

# **Economic and Sociological Analyses of Families: Existing Research Findings**

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## 1. Introduction

A great deal of economic analysis focuses on the behaviour of individuals. Less often, it takes into account the extent to which individuals behave as part of families. Yet the relationship between individual and family behaviour is strong and causative in both directions. A thorough understanding of individual behaviour requires an understanding of the family context in which individuals operate. By extension, government provision of support for individuals must allow for the influence of the family context. This is both implicitly true and explicitly true since many forms of government support are dependent on the family rather than individual circumstance.

Families have undergone dramatic changes over recent years, as we will document in chapter 2. It is important to investigate the influence of these changes and assess what these changes mean for the way social policy is set up to support families.

### 1.1 Motivation for the study

The rationale for a survey of economic and sociological literature on families has two main motivations, to provide a context for a government social security safety net and to review the way in which changing family structure and function is likely to impact on behaviour.

#### 1.1.1 Government support of families

Families are relevant to governments in many respects. Government provides a security safety net on the basis of family structure.<sup>1</sup> Cash payments are dependent on the family circumstance with implicit economies of scale for family size built into the payment schedules. In a political economy sense the family is the pre-eminent social institution with government policy based on family appeal.

Government support of families is conditioned by many factors to do with family structure and function. First, families may provide income and other services to individuals that reduce the need for support from government. Second, labour market behaviour, a key policy area for government, is often determined by family rather than individual circumstance. Third, there is sharing of resources within families, ameliorating or exacerbating individual circumstance. Fourth, factors affecting family formation, maturation and dissolution are critical to policy. Finally, there are intergenerational aspects of families which affect behaviour, for instance through laws in relation to death duties.

#### 1.1.2 Changes in family life

The second motivation is that families are changing and it is necessary to understand how the changes are likely to influence behaviour. Some of the widely reported existing or prospective influences on families are;

- changes in family composition –the atomisation of the family– trend towards singles and couples without dependents;
- increases in the average age of the population;
- falls in fertility and family size;
- changes in workforce participation of family members and consequent interaction of work and family activities – juggling work and family commitments;
- changes in the macro economy such as on the employment market;
- changes in the influence of traditional institutions such as churches, clubs and organizations;
- the trend to outsource family functions; and

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<sup>1</sup> Whereas the system of cash transfers has the family as its primary unit of focus the taxation system has the individual as its primary unit of focus. This has led to some tension in the incentive structure facing individuals and there have been calls to co-ordinate government activity on a common basis. However the introduction of the new system of family allowances, which may be paid either as a cash payment or be deducted from payable taxes, has muddied the waters further.

- the introduction of labour saving technology on family functioning.

The changes in family life have significant implications for policy generally. A noted economist Akerlof (1998, 308) has stated in a recent article that in the US "... Today we face another problem, another type of disaster. That disaster is the failure of the family system in America, which has fallen apart not just for those who have ended up on welfare but to a significant but smaller degree for those higher in the distribution of economic and social rewards." For many sole mothers welfare is needed to replace the income previously provided by a spouse. The increase in the proportion of unmarried men also brings other social problems upon society. Akerlof finds that unmarried men are less attached to the labour market, more likely to be involved in crime, more likely to use drugs, alcohol and tobacco, and have higher death rates.

While the focus on families is implicit in many research projects in economics, sociology, psychology, social policy analysis and other social sciences, the disciplinary underpinning and the interaction between disciplines are rarely considered. However the development of policy requires a multi-disciplinary focus. In this survey we shall aim to establish the theoretical basis for research on the family in economics and in sociology and the connections between them.

Families are a major force in the production and distribution of goods and services as well as in their consumption. As well as being economic agents, families are often the object of policy since family wellbeing is also the goal of economic activity. In spite of the primacy of the role of the family in economic activity, formal study of families has been limited (see Becker, 1987). Nevertheless readings from economic, sociological and psychological literature make important contributions to the discourse about family function. The following subsections define families and describe the importance of families to FaCS.

Family behaviour (including the behaviour of individuals in families) underpins the goals and objectives of much of economic and social policy and this is especially the case for FaCS. Consequently a comprehensive review of the literature from the main relevant disciplines (Economics, Sociology and to a lesser extent Psychology) is likely to be extremely useful in providing a contextual framework for FaCS' research program.

FaCS (2001) outlines the importance of family research; the key research themes in the stronger families research program are:

- The factors that give rise to and support stronger families and those that undermine family strength;
- The dynamics of family relationships and their impact on family members;
- The role of service provision in supporting stronger families and providing opportunities for family members;
- The impact of the transfer system and its effect on behaviour; and
- The interconnections between families, communities and individuals.

Our discussion has already foreshadowed many of these themes and others will be incorporated in the detailed review of the literature on family research in economic and sociological journals.

## **1.2 Definition of family**

McDonald (1995) makes the point that families may be defined in different ways and that the definitions may change over time. While the concept of the family may change (and has changed as we shall see) this is not a problem for public policy since most policy does not require a constant definition of the family. Policy is generally focussed on relationships such as husbands and wives, parents and children, carers and the people they care for and so on. It follows that responsibilities and entitlements derive from these relationships. Policy of the day will be concerned about these responsibilities and entitlements and will apply whatever definition of the day is relevant.

The common meaning of family is given in dictionaries: the Concise Oxford dictionary (Sykes, 1983), says families are 'members of a household, parents, children, servants etc', the Macquarie (Delbridge,

1986) says ‘parents and their children whether dwelling together or not’. Neither of these definitions is sufficiently precise to be helpful for the purpose of economic and sociological analysis however they do convey an idea of the scope of the family as understood by the population at large.

There are, of course, statistical definitions of families. The Australian Bureau of Statistics’ definition (ABS, 1995, p29) is: ‘a family is two or more people related by blood, registered marriage, adoption, or a de facto relationship who live in the same household’.<sup>2</sup> The ABS identifies three major family types: couple families, one-parent families, and families of related adults’. One or more families may be part of the broader entity of household. A household is a group of people who usually reside and eat together as a single unit within a dwelling.

The idea of ‘family’ is also intrinsic to the language of the policy makers and to public policy in general. Thus the Commonwealth department responsible for family matters (the Department of Family and Community Services or FaCS) describes families in terms of ‘natural and fundamental units’. Although not formally defined, the ‘natural and fundamental unit’ is the unit that is supported by the various forms of welfare provided by the department through its operational unit, Centrelink. The clearest indication of the FaCS view of ‘family’ is provided by the system of family tax benefits (previously family allowances). Here, benefits are provided to a parent or guardian of dependent children. Other welfare programs, Newstart allowance for instance, is provided to individuals, but the rate depends on the family relationship to which the individual belongs. The definition of family implied by the way it is treated in the social security system is generally consistent with the ABS definition.<sup>3</sup>

In the operational sense ‘family’ has a narrower rather than a broader meaning and the narrower definition is more tractable for analytic purposes. In general we shall use the statistical (ABS) definition of family in this paper.

### **1.3 In this report**

In selecting the material to be covered in this report we have been conscious of the need to maintain a tight focus in an otherwise disparate and wide-ranging field. No doubt the selection reflects our comfort in areas we are closest too in economics and to a lesser extent, sociology. Some areas not covered in the report include the insights from game theory (eg McElroy, 1990) and transaction cost approaches (see Pollak, 1985) in the discipline of economics and from sociology, theories that set family structures in a context of class relations (see Hartmann, 1981). Outside of these two core disciplines we are aware of important perspectives from psychology, political science and anthropology.

The next chapter provides some statistical background on families in Australia over the last three decades. This provides information on recent changes in the structure and behaviour of Australian families. In chapter three, we outline economic theories of the family. The economic theories provide a framework for considering issues in relation to the family. The chapter of theory is followed by a review of the empirical literature in economics, which sometimes draws on this theory though more frequently the theoretical underpinnings are not explicitly stated. The economic analysis often proves insufficiently rich to describe and explore what we observe about family behaviour; it is stronger on theory than on discovery, and has yet to integrate anomalous findings. Chapter five draws largely on papers in sociological journals. This research, while frequently lacking the integrating frame of

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<sup>2</sup> Many sociologists would question the definition of de facto couples as “families” since research repeatedly shows that people in de facto relationships have lower levels of commitment to each other than do their married peers, especially among men in such couples (e.g. Waite and Joyner 2001); much higher rates of sexual infidelity than the married (e.g. Laumann et al.1994, Table 11.12; Waite and Gallagher 2000: 91); much higher rates of partner violence than the married (Waite and Gallagher 2000: 155); and very high rates of dissolution (Waite and Gallagher 2000: 46). However, the aim of this paper is to be encompassing and include all major forms of relationship, so we use a broad definition of family.

<sup>3</sup> Whiteford, Stanton and Gray (2001) outline changing patterns of social security support for families since federation.

## Families

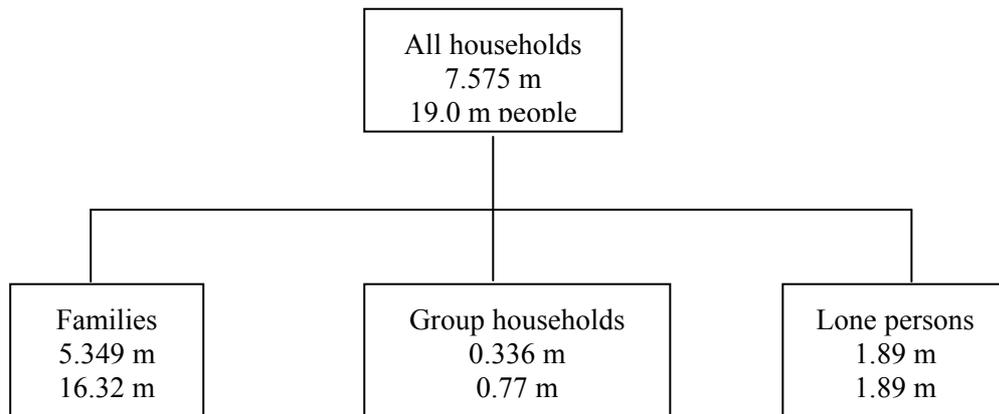
reference provided by economic theory, utilises tools that allow the researcher to get closer to the phenomena under observation – abundant data are made available in this literature and their linkages are explored albeit in a context of theoretical diversity.

Drawing on two bodies of academic thought provides a deeper and richer exploration of issues but inevitably also leads to some confusion. In the final chapter we pick up on various unresolved and conflicting lines of inquiry. We aim to expose the main issues without necessarily being able to resolve them. We also make recommendations for future research.

## 2. Families in Australia

### 2.1 Current structure of families

As we have noted, families are entities within households. Figure 2.1 shows projections for the structure of the resident population of Australian households in 2001. The projections are the Series B projections made by the ABS (1999) based on census data for 1996 and assumptions about fertility, mortality and immigration rates by cohort. While the ABS has produced more recent population estimates those shown are the latest that could be found that have a consistent decomposition from household to family. In 1996 the (then) 6.9 million Australian households contained 18.0 million people and there were another 0.33 million Australians living permanently in non-private dwellings (primarily institutions).



**Figure 2.1 Australian households, 2001 (projected)**

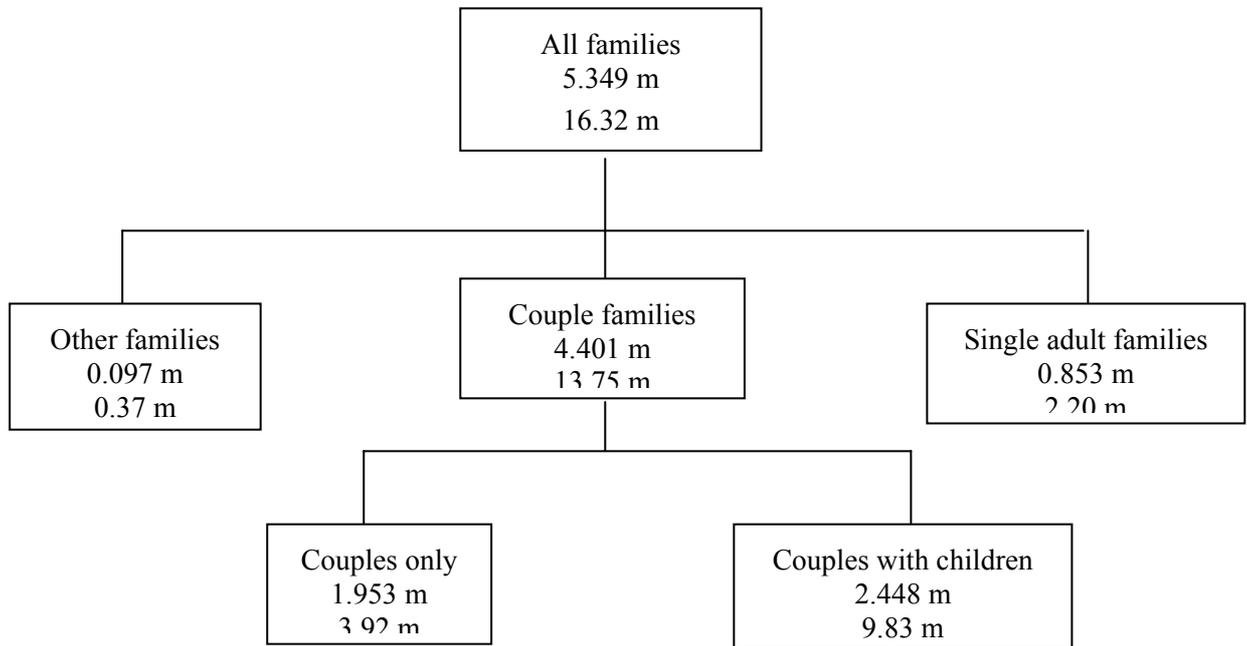
Source: ABS (1999)

The projections suggest that by 2001 the household population will have grown to 19 million and there will be another 0.37 million people living in institutions.<sup>4</sup> The ABS estimates that there will be nearly 7.6 million households in Australia, of which 70.6 percent will be families, 25.0 percent will be lone persons and the remaining 4.4 percent will be group households, primarily of independent young single people.

