and dual-earner families with respect to work activity. It should be noted that the total number of husband-wife families in which the wife did not work was used as a proxy for the total number of traditional-earner families and the total number of husband-wife families where the wife worked either full-time or part-time together was used as a proxy for the total number of dual-earner families.

It would appear from table 8 that the majority (1,798,745 or 60%) of wives in dual-earner families worked mostly part-time during 1980. Based on the data presented in this table it could be inferred that more wives in dual-earner families work part-time as compared to full-time. An examination of U.S. family data shows that most working wives hold full-time jobs.³² In particular, in 1978, more than 67% of working wives in the U.S. worked 40 weeks or more. Also, as can be observed from table 8, husbands in traditional families do not necessarily have a firmer commitment to the job market than husbands in dual-earner families. That is, more husbands in dual-earner families work mostly full-time (2,060,270 or 68%) compared to husbands in traditional families (1,162,775 or 62%), a finding that is similar in the U.S.

Table 9 provides 1981 census data on the age distribution of husbands and wives in dual- and traditional-earner families as well as average age. According to the data, in 1981, about 75% of the wives and 69% of the husbands in dual-earner families were 44 years of age or younger compared to 69% of the wives and 55% of the husbands in traditional-earner families. It would appear from the data that spouses in dual-earner families are considerably younger than their traditional-earner counterparts. More specifically, the average age of wives in dual-earner families in 1981 was 36.5 and that for husbands was 39 compared with 42 and 44 years for spouses in traditional families. Hence, on average, spouses in dual-earner families were about 5 years younger than their counterparts in traditional-earner families. (This pattern is similar to that of the United States.) The age gap between these two types of families may not be too surprising if one considers that during 1971-81 there was a significant increase in the proportion of female labour force participants who were married (particularly in the 25-34 age group).³³ By 1981, more than 1,350,000 females aged 25-34 were in the labour force, an increase of 133% since 1971 when the figure was 579,000.³⁴

Table 7, Husband-Wife Families in the Labour Force, Canada, 1981

	Total
Total husband-wife families:	5,611,500
Total in the labour force:	4,952,870 (100.0)
One person in labour force	1,726,840
Husband only ¹	1,537,390 (31.0)
Two persons in labour force	2,511,455
Husband and Wife ²	2,193,260 (44.3)
Three persons or more	714,575

Source: Canada, Statistics Canada (92-935).

¹ Estimate of the total number of traditional-earner families.

² Estimate of the total number of dual-earner families

Table 8, Work Activity for Husband-Wife Families (Husband Under 65 Years of Age), Canada, 1980

	Dual-earner families	Traditional-earner families
Total number	3,022,375	1,885,085 ^a
Full-time/Full-year: ^b		
Husband	2,060,270	1,162,775
Wife	1,223,630	
Both	929,715	
Part-time/Part-year: ^c		
Husband	878,490	722,310 ^a
Wife	1,798,745	
Both	619,670	
Husband full-time/full-year	1,130,555	
Wife part-time/part-year		
Husband part-time/part-year	258,820	
Wife full-time/full-year		

Source: Canada, Statistics Canada (92-936).

A includes families where the husband did not work for some part of the year.

B includes those who work 49-52 weeks, mostly full-time

C includes those who work mostly part-time, 49-52 weeks or less than 49 weeks.

Table 9, Age Distribution of Spouses in Husband-Wife Families, Canada, 1981

	Dual-Earner Families	Traditional-Earner Families
Wife:		
Less than 35	49	45
35-44 years	26	24
45-54 years	18	19
55 and over	7	12
Total	100%	100%
Husband:		
Less than 35	43	31
35-44 years	26	24
45-54 years	20	21
55 and over	11	24
Total	100%	100%
Average Age:		
Wife	36.5	42.0
Husband	39.0	44.0

Sources: Canada, Statistics Canada (92-935), table 12; average age data is from Canada, Statistics Canada (92-936).

Table 10, Percentage Distribution of Husband-Wife Families by Educational Attainment and Labour Force Activity of Wife, 1981

Education	With Wife in Labour Force ¹	With Wife not in Labour Force ²
- Less than grade 9	13	30
- Grades 9-13	41	43
- with some college or university	9	8
- with college diploma or university degree	37	19
Total	100%	100%

Source: Canada, Statistics Canada (92-935), table 22.

¹ A proxy for dual-earner families.

² A proxy for traditional-earner families.

According to the 1981 census, dual-earner couples generally have more education than couples in traditional-earner families. On average, both husband and wife in dual-earner families have 12 years of schooling compared to 11 and 10 years for spouses in traditional families.³⁵

Census data on the educational attainment for spouses of traditional and dual-earner families are not available. However, the census provides data on husband-wife families by educational breakdown and labour force activity of the wife (*see* Table 10). From this table we can get estimates of the educational attainment of wives for both family types. According to Table 10, wives in dual-earner families have more education than their traditional-earner counterparts. For instance, in 1981, 37% of wives in dual-earner families held a college diploma or university degree compared to less than one-fifth (19%) of wives in traditional families. Furthermore, about 30% of wives in traditional-earner families had less than a grade nine education compared to about 13% of wives in dual-earner families. The data supports the hypothesis that the more educated the wife the more likely it is that she will be in the labour force.

As previously noted, the empirical evidence is inconclusive as to whether the husband's occupation affects the labour force activity of the wife. An examination of 1981 census data reveals that the occupational distribution of husbands from dual-earner families is similar to the distribution for husbands from traditional families in the following five occupational groupings: Machining/Assembling/Product/Fabricating occupations; Managerial/Administrative occupations; Construction; Sales; and Service occupations.³⁶ These occupational groups together account for close to 60% of all husbands in husband-wife families. More specifically, 40% of the husbands in dual-earner families and 42% of the husbands in traditional-earner families are in Machining or related occupations; Managerial/Administrative; and Construction occupations. Hence, it would appear that husbands in dual- and traditional-earner families in general, have similar occupations. In general, working wives do not appear to be in similar occupations as their husbands. In fact, the majority (60%) of all working wives continue to be in the female-dominated occupations, such as Sales, Service, Clerical, Teaching, and Medicine and Health occupations.

Table 11 provides data on family income for both dual- and traditional-earner families for 1981. It would appear that dual-earner families earned considerably more income during that year than traditional families. For instance, 77% of dual-earner families earned \$20,000 or more in 1981 compared to about 55% of traditional-earner families. More specifically, almost one-fifth of dual-earner families earned \$40,000 or more compared to less than 10% of traditional-earner families. About 45% of traditional-earner families had an income of less than \$20,000, which was almost twice the figure for that of dual-earner families. On average, dual-earner families earned about 28.7% or \$6,807 more than traditional-earner families during 1981.

Table 12 provides data on the percentage of dual and traditional-earner families with and without children for 1981. As would be expected, more dual-earner families were childless (30%) than traditional-earner families (9%). However, more than one-half of all dual-earner families had children living at home. Of the families with children living at home, 14.3% of dual-earner families had children under the age of six years, a proportion that was not much lower than the 20% of traditional-earner families.³⁷ From these figures it would appear that the presence of young children may now be less of a deterrent to the labour force participation of wives, a point that was emphasized earlier in this paper.

Table 11, Husband Wife Families by Family Income, 1981

Income (\$)	Dual-Earner Families	Traditional-Earner Families
Less than 20,000	23	45
Between 20,000-40,000	58	46
40,000 and over	19	9
Total	100%	100%
Average Income:	\$30,474	\$23,667

Source: Canada, Statistics Canada (92-936), table 9A.

Table 12, Percentage of Husband-Wife Families With and Without Children, 1981

	Dual-Earner Families	Traditional-Earner Families
Childless	30	9
With children at home	58	71
With children no longer at home	12	20
Total	100%	100%

Source: Canada, Statistics Canada (92-935), table 14.