The ABS also projects the distribution of types of families. This is shown in Figure 2.2. In 2001 about 84 percent of the population, or 16.3 million people are expected to live in 5.3 million families, an average of 3 persons per family. Of these families 81 percent have two adults and nearly 16 percent have a single adult. The remaining 3 percent are families with three or more adults. Among couple families 56 percent have children living with them. Thus just over half the total population live in couple families with children. Among couples with children, family size is expected to average 4 in 2001.

<sup>4</sup> The estimated resident population in December 11, 2001 is 19,476,472.

## Families



**Figure 2.2 Australian families 2001 (projected)**

Source: ABS (1999)

The family as an economic and social entity has undergone profound change over the last twenty-five years or so. Changes have occurred in the structure, size, and workforce distribution of families and increased longevity has led to changes in the age structure of people in families.<sup>5</sup>

## **2.2 Recent changes in families**

### **2.2.1 Structure**

Table 2.1 shows the percentages of households of different types from 1976 to 2001. The table shows a steady growth in the proportion of lone person households and a concomitant fall in the proportion of families. In the first two years, group households were not distinguished from other families. The data indicate that the proportion of people living in group households has stabilised at around 4.5 percent since the mid eighties.

The table shows the proportion of families with no dependents and with dependents. There have been important changes in the composition of families. There has been steady growth in the proportions of families without dependents, rising from around 45 percent in 1976 to nearly 50 percent in 1996. Most of the growth has been in families of couples only and growth there has been partially offset by falls in the proportions of families of couples and non-dependents. Among families with dependents the growth in the proportion of one-parent families has offset the fall in the proportion of couple families with dependents.

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<sup>5</sup> Weston et al.(2001) trace many of the same changes as those presented here. They provide a more extensive and discursive commentary and the reader seeking a context for the changes should consult this reference.

**Table 2.1 Households by type, Australia 1976 to 2001**

Household type	1976	1981	1986	1991	1996	2001
One person	15.7	18.0	18.5	19.6	23.1	25.2
Group			4.1	4.5	4.4	4.5
Family	84.3	82.0	77.3	75.7	72.5	70.3
<i>Families without dependents</i>						
Couple only	28.0	28.7	30.3	31.4	34.1	
Couple plus non-dependents	11.1	10.0	10.9	9.5	9.0	
Other	5.9	6.0	6.2	5.9	6.4	
All without dependents	45.0	44.7	47.4	46.8	49.5	
<i>Families with dependents</i>						
One parent	6.5	8.6	7.8	8.8	9.9	
Two parents	48.4	46.6	44.8	44.4	40.6	

Sources: ABS (2001a)

**2.2.2 Family size and fertility**

The increase in numbers of persons living alone has led to a fall in the average size of households. In addition there has been a dramatic fall in the average number of children born to Australian women, in part as a result of increasing childlessness (Evans 2001a) and a significant increase in the proportion of children in sole parent families. Table 2.2 shows trends in the fertility rate and the average size of families over the last 25 years. The steady decline in the fertility rate over the 23 years between 1976 and 1999 has led to accompanying falls in the average household and family size. While only two observations are shown for family size the trends are likely to be the same as for households for which a complete set of data are presented.

**Table 2.2 Family size, Australia 1976 to 2001**

	1976	1981	1986	1991	1996	1999
Female fertility rate	2.06	1.94	1.87	1.86	1.80	1.75
Average family size				3.2	3.1	
Average household size	3.2	3.1	2.7	2.7	2.6	2.6

Sources: ABS (2001a and 2001b)

**2.2.3 Longevity**

A third notable development has been the increase in longevity among Australians. In Table 2.3 we present some statistics describing the ageing of the population. The table shows the steady increase in the life expectancy of males and females over the last 25 years. Males in 2001 can expect to live nearly 7 years longer than those in 1976 while females can expect to live 5.4 years longer. The proportion of the male and female populations over the ages of 65 and 85 has increased dramatically primarily as a result of these trends, but also as a result of decreased fertility which means the number of people in the younger age groups decreases.

**Table 2.3 Longevity, Australia 1976 to 2001**

	1976	1981	1986	1991	1996	1999
Expected age at death, males	69.4	71.4	72.9	74.4	75.5	76.2
Expected age at death, females	76.4	78.4	79.2	80.3	81.3	81.8
<i>Proportion of all males</i>						
Over 65	13.8	14.8	15.9	17.1	18.1	18.6
Over 85	1.0	1.2	1.5	1.8	2.1	2.3
<i>Proportion of all females</i>						
Over 65	19.1	20.2	20.9	21.7	22.3	22.7
Over 85	2.5	2.9	3.3	3.7	4.0	4.2

Sources: ABS (2001b)

**2.2.4 Families and work**

There have been important changes in the relationship between families and work. In particular there has been a growth in families in which there are two workers and a decrease in families in which there are no workers or just one worker.

**Table 2.4 Families and work, Australia 1976 to 2001**

	1991	1996	2000
Household type			
<i>Couple families with children under 15</i>			
Two adults working	51.8	54.5	56.3
One adult working	40.1	37.6	36.2
No adult working	8.1	7.9	7.5
<i>One parent families with</i>			
One adult working	43.2	42.7	47.3
No adult working	56.8	57.3	52.7

Sources: ABS (2001c)

A range of commentators have noted the emerging polarisation of families into the work rich and the work poor (see Dawkins, Gregg and Scutella, 2001 and Burbidge and Sheehan, 2001). Over the last thirty years the characterisation of families has changed markedly. In the immediate post war period families typically had one breadwinner, usually male, who worked a 40-hour week supporting a dependent spouse who was not in the workforce, and two or more dependent children. Families today, are more diverse. Table 2.5 shows the changes in labour force participation among males and females over the last 20 years. Male participation has fallen from 77 percent to 72 percent while over the same time female participation has risen from 45 percent to 55 percent.

**Table 2.5 Participation rates, Australia November 1981 to 2001 (a)**

	1981	1986	1991	1996	2001
gender					
Males	77.0	75.0	73.4	73.0	72.4
Females	44.8	48.6	51.5	53.6	55.3
Persons	60.7	61.6	62.5	63.1	63.7

Sources: ABS (2001c)

Note: (a) persons of workforce age (15 to 64)

In summary, there have been important changes in the structure of household types. Couples with dependents now constitute less than a third of households. Couples without dependents are the predominant family type. In addition, the number of dependents has fallen. There has also been strong growth in couple families with both adults working. Another feature has been the increase in average hours of work of some families. Wooden (2001a, Table 1), echoing Evans (1996a), notes that in the period from 1975 to 1995 the proportion of the employed workforce in August each year, working 45 or more hours increased from around 20 to 28 per cent. Since 1995 the level of hours has remained constant. Wooden and Loundes (2001) confirm this trend using data drawn from surveys in all months of the year.

### 2.2.5 Marriage and divorce

There have been profound changes in attitudes to marriage and divorce over the past thirty years. In Table 2.6 we show trends in marriage and divorce. The crude marriage rate fell steadily from 9.2 persons per 1000 resident population to 6.0 per 1000 in 1999. Part of this fall is due to changes in the age structure such that the proportion of people of marriageable age (broadly speaking those aged 20 plus) fell as a proportion of all residents, a part is due to falls in the extent to which individuals formalise partnering by getting married and to the delay in partnering, and the remainder reflect changes in the rate of partnering. Without detailed knowledge of the components it is not possible to describe trends in partnering, but research indicates substantial differences in the social and economic consequences of marriage and “living together” with de facto couples more closely resembling the single than the married population (Waite and Gallagher 2000: Chapter 3). The age specific marriage rate indicates the number of people who marry in the year per 1000 of those unmarried over all marriageable ages. Sharp declines in the age specific marriage rate for both males and females indicate a decline in either the formalisation of partnering or in the extent of partnering.

**Table 2.6 Trends in marriage and divorce, Australia, 1971 to 1999**

	1971	1976	1981	1986	1991	1996	1999
<i>Average age at first marriage</i>							
males		23.8*	24.4	25.6	26.7	27.6	28.2
females		21.4*	22.1	23.5	24.5	25.7	26.4
Crude marriage rate (per 1000)	9.2	7.9	7.6	7.2	6.6	5.8	6.0
<i>Age specific marriage rate (per 1000)</i>							
Males, all ages		62.9	55.5	47.6	41.7	35.2	34.8
Females, all ages		61.1	52.6	45.8	39.6	32.9	32.8
De facto couple families as per cent of all couple families					8.2	10.1	
Median duration of marriage		7.4*	7.5	7.6	7.4	7.6	7.9
Crude divorce rate (per 1000)	1.0	4.5	2.8	2.5	2.6	2.9	2.8

Source: ABS (2001b); Notes entries marked with asterisk refer to 1977

There are two observations for the shares of de facto relationships among couples. While these observations suggest a significant increase in the proportion of de facto couples they are still too low to make a large contribution to changes in the crude marriage rates.

The final row in the table shows the crude divorce rate, the number of divorces per 1000 adult resident population. This rose sharply from 1 to 4.5 in the period 1971 to 1976 when the legal reasons for bringing about divorce were dramatically eased. After the initial surge, which reflected pent up demand, the rate stabilised at between 2.5 to 2.8 per 1000. The rates from 1981 to 1999 imply relatively constant median duration of marriages shown in the row above.

### **2.2.6 Future developments in families**

Many of the trends noted above are likely to continue into the future. The fall in fertility, the increasing independence of women, the increased expected age of life and changes in social attitudes are likely to lead to further change in the structure and nature of families. Families will continue to become smaller if current low fertility continues, reducing family size (McDonald and Kippen, 1999). The trend, in recent times, towards increasing labour force participation of married women and a reduction in participation of men is also likely to continue.

### **2.2.7 Summary of changes**

The Australian population is steadily increasing through lower death rates and continuing immigration. Households consisting of a single person are becoming more common at the expense of families. This increase in single person households is caused by the decreased marriage rate and the increased divorce rates.

Within the group of families, the number of traditional couples with dependent children is decreasing relative to the number of one-parent families and couples without dependents. This may be partly caused by the larger proportion of older people, who are more likely to live with a partner or alone (after the children leave home), and partly by the reduced fertility rate. The increase in the number of older people is a result of the increased longevity. Fewer of the couple families are married, having a de facto relationship instead. However this is still a minority of all couples.

As a result of the increased female labour force participation the number of families with two workers has increased.

### 3. A theory of families

In his discussion of 'family' in the Palgrave dictionary of Economics, Gary Becker (Becker, 1987) notes that families have been a major force in the production and distribution of goods and services in all civilisations of recorded history. However they have been far less prominent in economic analyses that seek to explain the production and distribution of goods and services. While noting their importance, the early great writers in economics (Smith, Mill and Marshall among others) made little more than casual remarks about the operation of families. However during the last thirty years, dating from Becker's first contributions (eg Becker, 1965, 1973) economists have begun to analyse family behaviour in a systematic way.

The economic approach is to identify the utility derived by the people who make up a family, to note the resources available to them and the constraints under which they operate, and to utilise the logic embedded in constrained optimisation to reveal a model of behaviour.<sup>6</sup> The usefulness of the approach is determined by how well the model explains the observed behaviour of families.

The economic approach is limited only by the extent to which behaviour conforms to rationality, the extent to which concepts and values can be monetised to enable measurement in a common space, and the imagination of the researcher. Nevertheless if concepts and values, for instance altruism, cannot be easily monetised, then the economic approach will need to be supplemented by paradigms from other disciplines. The most straightforward approach is to undertake analysis using a conventional economic model but interpret the results in the light of the effects of the concept not included. Conjecture the likely effects of different values for this concept.

Thus economic theory can provide a point of departure from which matters that are not easily included in the general model (generally because they are not easily measurable) can be considered. For instance matters such as the extent to which individual partnering is influenced by genetic factors, by ethnic and religious belief and by cultural considerations would be considered exogenous to the general model. It may be that in some instances these matters are so strong as to severely limit the usefulness of the formal model (for instance where, in areas of ethnic conflict, particular combinations of ethnic background are forbidden). Nevertheless these circumstances are rare and in any case, in most situations models can be adapted to account for these eventualities.

Economists have studied families attempting to answer questions such as how economic reasons influence decisions concerning marriage, the number of children and the distribution of work and home duties within families. While non-economic<sup>7</sup> reasons play a large role in these decisions, economic influences may nevertheless explain a major part of observed behaviour. Evidence of this relevance can be inferred, for example, from the fact that highly educated men and/or men on high earnings seem more likely to be married, or from the fact that the marriage rate and the birth rate dropped during the recession years in the 1930's (Vamplew, 1987, pp. 42 and 51).

#### 3.1 The neoclassical approach

In Folbre's (1996) collection of papers on the economics of families, theoretical articles are divided according to their approach. Two main theoretical streams can be distinguished in the literature on family formation and family decision making processes, the neoclassical approach<sup>8</sup> and the institutional or feminist approach (making use of bargaining power models).

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<sup>6</sup> In constrained optimisation, it is postulated that economic agents (families) will take actions (make choices in the utilisation of time, the selection of consumption goods and services, and in the deployment of resources to work and home production) to maximise utility. At the point of maximum utility it must be true that utility cannot be increased by changing the choice of consumption goods, services, home production and leisure. At this point the ratio of marginal utility to price is equalised for all commodities.

<sup>7</sup> In this context, non-economic means anything that cannot be explained by economics.

<sup>8</sup> In the literature the stream of research emanating from the neo-classical approach has often been called the new home economics.

In the first stream, based on neoclassical utility maximization, it is assumed that the household is a single decision-making unit where an altruistic head of the family controls the common resources in such a way that household utility is maximized. A simple neoclassical model for the household utility can be written:

$$\begin{aligned}
 &\text{maximise } U(l_m, l_f, c) \\
 &\text{subject to } c = w_m h_m + w_f h_f + y, \\
 &\quad T = h_m + l_m \text{ and} \\
 &\quad T = h_f + l_f,
 \end{aligned} \tag{3.1}$$

or combining the above three constraints,

$$\text{subject to } c + w_m l_m + w_f l_f = w_m T + w_f T + y = y_{full}.$$

where:

$l_m$  and  $l_f$  is the time spent in leisure (or more accurately time spent in leisure and/or home production) by husband and wife;

$c$  is the total consumption by the household (in practice mostly assumed equal to total income);

$h_m$  and  $h_f$  is the time spent in work in the labour market by husband and wife;

$w_m$  and  $w_f$  is the market wage of the husband and wife;

$y$  is the unearned income available to the household;

$T$  is the total time available; and

$y_{full}$  is full income comprising the total value of time and other income.

The model maximises the utility of the family where the utility is a function of the amount of leisure of the husband and wife and the total amount of consumption of the family. The level of utility that can be reached is constrained by the amount of income and the amount of time ( $T$ ), available to the household. The amount of total income depends on unearned income ( $y$ ) and on the wage rates of husband and wife ( $w_m$  and  $w_f$ ). Total consumption is equal to the sum of earnings of the family through wages ( $w_m h_m$  and  $w_f h_f$ ) or unearned income (rent, interest and business income). Time available to husband and wife is divided into work time and leisure time.

In this model time not spent in leisure is spent working and a labour supply model may be derived with unearned income, wages and tastes as its arguments. An increase in unearned income, all else equal, increases the demand for all normal goods including leisure, inducing the individual to consume more leisure and work fewer hours. An increase in wages, ceteris paribus, has an ambiguous effect on work hours due to two opposing effects. On the one hand the wage increase is like an increase in unearned income and tends to lower work hours. However the increase in wages raises the opportunity cost of not working, and induces the individual to reduce leisure. The resulting effects depend on strength of these two opposing effects. Taste for consumption and leisure is represented by the parameters of the model, which are estimated from data.

### 3.1.1 Explaining home production

The simple model explains the total household consumption and the amounts of work and leisure time of the husband and wife. However much of leisure time is engaged in home duties that are better conceived as inputs to a home production function. An augmented model incorporating home production provides a richer basis for explaining the choice of hours of work for husband and wife.

Extending the above utility maximization (1) to include home production results in:

$$\begin{aligned}
 &\text{maximise } U(l_m, l_f, c_{mg}, c_{hg}) \\
 &\text{subject to } c_{mg} + c_i = w_m h_m + w_f h_f + y, \\
 &\quad c_{hg} = g(c_i, hp_m, hp_f), \\
 &\quad T = h_m + l_m + hp_m \text{ and} \\
 &\quad T = h_f + l_f + hp_f.
 \end{aligned} \tag{3.2}$$

where  $c_{hg}$  is consumption of home produced goods by the household;  
 $c_{mg}$  is consumption of market goods by the household;  
 $c_i$  is consumption of intermediary goods by the household;  
 $g(\cdot)$  is the home production function; and  
 $hp_m, hp_f$  is the time spent in home production by husband and wife respectively.

In addition to the time and budget constraint of the simple model, there is a production function  $g$ , which describes how much  $c_{hg}$  a household can produce with a given amount of intermediary goods and time of husband and wife spent in home production. The time constraint makes clear that spending time in home production means less time can be spent on leisure and/or labour supply. Less time in labour supply means that less income is available to buy market goods. The higher the wage rate the higher is the opportunity cost of home production. However, if home produced goods are valued higher than market goods, then even at high wage rates, time for home production may be set aside.

### 3.1.2 Explaining specialisation

In marriage, one person often specializes in home production while the other specializes in labour market production. This is done for the same reasons that people specialize in certain labour market activities: higher returns can be obtained by specializing in one activity and output of one kind can then be traded for output of another kind. Becker (1965) points out that if one member of the family is extremely efficient in the labour market, it pays for the family as a whole to free up this person as much as possible for labour market activities while other members focus on home production activities<sup>9</sup>. A rational choice is for the person with the highest home production skills and the lowest market wage to specialize in home production. This specialization within marriage then tends to reinforce differences in skills and earning potential that are present at the start of the marriage (Becker, 1985).

Wales and Woodland (1977) explicitly model the time spent on home production in a neoclassical utility framework. They derive a simultaneous model of three demand equations (one for the husband and wife's leisure, and one for consumption), conditional on the time spent on housework, and two housework equations, which depend on consumption. In this study, the fact that the price of consumption depends on the housework time is ignored. Compared to a model not accounting for home production this leads to different predicted labour supply behaviour in response to wage changes. The hours of housework equations are consistent with cost minimizing behaviour, in that the person with the lowest wage rate spends most time doing housework. This effect is insignificant though. Families without children spend less time on housework with increasing income. No such effect is evident for families with children.

### 3.1.3 Altruistic behaviour

Becker (1981a) shows how, in the neo-classical framework, altruistic behaviour by the breadwinner of a family can make the whole family work together as a utility maximizing unit, even if the beneficiaries of the altruist are selfish and envious of the other beneficiaries. The altruist is assumed to know the utility function and consumption of each of the beneficiaries. If any beneficiary is made worse off by the selfish behaviour of another family member, the altruist will redistribute contributions to even out the standard of living but in aggregate everyone will be a little worse off. The selfish behaviour of the other family member will be more than countered and he or she will be worse off. In this way there is an incentive for all family members to consider the interests of all other family members. The crucial assumption that brings about this state of affairs is the power of the altruistic breadwinner to redistribute income to change the shares among beneficiaries.

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<sup>9</sup> This is obvious from (3.2) - because  $c_{mg}+c_i$  can be higher if the person with the highest wage rate works the maximum hours in the market.

### **3.1.4 Explaining changes in gender roles and effects on participation**

Becker (1981b) argues that changes in gender roles are occurring, with an increase in the male contribution to housework<sup>10</sup>. As the traditionally female responsibility for the housework and care for children shifts to men, more time and energy becomes available for market activities by women. This increases their earnings and decreases job segregation by gender. Although as women focus more on the labour market and less on housework, Becker maintains that a division in labour in married households may still be beneficial if specialized household and market human capital remain important. However, if the primary responsibility for housework ceases to lie with women, then the labour division would no longer be automatically linked to gender.

Becker (1985) also developed a model for individuals' allocations of energy to different activities. He argues that because housework is more energy intensive than leisure and other household activities, married women spend less energy (or effort) per hour of market work than married men (assuming that, as with total time, the total stock of energy available per week is limited). Total energy is different for different people and reflects individual health, ambition and motivation. It also changes as a result of endogenous forces like expenditure of time and goods, such as, sleep or a healthy diet. This could explain why even if married women are working the same hours as men, their investment in human capital may be less and their earnings remain behind that of men. According to this theory, women are also likely to select jobs that are less demanding, leaving more energy for home production, resulting in job segregation by gender.

### **3.1.5 Explaining family formation**

The assumption underlying the neo-classical approach is that marriage only occurs if both prospective members of a couple expect to be better off (measured by the utility level they may attain) after marriage than before. In Becker's (1973, 1987) words, marriage is said to take place in a 'market' that assigns men and women to each other or to remain single until better opportunities come along. The theory of assignments in efficient markets explains positive assortative mating by complementarity (reinforcing the effect of similar traits). In all societies couples tend to be of similar family background and religion, and are positively assorted by education, height, age and many other variables. Wage rates and traits that are close substitutes in household production tend to be negatively correlated, since that would maximise the gain from the division of labour in the household. Another more prosaic factor, independent of an individual's characteristics, is undoubtedly the economies of scale and scope that arise when individuals partner.

But the theory does not explain why particular individuals choose each other. While assortative mating and other psychological and anthropological theories<sup>11</sup> have been developed to explain partnering and components of these theories have been included in neo-classical modelling, economic theory cannot be expected to explain marriage fully.

### **3.1.6 Explaining divorce**

While the model has modest success in explaining why and with whom partnering occurs it can go some way to explain divorce. Divorce has increased markedly over the last 50 years or so, and now about 30 per cent of marriages end in divorce. Why has this occurred?

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<sup>10</sup> This trend is less visible in Australia, where women are still mainly responsible for housekeeping tasks and childcare, even though female labour market participation has increased considerably over the past decades (Bittman, 1998). In addition, there does not seem to be a relationship between the hours in the paid labour force of women and their husband's contribution to unpaid work at home. Bittman and Matheson (1996) further show that there is a lag in the reaction of men to their wife's labour force participation, so their time in unpaid work increases over time. However, even four years after their wife's entry in the labour market, men only contribute slightly over 20 per cent of total time in unpaid work.

<sup>11</sup> For instance there is the idea that a fundamental urge of any member of a species is to maximize the opportunity for his or her gene pool to be passed to following generations. In human societies this is best achieved through the security of establishing life-long mating patterns.

Legal change is the most obvious proximate reason, with the institution of the Family Law Act of 1976 making divorce easy to obtain. However the family models do help explain why pressure built to first legalise then ease the process of divorce.

Since women specialise in child-care, they are economically vulnerable to divorce (and the death of their partners). All societies have acknowledged this vulnerability and have required long term contracts, called 'marriage' to be instituted between men and women seeking to have children. However, increases in the skills of women and the income they might command in the market place is expected to be associated with decreases in vulnerability and increases in marriage break-up. The key comparison here is not only the relativity of the wages of husband and wife but also of the wife's prospective earnings within and without marriage. Furthermore, the decline in fertility is also likely to have had a positive effect on divorce. It implies a reduction in the time when young children are present and when mothers are most dependent on their spouse. Consequently the level of female vulnerability is lessened and the opportunity costs of divorce are reduced.

### **3.1.7 Factors affecting fertility**

Assuming that having children implies that more time needs to be spent in home production, part of the price of having children is the foregone market-oriented human capital of mothers, and perhaps occasionally of fathers (Mincer and Polachek, 1974). As a result, the price of having children rises with an increase in human capital and an increase in real wages.

We would expect to see lower levels of fertility and smaller average family sizes in mothers with greater skills. As standards of living rise over time we would also expect to see reductions in fertility as the opportunity cost of the time spent in child bearing and child raising increases.

If full income is fixed then the number of children will fall as the cost of children rises. Similarly with fixed cost of children the number of children desired by the family will fall if either the cost of other things desired by the family rises or if the number of other things desired rises. Thus family size is influenced by (material) desires that may place greater emphasis on other consumption goods or on leisure time.

It is interesting to postulate the consequences of rising full income. If full income rises because the reward for female labour force participation rises, then there will be scope for increased family size. However, the increase in the opportunity cost of raising children will also increase the net cost of children. If the substitution effect dominates, then increases in full income will be more than offset by increases in the net cost of children and the number of children may need to fall to maintain utility. The evidence of the last thirty years suggests that substitution effects do often dominate and are one of the causes of falling fertility.

Women with children have an incentive to engage in activities that are complementary to childcare, including work in a family business based at home. Similarly, women who are involved in complementary activities face fewer disincentives to have children because children do not make large demands on their time.

The net costs of children will be reduced when opportunities for child labour are readily available, as in traditional agriculture. This implies that children are more valuable in traditional agriculture than in either cities or modern agriculture, and explains why fertility has been higher in areas where traditional agriculture occurs.

There is yet another reason that may have contributed to the decline in fertility that we may explain with an extension of the neo-classical model. This is concerned with the quality of children.

In practice we may measure the quality of children by their education, health and earnings capacity although in theory quality can be any attribute desired by parents in their children. We can use the case of education to illustrate the effect of including quality in the model. The fixed cost of children would be all of the costs incurred by the family in having children but not dependent on the number of children. In most circumstances this would be dominated by the opportunity costs of the parent who foregoes income to provide childcare. The fixed cost of a unit of quality might be a library of resources (books, computers, software etc) maintained by the family for the education of the children

but again not dependent on the number of children. The variable costs of quality are those costs of education that are dependent on the number of children, such as school fees. As the number of children rises less can be spend per child. The interaction between quantity and quality can explain why large declines in fertility are usually associated with large increases in the education, health, and other measures of the quality of children.