In summary, it has been found from this analysis of family data that on average, dual-earner couples tend to be younger, better educated and earn more income than their traditional-earner counterparts. Although approximately 40% of working wives work mostly full-time, the majority work on a part-time basis. More husbands in dual-earner families work mostly full-time compared to their counterparts in traditional-earner families. However, almost the same percentage of husbands in dual- and traditional-earner families work in Manufacturing, Managerial/Administrative and Construction occupations. As would be expected, more dual-earner couples are childless than their traditional-earner counterparts. However, 58% of dual-earner families have children living at home. Moreover, there is less than a 6% difference between the percentage of dual and traditional-earner families with children under the age of six years. This seems to suggest that more married women are choosing to remain in the labour force despite having young children at home.

IMPLICATIONS

As the number and proportion of dual-earner families continue to grow, their impact on the economy and society in general will increase. Hence, there are several potential social and economic implications that may arise as a result of the continuing growth of dual-earner families in Canada. The following will address some of these implications as well as some of the potential problems and concerns that may face dual-earner families in the near future.

In terms of economic welfare, it is argued that dual-earner families are better off than families with just one income earner. A recent study conducted in the U.S. reveals that the younger, more educated and wealthier dual-earner families are developing a distinct pattern of consumer spending.³⁸ For instance they tend to purchase more time-saving devices, such as microwave ovens, take more vacations and spend more on entertainment than traditional-earner families. In addition, dual-earner families appear to have a stronger impact on the housing and auto markets than do their counterparts. That is, dual-earner families are more likely to be able to afford a new home or second car compared to traditional-earner families. According to the 1981 Census of Canada, more dual-earner families (78%) own their own homes than traditional-earner families (73%). As more and more dual-earner families continue to follow such spending patterns, various sectors of the economy (e.g. auto, housing and service industries) may be stimulated, which in turn, may lead to an increase in the demand for labour in these industries.

In times of economic decline, it could be argued that dual-earner families gain relative to traditional-earner families. That is, the economic hardship suffered by a dual-earner family if one of its earners becomes unemployed, may be less severe than that associated with the unemployment of a husband in a traditional-earner family. In other words, if one of the earners of a dual-earner family were to lose his or her job, the family would still have one income to fall back on, whereas the traditional-earner family would have no earned labour income. At this point it is worth examining the contribution of working wives to family income. Not only has the number of working wives increased dramatically over the last 15 years, but their contribution to family income has increased as well. For instance, on the average, working wives earned 10% of family income in 1967 but by 1981, wives earned almost 20% of total family income.³⁹ There has been some concern that the increasing rate of the labour force participation of wives may exacerbate the inequality in the distribution of family income.⁴⁰ However, there has been no consensus reached in the literature in this regard. Although this issue will not be investigated at any great

length in this paper, it is noted that one study of family income found that dual-earner families predominate the mid- to high-income groups.⁴¹ In this same study it was concluded that one-earner families are mostly in the middle-income group whereas the low-income group consists mostly of unattached individuals (either young or elderly). However, income was found to be slightly more equally distributed when income tax was taken into account. In other words, low income groups gain relative to high income groups after income taxes. For instance, in 1981, the highest income group dropped its share from 42% to 40% of income, after taxes, whereas families in the lowest income group increased their share from 4 to 5%.⁴²

There are also some labour market implications associated with the growth of dual-earner families. Perhaps one of the major concerns for dual-earner families is that of labour market mobility. Consider the case where both husband and wife have careers and one of the spouses is asked to relocate as part of his or her employment. Problems may arise if the other spouse cannot transfer or find employment in the new location. It is evident that when both the husband and the wife work, the question of geographical mobility is a critical issue. Therefore, Canada may soon need business and labour market policies such as relevant transfer policies and retraining programs which help ease the mobility dilemma faced by dual-earner families.