The neo-classical view on fertility has been extended (Easterlin, 1987) to include taste and supply. Allowing for taste enables explanation of marked differences in fertility between for example families of different socio-economic status, income, and with divergent views derived from different religious beliefs. The supply explanation seeks to account for observed differences in fertility emanating from poor health conditions, as in some undeveloped countries in times of famine; and in government sanctioned programs to control fertility in other countries.

### 3.2 The institutional and feminist approaches

The second stream of theory was developed to address some of the shortcomings of the neoclassical approach. It was argued that there were advantages to long-term relationships, when these relationships require investment in family-specific capital. Women often invest more in marriage-specific investments, such as specialization in housekeeping tasks rather than labour market participation, which means they will lose more in a divorce than men. Bargaining power or collective approaches fit nicely in this stream, where the wife's and husband's bargaining power are not equal and are determined not only by each person's economic power but also by social norms and institutions.

The difference between the traditional neoclassical models and the bargaining models is that the utility of each person is written down explicitly and income is divided according to some sharing rule. Utility may depend only on one's own consumption (egoistic preferences), which could be written as  $U_m = U(l_m, c_m, c)$ , where  $c$  represents public household goods and  $c_m$  is private consumption (in this case of the husband). In the case where an individual's utility depends on the consumption of all members (altruistic preferences) the utility can be written as  $U_m = U(l_m, l_f, c_m, c_f, c)$ . Similar expressions can be written down for the wife's utility. Although the utilities are separate, optimising them still requires a joint decision process within the household. Assuming a cooperative approach, the maximisation problem can be written as (Bourguignon and Chiappori, 1994):

$$\begin{aligned} & \text{maximise } \lambda U_m + (1 - \lambda)U \\ & \text{subject to } p(c_m + c_f) + Pc + w_m l_m + w_f l_f = y_{full}, \\ & \quad T = h_m + l_m \text{ and} \\ & \quad T = h_f + l_f. \end{aligned} \tag{3.3}$$

where,

$p$  is the price of private goods;

$P$  is the price of public goods; and

$\lambda$  is a function dependent on prices  $p$  and  $P$ ; wages  $w_m$  and  $w_f$ ; and on total income  $y_{full}$ , which generates a value between 0 and 1 to weight the utility of each member.

$c, c_m, c_f, l_m, l_f$  are solved as functions of prices  $p, P, w_m, w_f$  and total income  $y_{full}$  for a given  $\lambda$ . Different values for  $\lambda$  give different Pareto efficient outcomes. However following this approach, the solutions are dependent on the chosen utility function. If a transformation of  $U$  is chosen which changes the relative values of utility in the different points for men and women, then different demand functions for  $c, c_m, c_f, l_m, l_f$  will result.

In case of egoistic preferences and without any public goods present, the decision process could be separated conditional on the existence of some rule about the sharing of total income. In this case, the demand functions should not be sensitive to a monotone transformation of utility  $U$ . For the husband the maximization problem would then look as follows (a similar expression exists for the wife):

$$\begin{aligned} &\text{maximise } U(l_m, c_m) \\ &\text{subject to } c_m + w_m l_m = \theta y_{full}, \\ &\quad T = h_m + l_m. \end{aligned} \tag{3.4}$$

where  $\theta$  is a sharing rule which determines which part of the full income is allocated to the husband.

A popular subclass of cooperative models is Nash bargaining, where each member in the household has a threat point or reservation utility  $H_m$  and  $H_f$ . This threat point represents the minimum level of utility that can be achieved by the husband or wife on their own (perhaps the utility after divorce). In a cooperative model the surplus of cooperation is shared between the members. The maximisation can be written as follows:

$$\begin{aligned} &\text{maximise } (U_m - H_m)(U_f - H_f) \\ &\text{subject to } p(c_m + c_f) + Pc + w_m l_m + w_f l_f = y_{full}, \\ &\quad T = h_m + l_m \text{ and} \\ &\quad T = h_f + l_f. \end{aligned} \tag{3.5}$$

The implication of this model is that each person has to be better off in the household compared to their potential situation outside the household; otherwise the household will break down. It also implies that people with higher utility outside the household can secure higher utility levels as a member of the household and thus have a better bargaining position. However, in this model the individual utilities still may contain the other member's consumption as an argument, so that more power for one of the household members only translates into a (much) worse position for the other members if the more powerful individual has egoistic preferences.

Gustafsson (1993) argues for adaptation of neoclassical models (including bargaining models) to reflect the feminist view. For example, specialisation in housework decreases the threat point (or reservation utility<sup>12</sup>) of an individual in the next period by decreasing their earnings capacity. This means the utility they can achieve on their own after a divorce would be lower. The utility of the person specializing in market work, on the other hand, will suffer much less from a divorce (if we focus on the financial side only). Even if this households starts out on an equal basis, the bargaining power of the person specializing in market work increases over time relative to the person specializing in homemaking, particularly given the fact that in a divorce the children normally go with the homemaker. Economic inefficient outcomes may occur because women, particularly those with higher education levels, who have potentially more to lose, might not have children or fewer children even though the utility of the household would increase from having more children. The gain in utility might however be unequally divided over the couple.

Lundberg and Pollak (1993) introduce the 'separate spheres' bargaining model, which differs from divorce threat bargaining models in that the threat point is not divorce but non-cooperative equilibrium within marriage reflecting traditional gender roles. In the separate spheres model, cash transfer payments to the mother and payments to the father can – but need not – imply different equilibrium distributions in existing marriages. In the long run the distributional effects of transfer policies may be substantially altered by changes in the marriage market equilibrium.

Using this new model of marital bargaining they compare two child allowance schemes, in the first a cash transfer is paid to the mother, and in the second it is paid to the father. Neither the neoclassic (Becker) model based on altruism nor the divorce threat bargaining model can explain potential differences in the effects of payments to the mother rather than the father.

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<sup>12</sup> This is the utility that can be obtained by the individual on their own, that is, after a divorce for example (Bourguignon and Chiappori, 1994).

### **3.3 Concerns about the neo-classical approach**

Many of the critiques of the neo-classical approach centre on the assumption of a joint utility function and the associated aggregation of individual tastes and preferences. The bargaining models described in section 3.2 are an attempt to develop models that answer these concerns by separately specifying the utility functions of different household members. However a number of commentators have raised broader problems with the Becker approach. Berk (1987, p677) provides a useful summary of this and associated concerns. He notes that the neo-classical approach (or new home economics) has gained a lot of adherents both within the economics discipline and in other social science disciplines, in part because of the lack of persuasive alternatives.

#### **3.3.1 Optimisation and equilibrium**

Berk (1987) notes two immediate problems: the assumption of optimisation is not necessarily suitable for a family and second it is not clear whether families are ever in equilibrium.

In the context of the family he opines, utility maximisation is especially problematic. Families are expected to allocate resources optimally. Families are thought to form within a marriage market in which inefficient matches will either not form in the first place, or if they do, will not survive. However to survive, it is not necessary to optimise, only to allocate resources in such a way that a sufficiently high level of utility is obtained. This level of utility may be reasonably close to the maximum, but it depends on the information an individual has on the available choices and the relative benefits each choice brings.

Second, Berk points out that families are subject to constant change and are relatively slow in reacting to changes. In addition, some changes are irreversible, such as for example the number of children, which cannot be reduced in reaction to a sudden increase in the costs of schooling. So often, before some reaction to a situation of disequilibrium can return the family to equilibrium, further changes will have occurred requiring a new equilibrium. But the conventional neo-classical utility optimisation models are predicated on the assumption of the existence of equilibrium states.

#### **3.3.2 Model specification and transaction costs**

Berk raises several other issues to do with the specification of the model. He notes that existing models do not cater well for joint production (cooking is home production but can also give psychic gratification and be regarded as a leisure activity) whereas anecdotal evidence suggests that joint production is widespread. The simple model assumes constant returns to scale in the home production function while common experience often suggests the opposite. For example, cooking for four persons does not take four times as long as cooking for one person.

Berk notes that the neo-classical model is an abstraction of the production process, which assumes frictionless interchange between individuals. In practice however there are considerable transaction costs which are not explained. Pollak (1985) outlines an approach that explicitly deals with transaction costs. This approach focuses on the role of institutions in structuring complex long-term relationships. It generalizes neo-classical theory by recognizing that internal structure and organization matter. It treats the family as a governance structure (rather than a preference ordering augmented by a production technology). Pollak outlines advantages and disadvantages of considering families from this viewpoint. The advantages of the family as a governance structure arise from its ability to integrate activities with pre-existing ongoing significant personal relationships. Families also have traditionally provided protection against the economic consequences of uncertain adverse events.

#### **3.3.3 Generality of the model**

Blaug (1992, p209) introduces the concept of *methodological individualism*, in which social phenomena are traced to their foundation in individual behaviour. Individuals act in their own interests. The so-called altruist has family harmony as an important part of his optimisation function. However the justification of altruism explaining what is seemingly selfless behaviour, is nevertheless still founded on the individuals concerned each making decisions in their own best interest. This approach may be contrasted with that adopted by other social scientists (sociologists, anthropologists and political scientists) who study households as whole units, and aggregations of households

(communities) as whole units.<sup>13</sup> Their behaviour is explained not by aggregating up from the individual but by considering the characteristics of the aggregated unit of observation. While macroeconomic analysis also envisages aggregate entities as economic agents there has been limited development of macroeconomic models of household or community.

On a general level Blaug (p226) notes that the household production model is so formulated as to be compatible with almost any finding. The ability to explain observed phenomena does not derive from the model but from assumptions about elasticities, about the form of functions and so on, which drive the model. For instance in order to combine market goods and services purchased with the own time and skills of household members into a single aggregate of 'full income', it is assumed that the household's technology exhibits constant returns to scale and no joint production. Dropping the assumption of constant returns to scale and allowing for joint production, as well as the multiplicity of traits by which family members differ, allows almost any observed sorting of mates to be explained.

Blaug is concerned that the model does not incorporate changes in taste over time or differences between people since such changes and differences can account for almost any behaviour that might be observed. The problem he highlights, is that the model is empty. It can explain behaviour, but so too can a myriad other models. To provide a powerful tool for social sciences the model needs to uniquely explain behaviour. Blaug acknowledges that with further development and enhancement this may be achieved.

Reflection on Blaug's critique leaves one with the impression that rather than consider the neo-classical model as a model to explain family behaviour, rather it should be regarded as a framework within which models may be constructed to explain behaviour. Indeed Blaug stylises it as a research program with much 'work to be done'.

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<sup>13</sup> Mythology also adopts an individual centred approach. For instance Marong (1994) discusses the mythic struggle of individuals to reconcile self-interest with their need to be part of a community composed of shared values. He critiques Joseph Campbell's advice derived from extensive mythological research (see Campbell, 1968) to 'follow your bliss' meaning to follow your instinct or heart, regardless of financial consequences. The modern day interest in fantasy suggests that many find the idea appealing.

## 4. Empirical studies in economics

While the previous chapter has outlined a theoretical framework for the study of families and phenomena associated with families, very few empirical studies overseas or in Australia have used this framework explicitly. However very many of these studies can be viewed as partial models of some aspect of family functioning in which there is an underlying but unstated utility maximisation problem similar to those discussed in the previous chapter. In discussing the empirical work no attempt is made to relate the partial models to the underlying family objective functions.

### 4.1 Norms

A body of research concerning social norms has developed from surveys of householder attitudes towards economic and social phenomena. While it is accepted that there is a gap between self-reported data (what people say) and observed behaviour (what people do) nevertheless attitudinal data is a powerful tool for studying social norms. The correlation between attitudes and observed behaviour may be very strong or it may be very weak depending on the nature of the material of interest. It is always incumbent on the researcher to be cautious about inferences from self reported data particularly where this relationship is known to be fragile. However in the discussion which follows it is believed that, in the main, the reported attitudes of individuals provides a strong indicator of behaviour.

The International Social Science Survey of Australia or (ISSSA)<sup>14</sup> is an nearly annual survey of respondents from around 2500 households that has been going since 1984. While most surveys carry questions about family in 1989 in particular questions were asked on attitudes towards marriage, family, and working mothers. Much of the material below draws on this and other surveys of the ISSSA.

#### 4.1.1 Fertility

Vandenheuvel (1991) reports that the majority (85 per cent) of respondents still see marriage as the preferred life style. Regarding the number of children, less than 2 per cent named no or one child as the ideal number. Interestingly, men saw more positive values in having children than women, perhaps because men generally have to give up less than women to have children, but Evans and Kelley (1999) found no gender difference in family size ideals. Gender difference in family size ideals would be in line with Gustafsson (1993) who explains how women may have fewer children than optimal for the household's utility, because of the unequal division of the gain in utility. Seven years later, using the 1996/1997 IsssA (International Social Science Surveys Australia), Evans (2001a) finds that 7 per cent of Australians prefer to be childless. Disaggregating this number by birth cohort, it is found that only 3 per cent of those born before 1929 would have preferred to remain childless, whereas this increases to 9 per cent for those born in the 1960s. Actual numbers of people remaining childless are higher and are projected to be between 27 to 31 per cent for those born in the 1960s, up from 13 per cent for the cohort born before 1929.