Throughout this paper it has been emphasized that the presence of preschool children appears to be the most important determinant of wives' labour force participation. However, it was also stressed that the deterrent effect on participation exercised by the presence of preschool children appears to be weakening. Recall that the recent study conducted by Sims revealed that married women with preschool children represented the most dramatic increases in participation of any other female group during the period from 1975 to 1982. As the number of working mothers continues to grow the implications for child care will increase as well. Although it is recognized that more married women are choosing to have fewer children, the substantial increase in the number of working mothers appears to overshadow this fact. The impact on child care is surely a growing concern.

Table 13 provides data on the number of children in various types of day care for the seven year period from 1973-1979. The number of children in full day care more than tripled during this period - rising from 25,268 in 1973 to 78,653 in 1979. Children in lunch and after school care increased significantly between 1973 and 1976, increasing from 1,543 in 1973 to 7,074 in 1976, then fluctuated over the next three years. However, family day care increased each year during the seven year period - rising from 1,562 in 1973 to over 8,100 by 1979. Overall, the total number of children in day care more than tripled - rising from 28,373 in 1973 to 93,852 in 1979. As more and more mothers work outside the home, it is likely that the demand for day care will increase as well. As a result, Canada may soon need some sort of child care policies that are specially designed to accommodate dual-earner families.

For some of the children of dual-earner families, the extra income generated by the mother's participation may mean the difference between poverty and a level of living that provides for the basic necessities of life. For many others, however, the extra income provides advantages of many sorts such as additional luxuries and higher education they might not have received otherwise.

Table 13, Distribution of Children in Day Care by Type of Program, Canada, 1973-1979

Type of Program	Year						
	1973	1974	1975	1976	1977	1978	1979
Full Day Care	25,268	47,833	60,757	71,956	69,959	67,887	78,653
Lunch and After School	1,543	3,163	4,524	7,074	6,158	8,804	7,072
Family Day Care	1,562	4,185	4,671	5,367	5,534	5,588	8,127
Total	28,373	55,181	69,952	84,397	81,651	82,279	93,852

Source: Canada, Labour Canada (1983), part III, p.21, table 6.

The above discussion regarding the implications for child care is just one example of the problems and concerns that dual-earner families may face in the near future. Another major concern for dual-earner families is trying to accommodate work schedules to meet family needs and obligations. Furthermore, the pressures and demands associated with dual-careers can have an impact on the family. For example, a working wife and mother who is also a career woman must allocate her time between her home and work life. The demands of her career may not allow her to spend as much time with her family as she or her family would like. This could cause problems for both the family and the marriage. Unfortunately, this paper cannot adequately deal with all the ramifications of dual-earner families due to the complexity and scope of the issues.

CONCLUSIONS

This paper has provided a general overview of dual-earner families in Canada. The major findings of this paper can be summarized as follows. The number and proportion of traditional-earner families has fallen dramatically over the last 20 years, from 68% of the total number of all husband-wife families in 1961 to approximately 27% in 1981. The steady rise in the labour force participation of wives has caused a substantial increase in the number of dual-earner families over this same time period. Dual-earner families represented less than 20% of all husband-wife families in 1961 but by 1981, almost 45% of all husband-wife families in the labour force were dual-earner families. Moreover, almost two-thirds of all families in the labour force in 1981 had two or more earners in the labour force during that year. A comparison of dual- with traditional-earner families revealed that, on average, dual-earner families were younger, more educated and earned more income. More dual-earner couples were childless compared to couples in traditional-earner families. However, it was found that of the families with children living at home, 14.3% of dual-earner families had children under the age of six years - a percentage that was not much lower than the 20% for traditional-earner families. The data seem to suggest that preschool children may now be less of a deterrent to wives' labour force participation compared to 15-20 years ago.

Several economic and social implications of dual-earner families were investigated. In particular, the implications for child care, labour market policy and income distribution were examined, revealing the need for policies and programs specially geared toward the dual-earner family.

This paper has provided a general overview of dual-earner families mainly from an economic viewpoint (due to the lack of appropriate data a more rigorous empirical analysis could not be undertaken). However the true complexity of the dual-earner phenomenon cannot be fully examined just from an economic perspective. It is clear that both social and economic research on dual-earner families should be encouraged in order to provide us with the knowledge to deal with the potential problems and concerns of this growing family type.