#### 4.1.2 Employment of mothers

Regarding employment of mothers, it has been found that the ideal of life-long full-time homemaking for women no longer holds sway in the Australian population, but instead focuses on the stage of young children in the home. Inferring from age effects net of many controls, Evans and Mason (1996) argue that liberalisation of gender role attitudes has been occurring across the 20<sup>th</sup> century, with the greatest change appearing to occur in the early decades of the century. By the middle 1980s, Evans (1988a: Chart 1) found in ISSSA (International Social Science Survey/ Australia) that large majorities of women (over 80 per cent) would prefer to work full-time as singles and as newly-weds, then (77 per cent) to stay home when there are children under school age, then (65 per cent) to work part-time while the children are at school, and then there was more diversity of opinion about the "empty nest"

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<sup>14</sup> The nearly-annual series of International Social Science Surveys began life as the National Social Science Survey in 1984; the NSSS is now incorporated as a module in the ISSSA. For more detail on the survey see Kelley and Evans, 1999.

stage, with only a small minority preferring full-time homemaking, and the rest fairly evenly divided between part-time and full-time employment. From a slightly different angle, generalised approval of married women's employment in a question not mentioning children had risen to a majority, and the claim that "A married woman should not attach too much importance to a career" only elicited agreement from 25% of the population (Evans 1989: Chart 1). Using later ISSSA data, Vandenneuvel (1991) reported that the majority of mothers believes women have the right to be concerned with their own careers, even if there will be some negative effect on children and family. However, the majority believed that new mothers should be homemakers (66 per cent of men and 62 per cent of women). Fewer than 4 per cent thought full-time work was the preferred option. Isssa data also reveal that the percentage believing that new mothers ought to be homemakers fluctuated between 65 per cent and 70 per cent during the 1990s in the general population (Evans 1995a; 2000b: Figure 7) and remained at about 70 per cent among mothers in 2001 (Evans and Kelley 2001a: Table 1). However, the answers of young women were somewhat different, only 53 per cent see full-time homemaking as ideal. Nonetheless, full-time work for mothers of small children is seen as ideal by just 5 per cent of women born in the 1960s and by 9 per cent of women born in the 1970s.

## **4.2 Marriage and fertility decisions**

In labour supply research a considerable amount of attention has been paid to labour supply over the life cycle, in particular for women, where the presence of children and a (working) partner is a major determining factor in the decision to work and how many hours to work. Often this is restricted to including the number of children or marital status as explanatory variables in an equation explaining labour supply. This can lead to interesting studies such as Hamermesh's (2000) analysis of the jointness in spouses' leisure time and the effect the birth of the first or an additional child has on this jointness. He finds that there is jointness, which is reduced by the presence of children. In addition, he identifies who is changing their work schedule most. Not surprisingly, the answer is new mothers. Although he analyses the effect of changes in the number of children from one year to the other, the number of children and the arrival of additional children is taken as given.

### **4.2.1 Effect of welfare payments**

Alternatively, marriage and fertility decisions are estimated for women who start out on welfare payments in the US (Grogger and Bronars, 2001). The effect of the generosity of welfare payments on the duration until the first marriage and on the duration until the birth of the next child, is analysed. Welfare payments differ between states, however the model assumes that welfare payments are exogenous and no movement takes place towards states with higher benefit levels. Additionally, no account is taken of the possibility that labour supply may be affected as well. Conditional on this, the authors find that white mothers postpone their first marriage and black mothers hasten their next birth. The effects are very small. No evidence is found of an effect from increased benefits as a result of larger family size after an additional child is born. Fitzgerald (1991) follows up on this result found by other research that white sole mothers are more likely to exit through marriage than black sole mothers (exit through employment is similar for both groups). He analyses the possibility that black mothers' marriage prospects are poorer due to the lack of potential spouses with sufficient income. Neither the ratio of available potential spouses to the number of single women nor the ratio of employed single men to single men are important in the exit rates of black mothers, contradicting the idea that a poor marriage market is the cause for lower exits through marriage of black mothers on welfare. In the US, a large number of papers have been written on marriage and birth rates for sole mothers given the incentives of the welfare system, which is generous to sole mothers compared to the available programs for other groups. Examples are Moffitt (2001), who finds a small effect of welfare benefits on female headship (defined as women who are not married, with children) using time-series data, which is consistent with the wide range of mostly positive effects found using cross-section data. Lefebvre and Merrigan (1998) find similar results of welfare benefits for Canadian sole parents on marriage rates, and additionally they find that higher welfare benefits available to couples with children increase the probability of marriage. Their study is not restricted to sole parents who are dependent on welfare benefits. A US-study based on all young women aged 16 to 24, examines the influence of labour market (for men and women) and marriage market conditions on female marriage

decisions over time (Blau, Kahn and Waldfogel, 2000). They find, as one would expect, that better female marriage markets, worse female labour markets and better male labour markets all increase marriage rates for white women (the results for black women are not robust for this age group, but for the 25 to 34 age group somewhat stronger results are obtained). Welfare benefits decrease the marriage rate, however this effect disappears largely in the fixed effect specification.

#### **4.2.2 Work for women, in general**

A different line of research focuses on the probability of women working in general rather than concentrating on women in receipt of welfare payments only. Persistence with regard to labour force participation has not changed much over time (that is persistence in being a worker and persistence in being a non-worker), however the number of persistent workers (rather than non-workers) did increase from 1967 to 1987, from about 27 to 51 per cent of all married women (Shaw, 1994). This resulted from fewer women dropping out of employment after marriage, even after childbirth (short-term hours reductions make this feasible).

A similar persistence is found in Shapiro and Mott (1994) and Dex et al. (1998). Shapiro and Mott look at the employment behaviour of women around their first childbirth and find it has an effect on subsequent labour force behaviour (even after 14 to 19 years after the first birth an effect is still visible, although it is somewhat smaller than at first) and on wage rates. The question is whether the effects of this behaviour of the most strongly attached women can be extrapolated to other women, if they could be induced to remain in the labour force by better maternal leave policies? Similarly, Dex et al. (1998) find a propensity (unexplained) to either stay in or out of the labour force, even after controlling for a wide range of observable factors in the labour force participation decision. There is however evidence of large differences between highly educated, high-wage women and lowly educated, low-wage women. The former group is more likely to have continuous employment, and delaying childbirth does not seem that important. For low-wage, lowly educated women, a delay in the first childbirth even seems to worsen the chances of continuous employment.

The increase in female labour force participation has been highest for women married to high-wage men, whereas the slowdown in earnings was highest for low-wage men (Juhn and Murphy, 1997). This increase in participation can therefore not be explained as a compensation for the lower earnings growth of their husbands.

#### **4.2.3 Occupational choice**

Although women may stay in employment more often after childbirth now than they did in the past, they may also choose different types of jobs than men to accommodate their family responsibilities. However, an interesting alternative explanation for occupational segregation according to gender is provided by Badgett and Folbre (1999). They argue that it might not just be caused by family responsibilities, which are more easily accommodated in some types of jobs (which are then, as a result, favoured by women). They hypothesize that gender nonconforming occupations reduce the attractiveness of both men and women. As a result choosing gender nonconforming occupations may penalize individuals in the marriage market. This hypothesis is tested with the generation of a large number of personal advertisements by combining eight characteristics in several (random) ways. These personal advertisements were then put before a sample of about 500 students, who were asked to rank the response they thought the advertisement would receive. From a regression of all the different characteristics on the rating it was found that individuals in nonconforming occupations are expected to get fewer responses to their advertisement.

In addition to different types of jobs, mothers may experience lower wage growth than others as a result of the fact that they need to spend more time and effort in unpaid work at home than others. This is confirmed by the explanation of Becker (1985) that everyone has a limited amount of energy available. If more energy is spent outside the labour market, less energy is available for labour market activities. Thus as one would expect, Waldfogel (1995) finds that the gap between male and female earnings is much larger for mothers (38 per cent) than for non-mothers (16 per cent). This is largely due to the effect of family status (both direct and indirect by women with family responsibilities taking more time out of the labour market). Human capital was important but unobserved heterogeneity not (differences in motivation or other unobserved attributes cannot explain much). After this a large part

of the child penalties remains to be explained, perhaps by differences in effort (supporting the theory of Becker (1985) on the allocation of energy), discrimination, or opportunities.

#### **4.2.4 Interactions**

Lately, the importance of treating marital status and number of children as endogenous factors together with the work decision has become more acknowledged. Finding data on labour supply, marriage decisions and fertility decisions and then setting up models taking the endogeneity of several variables into account can be complicated and sometimes impossible. Ideally, such analyses require detailed longitudinal data with information on labour supply, marital status and number of children at different points in a person's life cycle.

In one of the earlier studies on fertility, female labour supply and wages, Moffitt (1984) addresses the jointness of these three variables and their changing patterns over the life cycle. The presence of children often is not a random event but a well-planned decision taken together with the decision on labour supply. Furthermore, women with lower wage levels may be more likely to have children but in addition having children (and reducing time in the labour market) may reduce wage growth as well, which means the causal relationship may run both ways. Moffitt looks at the time path of the above three endogenous variables and finds that shifts in the wage path leads to shifts in the fertility profile (slightly lower path for higher wage paths) and shifts in the employment path (higher path for higher wage paths).

Few papers look at all three components. However looking at two components at a time, researchers find that accounting for the endogeneity of additional factors changes estimated results. Thus family formation can be important when looking at economic issues. Van der Klaauw (1996) finds that accounting for the simultaneity of the labour supply decision and the marriage/divorce decision of women leads to higher estimated wage effects on female labour supply. This study has potentially 17 years of data on labour supply and marital status of young women (between 29 and 36 years old in the final year of the data). On average 13 years of data are available for each woman. The model evaluates the utility of marriage and labour supply at several points in time using an estimated earnings function for the woman and an earnings function for a (potential) husband. Account is also taken of the different arrival rates of marriage opportunities for different women.

The increasing divorce rate has been at least partly attributed to an increase in economic independence of women over the past few decades. However, it could be argued that the causal relation might work in both directions, with divorce more prevalent, women might re-enter the labour market or become the primary wage earner instead of the second wage earner. In addition, women might be more cautious about giving up paid employment in favour of full-time homemaking when divorce rates are high. Ressler and Waters (2000) analyse divorce rate and female earnings<sup>15</sup> by state for the years 1960, 1970, 1980 and 1990 in a simultaneous equations model, allowing the causal relation to go either direction. They find that divorce and female earnings are indeed jointly endogenous, and that there exists a two-way causal relationship. Not accounting for the simultaneity of these two variables could overstate for example the effect of earnings on divorce. They argue that women with higher earnings are typically higher educated and thus more able to end an unsatisfactory marriage. Over time the effect of earnings on divorce has decreased.

### **4.3 Home production**

To assess the welfare of a household correctly, home production should be taken into account. If one of the household members is a full-time homemaker, non-financial advantages are present which may increase the welfare of a household. Services and goods that households without a full-time homemaker need to purchase in the market could be produced at home.

Becker (1965) assumes that households maximize a utility function where the arguments are both market produced and home produced commodities. Both types of commodity combine household

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<sup>15</sup> Female earnings are defined as median female income of full-time year-round workers, divided by the US Gross Domestic Product Price deflator.

resources of time and money; however the market good requires less time and more money, whereas the home-produced good requires less money and more time. The utility function is therefore maximised subject to a time constraint, an income constraint and a technology function, indicating how a good can be produced (see 3.1.1, equation (3.2)). The lack of data on home produced goods means that the effects on behaviour of preferences and technology cannot be disentangled.

#### **4.3.1 Time use studies**

To examine home production properly, good time-use data is necessary to gather information on the time spent in home production. For example, a sequence of time-use surveys may answer the question whether in times of recession people do shift from market goods to home-produced goods. Joyce and Stewart (1999) suggest this as one of several possible uses of time-use data, which have economic relevance.

Bitmann et al.(1998) undertook such an analysis with Australian data at two points in time, utilising an expenditure survey and a corresponding time use survey. They compared expenditure on domestic outsourcing in 1984 and 1994. The expectation is that with an increase in female labour force participation (and the reluctance of men to do more unpaid work at home) outsourcing of domestic tasks would increase. The authors find the largest increases in food preparation and childcare. Examining time use surveys for the same years, it is found that the latter increase did not mean that people were spending less time with their children themselves in 1994 compared to 1984. However, expenditure on outsourced cleaning and the amount of time spent cleaning had remained constant. The outsourcing of laundry and clothes care had even decreased. Possibly technological changes have meant this has become an easier (cheaper) task to do at home.

Models that analyse for example the effect of taxation reforms on the income of families without accounting for home production leave out part of the welfare of families generated by home produced goods. Apps (1994) compares the results from two models of Australian female labour supply and housework: one accounting for women's time spent in home production and the other adding women's home production time to leisure time. She assumes that home-produced and market goods are perfect substitutes and that home-produced goods are valued at the time it takes to produce them multiplied by the woman's net market wage rate. Data on labour supply and data on home production are available from two separate surveys. A housework equation is estimated from the time-use survey. Imputed hours of housework are then generated for each observation in the other survey and used in the demand for leisure and consumption equations. Under these assumptions, she finds the latter model overstates the distributional merits of policies disadvantaging employed married women. Women in larger families and with younger children spend in total more time working in the market and doing housework, thus generating welfare for the family.