APPENDIX I

Data Sources and Concepts

The various family data sources used in this paper differ in their concepts. The Census of Canada publications used in this paper provide the best data and information with respect to dual-earner families as defined in the introduction of this paper. The census family is defined as, "a husband and wife (with or without children who have never married, regardless of age), or a lone parent of any marital status, with one or more children who have never married, regardless of age, living in the same dwelling. For census purposes, persons living in a common-law type of arrangement are considered as now married, regardless of their legal marital status; they accordingly appear as a husband-wife family in the census family tables."⁴³ More specifically, the husband-wife family consists of a husband and a wife (with or without children), or persons who live in a common-law relationship (with or without children).

Since 1961 data on income and various characteristics of husband-wife census families have been available, however, certain information has not been consistently available from one census year to the next. The 1981 census provides the most comprehensive data and information on husband-wife census families as it relates to the study of dual-earner families.

The Survey of Consumer Finances (since the 1960's) and the Labour Force Survey (since the 1970's) provide family, or at least relationship, data. The Survey of Consumer Finances is an annual household survey which provides data on the incomes of families and individuals. The family unit is referred to as the economic family and is defined as, "a group of individuals sharing a common dwelling unit and related by blood, marriage or adoption".⁴⁴ Thus all relatives living together at the time the survey was taken are considered to comprise one family. This definition of the family may not be suitable for the study of dual-earner families specifically because the economic family, by definition, is not just the immediate or nuclear family. Hence, the more restricted definition of the family used in the census publications is more appropriate.

The Labour Force Survey, conducted each month, is a stratified sample of some 56,000 households in Canada. The sample represents all persons in the population 15 years of age and over residing in Canada, with the exception of the following: residents of the Yukon and Northwest Territories, persons living on Indian Reserves, inmates of institutions and full-time members of the armed forces. Generally speaking, this survey provides data on individuals rather than families however, some of the data from this survey can be used in the study of dual-earner families. For example, data on the labour force participation rate of married women can be used as a proxy for the number of dual-earner families. In addition, the May 1984 issue of this survey contains a feature article on the labour force participation and income trends of husband-wife families in Canada.

BIBLIOGRAPHY

- Becker, Gary (1965). "A theory of the allocation of time." *The Economic Journal* 75: 493-517.
- Cain, Glen (1966). *Married Women in the Labour Force*. Chicago: University of Chicago Press.
- Canada. Dominion Bureau of Statistics (93-520). 1961 Census of Canada. Households and Families: Husband-wife Families. Ottawa: Queen's Printer.
- Canada. Labour Canada (1983). *Women in the Labour Force, Parts I and II*. Ottawa: Supply and Services Canada.
- Canada. Statistics Canada (13-207). *Income Distribution by Size in Canada*. Ottawa: Supply and Services Canada, annual.
- _____ (13-581). *Charting Canadian Incomes, 1951-1981*. Ottawa: Supply and Services Canada, 1984.
- _____ (71-001). *The Labour Force*. Ottawa: Supply and Services Canada, monthly.
- _____ (92-915). 1981 Census of Canada. National Series: Population: Labour Force Activity. Ottawa: Supply and Services Canada.
- _____ (92-935). 1981 Census of Canada. National Series: Census Families in Private Households: Selected Characteristics. Ottawa: Supply and Services Canada.
- _____ (92-936). 1981 Census of Canada. Census Families in Private Households: Income. Ottawa: Supply and Services Canada.
- _____ (93-720). 1971 Census of Canada. Families: Husband-wife Families. Ottawa: Information Canada.
- _____ (93-723). 1971 Census of Canada. Families: Families by Labour Force Activity of Family Members. Ottawa: Information Canada.
- _____ (93-832). 1976 Census of Canada. Supplementary Bulletins: Housing and Families: Husband-wife Families. Ottawa: Supply and Services Canada.
- _____ (94-773). 1971 Census of Canada. Labour Force Activity: Work Experience: Labour Force Activity by Marital Status, Age and Sex. Ottawa: Information Canada.
- _____ (94-804). 1976 Census of Canada. Labour Force Activity: Labour Force Participation Rates by Age and Sex and by Marital Status and Sex, 1971 and 1976. Ottawa: Supply and Services Canada.
- _____ (99-901). 1981 Census Dictionary. Ottawa: Supply and Services Canada, 1984.