#### **4.3.2 Multiple utility functions within the family**

Polak (1999) points out that models that rely on household utility instead of individual utilities for two-person households are unlikely to hold. If a household utility existed, then expenditure and time-use patterns should not be influenced by which of the household members is in control of the resources. This is rejected by empirical evidence. Apps and Rees (1996, 1997) address this issue by incorporating home production in a collective labour supply model allowing the individuals in a household to have distinct utility functions. Instead of obtaining a transfer model, where one individual receives large transfers of consumption from the other individual and may seem parasitic, they set up an exchange model, where an interpersonal exchange of production of homemade goods and consumption takes place. This provides a plausible economic explanation of why transfers between individuals take place. First of all, accounting for home production time reduces the seemingly large consumption of leisure by the person working at home in housework and secondly, valuing the output of home production means it can now be included in the full income<sup>16</sup>. The empirical results from the exchange model present much smaller wage and income elasticities than the

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<sup>16</sup> It should be noted that in order to value home production, assumptions need to be made. Here the price of home produced goods is assumed to depend on the market wage or reservation wage of the individual producing the good.

model without home production. This means for example that people are less sensitive to lower income tax rates than would appear from a model without home production.

Often (like in the above paragraphs) it is assumed that total consumption equals the output of the home production process and that home produced and market goods are perfect substitutes (that is preferences for home-produced or market goods do not play a role). An alternative is to construct a reduced form utility function, which is dependent on goods (consumption) and on time spent on different activities (including home production). The utility function is reduced form because the effect of technology and preferences cannot be separated. Seven different activities are distinguished in a study by Kooreman and Kapteyn (1987). They show that small changes in the aggregate time use may disguise larger movements in the separate components. For example, male leisure is quite unresponsive to female wage rates, but time spent on organized activities, hobbies and sports increases quite substantially, whereas time spent on entertainment, and social activities decreases to some extent.

#### **4.3.3 Unpaid, on-call and parallel activities**

The time spent on eight unpaid activities is examined by Williams (1999). He finds that female wage rates are an important factor in determining what sort of unpaid work is done and who does it. Women spend less time in unpaid work in general if their wage is higher and more time if there are children (particularly pre-school). Men spend more time on cooking, general housework and home maintenance if the female wage rate is higher and more time on child care if there are pre-school children. Williams and Donath (1994) found a similar result looking at aggregate unpaid work. The model is limited by the lack of information on the presence of durable goods, which could partly explain reductions in time spent on unpaid work due to technological improvements and separate it from the effect of contracting out.

Pollak (1999) and Joyce and Stewart (1999) make it clear that including home production is not quite straightforward. First of all, the commodities produced need to be identified and valued (what wage rate should be chosen for the time used in home production?). In the collection and analysis of time-use data simultaneous activities are problematic. Polak (1999) suggests a distinction should be made between on-call (or standby, for example, caring for a sleeping child and doing other housework chores) and parallel activities (driving and listening). The most important combinations can be treated as separate compound activities. The number of categories needs to remain manageable however. Similarly one home production process may generate two outputs, for example if someone enjoys cooking, the output can be a home cooked meal and time cooking. In most cases (unless there is no joint production and the household technology exhibits constant returns to scale), commodity shadow prices depend on preferences (likes and dislikes of activities), on prices of market goods, on wage rates, and the parameters of household technology. Williams and Donath (1994) use data on Australian households where simultaneous activities are recorded. They use an approach where one accounts for the less intense input of time if a person needs to divide their attention between different activities. Although it is known which activity is the primary activity and which one the secondary activity, they argue after estimating the weight for each activity that the empirical results indicate that the input hours on an activity should be divided by the number of activities undertaken at the same time. This gives each activity an equal weight. However, it is also found that the results are quite insensitive to the treatment of secondary time.

Longitudinal data would help identify the relation between time use and the purchase of goods by providing price variations (Kooreman and Kapteyn, 1987). This data should ideally contain information on time use, household production, stock of durables and consumption.

#### **4.4 Intra-family transfers**

Two types of intra-family transfers can be distinguished in the literature. The first one is between, independent households which are however blood related, such as from parents to children (for example when helping with the buying of a house) or from children to parents when for example, parents are living close to their children in a "granny flat". The second type of transfers relates to the distribution of consumption over the members within a single household. For example is there a

difference in how income is spent, depending on who receives it? For both types, transfers can be in time or money.

The two types of transfers are discussed in the following two subsections.

#### **4.4.1 Transfers between households**

The first type seems less relevant to Australian families than the second one. Most articles on this type of transfer relate to developing countries, because in this group of countries older people often need to be supported by their children, as there are no national provisions like age pensions. King and McDonald (1999) find that in Australia receipt and provision of transfers occur only at a rate of 5 to 10 per cent (this includes inheritances). Financial transfers are most likely to happen between the better-off families, while transfers of care occurs more frequently among the lower income groups. US research (McGarry and Schoeni 1995b), however, has found that time and financial transfers from children to parents occur quite frequently. These transfers are more likely to occur and involve larger amounts when the parents have lower incomes.

The Australian results are mostly from univariate analysis of the 1992 Family Survey by the ABS. The personal characteristics of both the provider and recipient are only known when the provider and recipient are part of the same household. This complicates multivariate analyses of transfers like those by McGarry and Schoeni for Australian data. However, more in-depth analysis of the Australian data could be useful to gain insight in the timing and reasons for transfers.

With the increased prevalence of superannuation and the Australian system of Age Pension payments, Australians should not need children to provide for them in their old age, so one would expect fewer of these transfers to take place in Australia. Some support for this is provided by King and McDonald (1999), who find that Australian individuals between 35 and 74 years old are more likely to be providers than recipients of transfers, indicating that many older people are still helping others rather than being helped. For those over 75 years transfers are most likely to be in the form of personal care and home help. Further support for the idea that social security replaces the old-age provision function of children is found in a macro-economic analysis by Cigno and Rosati (1997). They suggest that the social security system, the capital market and the extended family are all ways to make life-cycle adjustments (that is transfers from prime-aged individuals to old-age parents and children). Evidence from Japan (and from Germany, Italy, the UK and the USA in earlier articles) support the idea that changes/introduction of a social security system affect the use of the other ways of making life-cycle adjustments.

In Australia, there is anecdotal evidence of transfers from parents to children when the children start setting up their own households. As far as we know this has not been subject to empirical research in Australia. In the US, some supporting evidence is found by McGarry and Schoeni (1995a, 1995b) in a study of older people. Information is available on the occurrence of transfers of more than US\$500 to the respondent's children during the past year. They find that more and larger transfers are made to the less-well-off children within the family, to younger children, to children who live nearby and to children who own a home (indicating some transfers may be made to help with the purchase of a home). Interestingly, no evidence is found for a relationship between help provided by the children to the parents and financial transfers from the parents to the children (now or in the past). There is, however, some evidence of a positive (small) correlation between current financial transfers and whether the respondent thinks the child will provide help in the future. Thus it seems that overall the transfers are not driven by self-interest of the parents.

Further US evidence for parent-to-child transfers is found by Rosenzweig and Wolpin (1988). They examine transfers (in the form of financial transfers or shared residence) from parents to their young adult sons (18 to 30 years old), many of whom invest in human capital through schooling or in the labour market. These transfers are found to be at least as important as governmental transfers. The transfers are conditional on the sons making human capital investments and are seen to help smooth the young men's consumption over time.

#### **4.4.2 Transfers within a household (intra-household transfers)**

Transfers within a family belonging to the same household is particularly relevant in relation to the decision by government to whom in the family social security benefits or family payments should be paid. Foreman and Wilson (1995) examined financial arrangements within families for family allowance or family payments recipients who had a partner on Job Search, Newstart or Sickness allowance in 1992 or 1993 and family payment recipients in 1994. They found that finances are often controlled jointly, and that in particular for low-income households, the wife's role in day-to-day financial management is large. The husband's role is more important in higher income families especially when the wife is not in paid employment. The evidence in this article however cannot be used to identify whether income is spent in different ways depending on who receives and controls the income. Unfortunately, little data is available on the individual's consumption within households and so this is a little-researched topic. The lack of suitable data is noted by the few articles on this topic (Browning et al. 1994, Apps and Rees 1996).

Even if data were available, the estimation of how income is shared in the household is not straightforward. For example, it is necessary to assign consumption to individual household members and allow for substitution effects between consumption and labour supply. Browning et al. (1994) estimate a collective model where the individual rather than the household as a whole acts as the decision-making unit. To illustrate the relevance of using a collective rather than a unitary utility function they look at the expenditure on clothing in a couple without children where both members work full-time (the latter selection means that for this group there is no substitution between consumption and labour supply, furthermore it is assumed that selection into this group is exogenous). Clothing clearly is a private good, which means it can easily be assigned to one of the two persons in the household. Many other consumption goods are more difficult to assign. The results indicate that the relative age of the members is important (older members have a larger expenditure share), as is the relative income (a larger share in the household income earned by the member means a larger share in the expenditure). Finally the wife has a larger share when total household expenditure is higher.

This clearly is an interesting result indicating the importance of the amount of income earned by each member. However, estimating a similar model for the share of expenditure on food and schooling for children in a diverse range of household types (allowing for working and non-working members), which would be relevant for policy making, is much more complicated. The above example by Browning et al. has been constructed in such a way that the problem is simplified and although it tackles an interesting issue, more work is needed to make it interesting from a policy perspective. Apps and Rees (2000) have started this complicated task using Australian data. From their paper, it is clear that several assumptions have to be made to set up a model where all members (including children) are treated as individuals with their own utility function. In their model the cost of a child is defined as the amount of consumption allocated to the child, which is the outcome of the choice of an intra-family distribution of consumption. Consumption incorporates time costs of childcare and domestic work. They find that time transfers to the child are largely those of the female partner and that in non-traditional households (where the female partner works more than 500 hours per annum) there are higher (financial) transfers to the child from the employed mother to substitute domestic goods by market goods.

Phipps (1999) reviews the literature to find the answer to the question whether the child's well-being is dependent on which parent is receiving extra cash or whether support is directed towards the child directly (for example through provision of school lunches). Few studies are concerned with the children's consumption, but rather focus on the husband and wife in families. From research in developing countries there is evidence that increases in the mother's income will benefit children more than increases in the father's income.

As a result of the replacement of a tax exemption for children by a family allowance benefit in the late 1970's in the UK, a natural experiment occurred, which facilitated less complicated analysis of this issue. The change meant that income was shifted from fathers to mothers. At the same time a shift from expenditure on men's clothing to expenditure on children's clothing was observed (Lundberg,

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Pollak and Wales, 1997). Thus it appears that in the UK, mothers also spend more of their income share on children's consumption than fathers do.

In the US, where there are both cash and in-kind transfers to families with children, Currie (1995) concludes that in-kind transfers seem most effective in increasing children's well-being, since cash transfers are likely to be only partly spent on children's consumption. In fact, there is not even a guarantee that it will benefit the children in a family, whereas the provision of a warm lunch at school will with certainty improve children's well being. The downside of such a system is of course the paternalistic nature of such transfers, that is, the consumption of these families is restricted to what other people think is best for them.

From this review of research on intra-family transfers, we conclude that in Australia more research should be done on the ABS 1992 Family Survey and the survey for the Australian Living Standards Study 1991-92 (undertaken by the Australian Institute of Family Studies), the two data sets that contain information on intra family transfers. So far, little multivariate analysis has been done to answer the question why and when transfers occur. The Household, Income and Labour Dynamics in Australia (or HILDA) Survey contains a variable indicating the amount of income received from parents in the last financial year and it has some information on the amount of time spent caring for elderly parents and disabled adult relatives. This would allow researchers to examine more recent developments for a particular category of intra-family transfers.

## 5. Sociological analyses of families

Sociologists are inductively inclined, preferring to work up from data, rather than down from theory. Their literature is rich in facts that are not easily placed under a single theoretical rubric. Broadly put, sociologists tend to emphasise the roles of values/ norms/ moral commitments and of constraints in shaping behaviour, and often tend to slight the preferences that play such an important role in economic theory. Because economists often tend to slight values and constraints, the two approaches taken together hopefully, like Jack Sprat and his wife lick the platter clean. Other key differences are that sociologists tend to see production and consumption simultaneously occurring in the same activities, and to see people as deriving a great deal of their utility from the utility of others.

### 5.1 Courtship, marriage, divorce, widowhood: patterns and consequences

The complex of changes in family life that has characterized Australia as well as most of the rest of the industrialized world in the past several decades -- an emerging pattern of pre-marital sexual intercourse; late marriage for most with substantial numbers of co-habitators and of life-long bachelors and spinsters; very low fertility inside marriage with a very substantial portion of fertility occurring outside marriage; and very high levels of divorce (e.g. Bracher and Santow 1990; Blossfeld 1994; Carmichael 1995; Hoem and Hoem 1988; Kiernan 1989; Kravdal 1994; Leridon 1990; Van de Kaa 1987) -- is sometimes attributed to women's labour market opportunities and the growing economic independence this brings (Preston and Richards 1975), but the evidence is mixed, as will be seen below.

#### 5.1.1 Marriage

##### *Is work an alternative to marriage?*

Young, single women's labour market experiences have interesting, and sometimes surprising impacts on their family formation patterns. Event history analysis controlling for age, education, and the presence of young children shows that employed single women were more likely to marry and less likely to cohabit than their otherwise similar non-employed peers, at least until the mid-1980s in Australia (Santow and Bracher 1994). Research on the US also shows that among single women, the employed are more likely to marry than are the students and the non-student non-employed (Cherlin 1980; Oppenheimer and Lew in press; Spitze and Waite 1980), and the same seems to hold for Norway (Kravdal 1994) and Germany (Blossfeld and Huinink 1991).