Ciuriak, D. and Harvey Sims (1980). *Participation Rate and Labour Force Growth in Canada*. Ottawa: Department of Finance.

Coates, Mary Lou (1981). *Labour Force Participation of Married Women in Canada: Evidence from the 1971 Census*. M.A. Thesis, Department of Economics, Queen's University at Kingston.

Danziger, S. et al. (1981). *Two Notes on Working Wives and Family Income Inequality*. Institute for Research on Poverty, Reprint Series No. 394. Madison: University of Wisconsin-Madison.

Friedman, Milton (1957). *A Theory of Consumption Function*. Princeton: Princeton University Press.

Gunderson, Morley (1980). *Labour Market Economics: Theory, Evidence and Policy in Canada*. Toronto: McGraw-Hill Ryerson.

_____ (1977). "Logit estimates of labour force participation based on census cross tabulations." *Canadian Journal of Economics* 10: 453-62.

Hayghe, Howard (1976). "Families and the rise of working wives: an overview." *Monthly Labor Review* 104 (May): 12-19.

_____ (1981). "Husbands and wives as earners: an analysis of family data." *Monthly Labor Review* 104 (February): 46-59.

_____ (1983). "Married couples: work and income patterns." *Monthly Labor Review* 106 (December): 26-29.

Heckman, J. and T. Macurdy (1980). "A life cycle model of female labour supply." *Review of Economic Studies* 47: 47-74.

Hershman, Arlene and Mark Levenson (1979). "The big clout of two incomes." *Dunn's Review* 113 (April): 43-48.

Killingsworth, Mark (1983). *Labour Supply*. Cambridge: Cambridge University Press.

Long, Clarence (1958). *The Labour Force under Changing Income and Employment*. Princeton: Princeton University Press.

Maynard, C.E. and R.A. Zawacki (1979). "Mobility and the dual-career couple." *Personnel Journal* 58: 468-82.

Mincer, Jacob (1962). "Labor force participation of married women." In *Aspects of Labor Economics: A Conference of the Universities-National*

Bureau Committee for Economic Research. Princeton: Princeton University Press.

Nakamura, A. and M. Nakamura (1984). *A Survey of Research on the Work Behaviour of Canadian Women*. Preliminary draft. Edmonton: Faculty of Business, University of Alberta.

Nakamura, A. et al. (1979). *Employment and Earnings of Married Females*. Statistics Canada cat. no. 99-760. Ottawa: Supply and Services Canada.

Ostry, Sylvia (1968). *The Female Worker in Canada*. Dominion Bureau of Statistics, 1961 Census Monograph, cat, no. 99-553. Ottawa: Queen's Printer. Ostry, S. and M.A. Zaidi (1979). *Labour Economics in Canada*. 3rd ed. Toronto: Macmillan of Canada.

Robbins, L. (1930). "On the elasticity of demand for income in terms of effort." *Economica* 10 (June): 123-29.

Sims, Harvey (1983). "Participation rate changes in Canada in the early 1980s." In *Canadian Labour Markets in the 1980s: Proceedings of a Conference held at Queen's University at Kingston, February 25-26, 1983*. Kingston: Industrial Relations Centre.

Skoulas, Nicholas (1974). *Determinants of the Participation Rate of Married*

Women in the Canadian Labour Force: An Econometric Analysis. Statistics Canada cat. no. 71-522. Ottawa: Information Canada.