These results are strongly contrary to the argument that role differentiation enhances marital cohesion (e.g. Parsons 1949): instead of role complementarity, women whose labour market behaviour is more similar to that of men are forming families more rapidly. It is also clearly contrary to Freiden's (1974) and Preston and Richards' (1975) influential analyses based on aggregate data suggesting that women's potential economic independence makes marriage less attractive to them.

Why the positive association revealed by the individual-level analyses? Spitze and Waite (1980) have suggested that the enhanced marriage opportunities of employed women may reflect opportunities to meet a spouse in one's workplace or that women's current employment may signal their future willingness to work for pay and that men regard this willingness as desirable. Addressing the role differentiation issue more directly, it may be that young men interpret young, single women's employment as a signal of their willingness to contribute to the family in flexible ways.

But either the process of selection into marriage and cohabitation differs substantially from the subsequent impact of being married or co-habiting on labour force participation, or the apparently elevated labour force participation of co-habiting women reflects their youth, education, and lack of family responsibilities. In Australia, co-habiting women are, on average more likely to be in the labour force than are married women, but co-habiting women are also unusually likely to be in couples in which neither partner works (Khoo 1986, 1987). Similar patterns have been found for the Netherlands (Henkens, Meijer, and Siegers 1993), France (Villeneuve-Gokalp 1991) and Norway (Blom 1994), and can be collated from different studies of the United States (Glick and Spanier 1980; Spanier 1983;

Willis and Michael 1988). A wide-ranging overview suggests connections of these differences to feminist gender attitudes and to post-materialist attitudes more generally (Carmichael 1995).

### *Immigrants and marriage*

As in other countries (Houstoun, Kramer, and Barrett 1984; Tyree and Donato 1986), women form a very large fraction of modern migrations to Australia, but for some groups there has been a fairly substantial imbalance. For example, in many phases of the migration stream from the former Yugoslavia, women were rather less than half the migrants (Young 1990). That led to an unusually favourable marriage market position for Yugoslav women and left an unusually large fraction of permanent bachelors among the men (Young 1990).

### **5.1.2 Divorce**

#### *Does employment increase the risk of divorce?*

Women working in the labour market are more likely to divorce than are homemakers in Australia (Bracher, Santow, Morgan and Trussell 1993), as also is true for the United States (Cherlin 1992). Multivariate event history analysis reveals intriguing patterns (Bracher, Santow, Morgan and Trussell 1993). In particular, part-time work gives only a small increased risk of divorce in Australia, and the effect of full-time work has changed dramatically over time. For the cohorts coming of age in the early post-war period, women's full-time employment substantially increased the risk of divorce, but that effect dwindled steadily to the same size as the effect of part-time employment among the cohorts coming of age in the late 1970s and early 1980s. Research on Sweden has also found that full-time employment increases the risk of divorce, but the Swedish case differs from the Australian case in that part-time employment in Sweden has no effect on the risk of divorce (Trussell, Rodrigues, and Vaughan 1992) in contrast to the small but robust effect found in Australia.

Cherlin (1992) points out that writers on the family since at least the early 20th century have been pointing towards wives' employment as elevating the risk of divorce. But that it remains unclear whether wives' employment is itself a source of strain for families (Parsons 1949) or reduces wives' commitment to the particular marriage they are in, or provides women with an attractive alternative to marriage (Leibenstein 1957) or simply makes it feasible for women in unhappy marriages to leave (Oppenheimer 1994). Systematic assessment is required, but the evidence to hand suggests the following tentative conclusions: (1) the somewhat divergent findings for different countries run contrary to Parsons' hypothesis which implies a universal effect; (2) the fact that single women and divorced women are less happy than married women -- and this effect shows no sign of diminishing in Australia or elsewhere -- runs contrary to Leibenstein's hypothesis of the attractions of the solo life; (3) that leaves Becker's reduced commitment hypothesis and Oppenheimer's easier exit hypothesis as the most plausible (although it is also possible that some women in unhappy marriages may start to work in anticipation of a divorce).

## **5.2 Fertility**

### **5.2.1 Actual fertility patterns**

Childlessness rose across the last half of the 19<sup>th</sup> century in Australia and many other rich industrialising countries (Rowland 1999: Table 1). The percentage permanently childless hovered in the low teens across the cohorts born early in the last century, then climbed to a projected 18 per cent among the cohorts born in the 1950s, and to 27 to 31 per cent among those born in the 1960s (Evans 2001a). Details of recent trends in Australia in international perspective are succinctly set forth in Barnes (2001). Low fertility, especially childlessness, has large practical implications for FaCS in the future because children provide important unpaid caring services, so those without children will either need to be encouraged to invest and save more for their old age or will depend upon services provided by governments and charity, and hence will require increased public outlay.<sup>17</sup>

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<sup>17</sup> Research has repeatedly found that children (primarily daughters) contribute enormous amounts of unpaid caring services for elderly parents, especially their mothers. The standard pattern would be that the wife takes

### **5.2.2 Desired fertility**

Only 3 per cent of Australians feel strongly attracted to childlessness and another 4 per cent feel mildly attracted. There have been large changes in these ideals. Only 3 per cent of the cohorts born before 1930 feel attracted towards childlessness (strongly or mildly), as do 5 per cent of those born in the 1930s, 7 per cent of those born in the 1940s, 7 per cent of those born in the 1950s, and 9 per cent of those born in the 1960s (Evans 2001a). These levels of desired childlessness are similar to those found in Europe by both the ISSP (Evans and Kelley 1999) and Eurobarometer surveys (Coleman 1996a 38-39). This increase in desired childlessness is large, but it is dwarfed by the increase in actual childlessness, reaching a projected 27 to 30 per cent among those born in the 1960s (Evans 2001a). These figures suggest that among the cohorts born in the 1960s there will be around 9 per cent who are childless and want to be, 18 to 22 per cent who are childless and would rather have had children, and 69 to 73 per cent who have children. The increase in desired childlessness has stimulated a burst of research on its socio-economic and psychological correlates showing that those who desire to be childless do not appear especially distinctive, except that highly educated women are especially over-represented, as are people with a strong desire for control (Callan 1985, 1986; Lewis 1986; Marshall 1993). But there is as yet little research on the “unmet demand” for parenthood among the much larger group who are childless, but would have rather had children.

To the extent that FaCS’s role involves building strong families and achieving community ideals about families, it is a matter of urgency to investigate family policy to remove policies that are impeding childbearing and to put in place policies that facilitate it.

### **5.2.3 Costs of children**

Children are expensive in Australia, especially the first child, although some of the extra housing, transport, and household goods costs that come with the first child may be partly in anticipation of a larger completed family (Valenzuela 1999: 32), since few Australians desire an only child (Evans and Kelley 1999a). Expenditures on alcohol and tobacco tend to decline with the arrival of children, indicating some of the differences between a childless and a family lifestyle (Valenzuela 1999: Table 1). Other research finds sharp increases in female early school leavers rates of taking up smoking over the late decades of the twentieth century (Evans 2000a: Figure 9), so the fall in tobacco consumption with the arrival of the first child requires further research on the extent to which it is differentiated by sex and class.

### **5.2.4 Effects of labour force participation on married women’s fertility**

In the US, women’s employment has long been associated with wider birth spacing (Groat, Workman, and Neal 1976; E.F. Jones 1981). The same pattern probably, but less certainly, holds for Britain (Ni Bhrolchain 1986a, 1986b). In Canada, women who accumulated more labour force experience in young adulthood later had wider birth intervals between first and second births and between second and third births (Ram and Rahim 1993). Interestingly, the Canadian data also show a substantial interaction such that highly educated women who had accumulated little workforce experience as young adults later spaced their births especially closely. By contrast, women’s employment seems to be associated with shorter birth intervals in Sweden (Hoem and Hoem 1989). It may be that very small children are the most tiring, so that in countries where work is quite demanding working women feel that they can cope with, or perhaps adequately care for, only one small child at a time, but that by contrast in Sweden, where women’s employment is heavily concentrated in the government with very short hours, and many occasions of leave, women’s employment leaves them with enough energy to cope with several small ones at a time.

An aggregate-level study of twelve industrialized countries found a negative association between women’s labour force participation and fertility (Mincer 1985) and assumed (without testing) that the

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care of the husband as his health declines in the last few years of life, and then after he dies and her health begins to decline, the children take care of her. Children may not be a guarantee of old age care, but they certainly greatly increase the probability of non-dependence on government and charity for a wide range of services.

causal direction was from participation to fertility. But aggregate-level studies that allow for mutual influence generally find no effect of participation on fertility (Biswas and Ram 1982; Klijzing et al. 1988; Murphy 1992; Zimmerman 1984).

### **5.3 Childrearing practices, family relationships, family life**

Of married couple families with dependents, just 5 per cent had a mother in the labour force and a father out of the labour force (Grbich 1994), so female breadwinner families remain a great rarity today.

#### **5.3.1 Domestic violence**

Between 1.6 and 2.2 per cent of currently married and cohabiting women experience domestic violence in a given year according to ISSSA and ABS data, with 7.2 to 8.6 per cent reporting ever having experienced domestic violence (Headey, Scott and De Vaus 1999: Table 2). Most people who experience domestic violence also commit it (Headey, Scott and De Vaus 1999: page 59). Men seem to be just as likely as women to experience domestic violence (Headey, Scott and De Vaus 1999: Table 3).

There is evidence of only weak intergenerational transmission of domestic violence – a large majority of the people who had violent parents do not assault their own spouses, but rates of domestic violence are substantially higher among people reared in violent homes (Headey, Scott and de Vaus 1999: Table 4).

#### **5.3.2 Reading and cultural capital**

Parental reading has a substantial positive effect on the educational attainment of their children in Australia (Crook 1995; Evans and Kelley 2000c:Table 2; Lamb 1989), a fact that is remarkable in part because the influence of most parental characteristics is declining over time (Marks 1992). This is consistent with evidence from the Netherlands (De Graaf 1986, 1988, 1989); that has led to the “Cognitive Resources Hypothesis” of parental influence. This suggests that a very important part of strengthening families’ ability to raise children who will be educationally successful in order to be economically self-reliant and to achieve their potential is through enhancing parents’ literacy skills and engagement.

Importantly, both in Australia and abroad, these cognitive resources are measurably distinct from beaux-arts-related high culture activities with which they are sometimes lumped. No study empirically assessing the dimensionality of “high culture” containing sufficient measures of scholarly/ cognitive resources matters and of beaux-art-related matters has ever found them to be the same dimension (Crook 1997; De Graaf 1986, 1988, 1989; Evans and Kelley 2000c:Table 1). This is important because inclusion of “bookish” items (reading, book ownership, library-going) in multiple-item indices purporting to measure “cultural capital” leads to “cultural capital” having a large impact on school success, which is frequently interpreted as implying that teachers are bedazzled by beaux-arts related sophistication into rewarding and encouraging students from upper class families (Aschaffenburg and Maas 1997; Bourdieu 1973; DiMaggio 1982). It is fortunate that participation in beaux-arts high culture has little or no impact on educational success, because few Australian children are exposed to it. 28 per cent of adult Australians report having grown up in families that went to a museum at least once a year in ISSSA data (Evans and Kelley 2000c: 41) - a figure that is very close to current attendance – 28 per cent of adults in 1995 (ABS 1999: 177).

#### **5.3.3 Immigrant families**

Australia has had around 20 per cent of the population foreign born for several decades, making it among the highest immigration societies in the world. Note that this is far in excess of the 10 to 15 per cent foreign born that the US experienced during its heyday of immigration earlier in this century (Zubrzycki 1964).

Many immigrants experience a substantial loss of community (e.g. Appleyard and Amara 1986; Foner 1986; Prieto 1986, Simon and Corona 1986; Bhachu 1986; Lamphere 1986). Women’s paid work is typically more separated from the home in the mature industrial societies; men’s authority over

women is typically less in the mature industrial societies; and conflict over the legitimate extent of that authority is more common (e.g. Brettell and Simon 1986; Caspari and Giles 1986; Davis and Heyl 1986; Lamphere 1986). The logistics of childrearing, especially with respect to babies and toddlers, are typically much more burdensome in the mature industrial societies (e.g. Appleyard and Amara 1986, Foner 1986; Mirdal 1984 ). It is also noteworthy that the affluence that immigrants experience in mature industrial societies comes with (and generates) a wide range -- indeed sometimes a bewilderingly wide range -- of options (e.g. Boyd 1986; Evans 1984; Muenscher 1984; Pessar 1984). Some of the Mediterranean immigrant groups engage grandmothers more deeply in childrearing than is customary among Australians of British descent.

Less educated older women immigrants tend to have rather weak English language skills (Evans 1984, 1987), and many come from cultures where multigeneration households are more common than among long established Australians (Kelley and Evans 1990).

## **5.4 Labour supply**

There has been a large growth in casual employment (as defined by the Australian Bureau of Statistics to mean employed with higher pay in exchange for fewer non-wage benefits; with low de jure job security, but no implications for de facto job security) during the 1990s. Most working teenagers are in casual employment, but only about one fifth of casual workers are in their teens (Jensen 2000). Most casual workers are highly satisfied with their working arrangements (Wooden 2001b).