Spencer, B. and D. Featherstone (1970). *Married Female Labour Force Participation: A Micro Study*. Dominion Bureau of Statistics, Special Labour Study, Series B, No. 4. Ottawa: Queen's Printer.

Waldman, Elizabeth (1983). "Labour force statistics from a family perspective." *Monthly Labor Review* 106 (December): 16-19.

Weir, Tamara and Ronald J. Burke (1979). "Two people, two careers, and one relationship! Making it work." *Business Quarterly* 44 (Spring): 47-53.

END NOTES

- ¹ For a list of empirical studies that have come to this conclusion refer to Mincer (1962), p.63,
- ² Robbins (1930) points out that the labour supply curve may be backward-bending, positively inclined over a range, then becoming negatively inclined, depending on the elasticity of demand for income in terms of effort.
- ³ See Mincer (1962) and Becker (1965).
- ⁴ See Becker (1965), p.512.
- ⁵ See Skoulas (1974).
- ⁶ Ibid., p.31. Also, see Coates (1981).
- ⁷ As summarized by Coates, *ibid.* Also, see Becker (1965), pp.495-97.
- ⁸ There are also formal models of household labour supply which have grown out of the simple work-leisure choice model. For a review of some of these models refer to Killingsworth (1983) and studies cited therein.
- ⁹ This discussion is primarily reproduced from Nakamura and Nakamura (1984), pp.6-12.
- ¹⁰ Ibid. Cross-sectional micro data augmented by certain information about the work behaviour of the individual for the year prior to the year for which current relevant data is available can also be used to control for the impact of unobservable individual effects.
- ¹¹ For Canadian studies see Skoulas (1974) and Nakamura et al. (1979). For American studies see Mincer (1962) and Long (1958).
- ¹² Mincer (1962).
- ¹³ Ibid., p.102.
- ¹⁴ For studies finding this result, see for example, Mincer (1962) and Skoulas (1974).
- ¹⁵ See Ostry and Zaidi (1979), p.50,
- ¹⁶ See Gunderson (1980), p.53.
- ¹⁷ See Ostry (1968). Also see Spencer and Featherstone (1970).
- ¹⁸ Gunderson (1977).
- ¹⁹ For a list of these studies refer to Gunderson (1980), p.53.
- ²⁰ See for example, Nakamura et al. (1979). Also, see the panel study of Heckman and Macurdy (1980).
- ²¹ Ostry and Zaidi (1979), p.49.
- ²² Sims (1983), pp.70-72.
- ²³ See for example, Ostry (1968), Skoulas (1974) and Coates (1981).
- ²⁴ See Canada, Statistics Canada (13-581), p.2.
- ²⁵ See the Appendix for the definition of husband-wife census family.
- ²⁶ See Sims (1983).
- ²⁷ Nakamura et al. (1979), pp.27-29.
- ²⁸ Ibid.
- ²⁹ Ibid.
- ³⁰ Ibid.
- ³¹ It should be noted that if one compares the total number of husband-wife families in which more than one person is in the labour force with the total of these families in which the husband only is in the labour force, the difference between the two represents a much higher figure. The figure in the text of this paper is based on the definition of dual-earner families as given in the introduction.

³² See Hayghe (1981).

³³ See Canada, Labour Canada (1983), Part I.

³⁴ Ibid., p.64.

³⁵ See Canada, Statistics Canada (92-936), table 13.

³⁶ These figures were taken from Canada, Statistics Canada (92-935), table 13.

³⁷ See Canada, Statistics Canada (92-935), table 12.

³⁸ See A. Hershman and M. Levenson (1979). Although this is an American study the general results can apply to Canada because as we have already observed, dual-earner families in Canada share some of the same characteristics as their American counterparts.

³⁹ Canada, Statistics Canada (13-581), p.11.

⁴⁰ See, for example, Danziger et al. (1981).

⁴¹ See Canada, Statistics Canada (13-581) for the classification of low, middle and high income groups.

⁴² Ibid., p.22.

⁴³ See Canada, Statistics Canada (99-901), p.59.

⁴⁴ Ibid., p.63.



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