### **5.4.1 Women's labour force participation (labour supply):**

#### *History of women's labour force participation*

In the post-war years, married women have taken jobs in record numbers in many industrialized countries, so that the "activation" of female labour is one of the most striking changes in the workforce in this period (e.g. Bakker 1988; Gregory et al. 1985; Schultz 1986; Zagorski 1984)), particularly in countries like Australia where women's labour force activity had held quite steady for over a century with about 3 out of 10 women participating and the vast majority of these participants being unmarried (Alford 1984; F.L. Jones 1987). In the last century, perhaps the most typical employment experience for women was a series of posts as servant during adolescence and young adulthood. Many of these women, after they married, in turn, became employers of young, single, household servants (Larson 1993; Reekie 1994), a pattern also well known from Western Europe (Hajnal 1982; Laslett 1977; McIntosh 1984). But domestic service has waned, and women have flocked into jobs in offices and shops, especially during the post-war period. By January 1996, 53 per cent of women held jobs outside the home (ABS 1996). Australia's post-war pattern parallels that of the US, but at a lower level, and is broadly similar to the Netherlands (G.W. Jones 1993).

In Australia, the dramatic growth of women's labour force participation in the post-war period was brought about almost entirely by changes in married women's behaviour, with single women's participation holding constant or declining as more young, single women undertook further education across the post-war period (Bracher 1990; Daly 1990; Young 1975, 1989). 90 per cent or more of single women have worked for pay at some time during their early 20s for all cohorts since the 1920s, but there is substantial variation in amount of time in the labour force among the members of these cohorts (Santow and Bracher 1994).

Australia entered the post-war period with very few married women in employment (e.g. Ware 1976; Young 1975, 1990). As recently as 1950, only one wife in 10 had a paid job, a figure that skyrocketed to 4 or 5 in 10 by the late 1970s (Eccles 1984; Evans 1988b; Gregory et al. 1985) and seems to have stabilized during the 1990s at just over 5 in 10 with a possible small increase at the end of the 1990s (Evans 1995a, 2000b), but the most dramatic changes occurring between the mid-1950s and the late 1960s or early 1970s. The reasons for this change, and the pervasiveness of its consequences remain hotly contested.

In Australia, there used to be substantial disincentives to married women's labour force participation, including (then legal and respectable) job contracts common in large organizations such as the Public Service that specified termination of employment upon marriage, lower pay to women than to men in

the same job, and, according to anecdotal evidence, a daunting chorus of disapproval inflicted upon employed mothers by their friends and neighbours (Young 1989). Moreover, in the early part of the post-war period, most women had ended their education with Year 8 (Yates 1993), so that their potential wages may have been low relative to the value of their homemaking activities (e.g. Gregory et al. 1985).

The formal, legal disincentives to women's employment were dismantled bit by bit in a series of judicial and legislative decisions in the late 1960s to early 1970s, culminating in firm legal support for equal employment opportunity and for equal pay for equal work (see Young 1989 for a detailed assessment of policies affecting women's employment in the post-war period in Australia). And the best recent estimates suggest that reality approximates the legal ideal, that only a very small wage gap separates men and women when relevant productivity-related factors are controlled, despite persistent occupational segregation (Daniel 1993; Hayes 1991; Jones and Davis 1988; M. Western 1994). By comparison, the evidence for Britain on the gender gap in pay is more ambiguous. The post-war period has also been a time of erratically rapid expansion of education in Australia, so that young women today are much more highly educated than their peers of 50 years ago (Yates 1993). Because of education's continuing close connection with the quality of jobs and the level of pay workers can command in Australia (Broom, Jones, McDonnell and Williams 1980; Marks 1992), being a full-time homemaker would "cost" these young women much more than in prior generations (Beggs and Chapman 1988; Gregory et al. 1985). Indeed, at the individual level, educational attainment has long been a very strong determinant of labour force participation (Evans 1988). Thus, in a way, we need to be asking why so many Australian women remain outside the job market, as well as asking why so many now participate.

#### **5.4.2 Participation over the life course**

Of all the cohorts born since 1940, 90 per cent or more have participated in the workforce in the "nest-building" stage between marriage and the birth of the first child and around 80 per cent have participated full-time (Evans 2000b: Figure 1). These rates are very close to Australians' ideals (Evans 2000b: Figure 6).

Next, in the "nestling" stage, when there are preschoolers in the home, participation escalated across the course of the twentieth century from about two out of ten to about five out of ten, with increases strongly concentrated in part-time employment, as shown by both Issa and Census data (Evans 2000b: Figure 2; ABS 1999: page 98, row 6), although patterns in the 1990s show mixed trends for various family types containing a preschooler (McDonald 2001: Table 1). Current levels of participation at this life cycle stage are decidedly in excess of the ideals of the general population (Evans 2000b: Figure 7) and, more specifically, somewhat in excess of the ideals held by today's young women (Evans 2001b: Figure 1). To the extent that FaCS's brief is to realise community ideals, these results suggest diversity with the preponderant (but by no means universal) preference being for full-time homemaking. Facilitating this diversity would seem to be most readily achieved by putting resources in the hands of parents to use as seems best to them rather than by subsidising formal child care centres – some will want formal child care, others will prefer to pay for the informal care of relatives or neighbours, and some will simply use the resources to partly compensate the earnings forgone by a full-time homemaking mother.

In the "fledgling stage" when the children are of school age, again there is diversity of both behaviour and ideals, but with a plurality in favour of part-time employment. About half the women born since 1940 have worked part-time while their children were at school; that is a high plateau after a sustained rise from about 20 per cent for the women born early in the 20<sup>th</sup> century (Evans 2000b: Figure 3). Those not working part time are about evenly divided between fulltime employment and fulltime homemaking. At this life course stage, the number working part-time is less than the social ideal – there is both more full time employment and more full-time homemaking than the community would see as ideal (Evans 2000b: Figure 7). In international terms, Australians are middle-of-the-road, holding opinions similar to those in many other developed countries (Evans 2000b: Figure 7).

### **5.4.3 Contemporary situation: Marriage and women's workforce participation**

In Australia, co-habiting women are, on average more likely to be in the labour force than are married women, but co-habiting women are also more likely to be in couples in which neither partner works (Khoo 1986, 1987). Similar patterns have been found for the Netherlands (Henkens, Meijer, and Siegers 1993), France (Villeneuve-Gokalp 1991) and Norway (Blom 1994), and can be collated from different studies of the United States (Glick and Spanier 1980; Spanier 1983; Willis and Michael 1988).

Immigrant women from former Yugoslavia, Italians, Greeks, and Other Mediterraneans all show a characteristic pattern of increase in women's labour force participation in the newly wed stage, probably associated with getting started on the purchase of a house.

#### *International comparisons*

An international comparison of 14 advanced industrial societies in the early 1990s found that Australian women devote fewer hours to paid work in young adulthood, early middle age, and the beginnings of prime middle age (up to the middle fifties) and more hours thereafter than do women in most other advanced societies.

### **5.4.4 Sources of women's labour force participation: Education**

Education encourages married women's labour force participation in Australia (Evans 1984; Evans 1988; Miller and Volker 1983) as in many other countries. (Student status temporarily depresses labour force involvement, but the effect seems to be entirely transitory [Blossfeld and Huinink 1991].) Educational attainments have risen substantially in Australia in the post-war period, thereby shifting more women into the part of the educational distribution where labour force participation is more common. And, importantly, secondary school completion rates of girls drew even with boys in the early 1970s and then surpassed them (Jensen 1999; Yates 1983). But interpretation of education's effect remains problematic.

Economists have, for many years, interpreted education's effect as reflecting a "wage pull": highly educated women command higher wages and so forego more money if they stay out of the labour market (Mincer 1963, 1985). More generally, the "wage pull" hypothesis holds that women choose whether or not to take jobs based on whether or not their potential earnings outweigh the value of their home-making tasks; as a result rises in women's earnings can draw women into the labour force (Miller 1988; Mincer 1963). This seems likely to be an especially strong effect when the value of home production and market work are nearly balanced.

The evidence on the strength of a "wage pull" for women into the labour force in Australia is mostly in favour, although with continuing debate about the magnitude of the effect. In a direct test using education as a proxy for potential wages, Evans (1988) found that labour force participation was a good deal lower for the least educated married women than for the most educated women, all else equal in the 1980s. In indirect tests, Miller (1988) found a substantial negative effect of women's potential wages on fertility in an individual-level analysis, but Jackson (1995) found ambiguous results in an aggregate-level time-series analysis. Evans (1988) further decomposed the effect of education into an explicitly measured "cultural" effect reflecting education's effects of attitudes and values and a residual "wage pull" effect, and found that about one third to one half the effect of education reflects the "cultural" effect with the remaining half to two thirds representing an upper bound on the "wage pull" effect. The section below on "cultural" effects on women's labour force participation gives more details of the contents of the relevant attitudes and values.

*Immigrant women.* There has been a puzzling absence of an effect of education on participation reported in prior research for the Mediterranean group as a whole (Evans 1984). On closer examination, it turns out that the workforce participation of women from the former Yugoslavia is much more differentiated by education than is true of the rest of the Mediterranean groups, so there appear to be some important cultural differences in the propensity to "cash in" one's education (these differences are adjusted by multivariate analysis for differences in language fluency and life cycle stage). Being "hard working" is a traditional virtue, sought after in Yugoslav wives in the country of origin, and also lauded among the Greeks (Bottomley 1979: 85-86) and hence perhaps influential.

Placing a high value on diligence and on women's economic contribution is likely to encourage an instrumental attitude towards women's employment: Encouraging them to focus on homemaking when that affords the greatest economic contribution to the family, but to concentrate on market work among women who can get good jobs. By contrast, anthropological evidence suggests that, among Italians, diligence is not an especially sought-after virtue of women because maternal responsibilities in this group are strongly focused on emotional rather than material provision (Huber 1977) The important point is that there is diversity in the extent to which education influences the workforce participation of women from different cultures.

#### ***5.4.5 Effects of husband's income on wife's labour force participation***

The second family of economic hypotheses about women's labour force participation posit that the husband's income should have a negative association with wife's labour force participation. In other words, assuming that there is a fixed amount of housework and homemaking and family care to be done, the more that husbands can earn, all else equal, the greater the incentive for the couple to maximize their earnings by concentrating the husband's efforts on the labour market, with the wife withdrawing from the labour market (either fully or partly) to compensate by taking on the family tasks that would otherwise have been his or -- especially -- by rearing more children than they would otherwise have found feasible (e.g. Becker 1960; Becker 1981; Leibenstein 1957; Mincer 1963; Schultz 1976). One can also arrive at the prediction of a negative effect of husband's income if income has declining marginal utility: in this view, the husband's earnings largely reflect his education and other pre-existing characteristics, if that is high, couples may feel that they have plenty and so additional earnings from the wife's employment would add little to their happiness. If true, then the wives of high-earning men will have less incentive to take jobs. Another argument is that the husband's "relative" income (compared to expectations of past experience) is what drives wife's labour force participation (Easterlin 1978). By contrast, one writer has argued that instead of maximizing efficiency by specialization and differentiation of tasks, high earning men may seek out work-oriented women so that the spouse selection process would generate a positive effect of husband's income on women's labour force participation (Apps 1981).

The evidence for Australia is uniformly against an effect of husband's income in both direct studies of labour force participation (Evans 1988) and of fertility (Miller 1988; Jackson 1995: Table 1, column 1). Internationally, the evidence is at most mixed, and, on the whole, has long been mostly against this hypothesis with again the few gleams of support deriving from aggregate-level results (as usual selective about time and place) and individual-level results that control for age or cohort are uniformly negative (Killingsworth 1983; Leibenstein 1974; Murphy 1992; Smith and Ward 1985). Easterlin's interesting attempt to recast the husband's income hypothesis as involving comparison to the parental generation's affluence has elicited volley after volley of studies, but a comprehensive, sympathetic review reveals, at best, limited support, again, entirely at the aggregate level (Pampel and Peters 1995). There is, perhaps, a moral here about being too ready to leap from cross-sectional bivariate relationships to causal explanations.

The evidence on housework is also substantially contrary to the assumptions of the economic hypothesis: husbands' time devoted to housework is not substantially related to their hours of employment (at least among full-time workers), and although wives' time spent on housework is related to their employment, the trade-off is many hours of employment gained for each hour of housework shed (Bittman and Lovejoy 1993; Baxter, Gibson, and Lynch-Blosse 1990).

#### ***5.4.6 Effects of fertility on women's labour force participation***

The greatest potential strain between work and family commitments occurs when there are young children in the home. The presence of small children in the home has long been, and continues to be, a massive deterrent to women's labour force participation in Australia (Beggs and Chapman 1988; Eccles 1982; Evans 1984, 1988a, Young 1975, 1990), although the effects differ substantially by birthplace (Evans 1984). Some aspects of the effect appear to be quite sensitive to specification: two multivariate analyses based on large national samples yield different results -- one that fertility has an enduring, albeit diminishing negative effect on participation long after the children are in school (Beggs and Chapman 1988), the other that full-time homemaking associated with childrearing is a

brief detour from employment with no enduring impact on women's labour force participation (Evans 1988a). It is a question of theoretical interest, bearing on the role differentiation argument and on questions of flexibility in identity and is also of practical importance, for example in assessing a husband's continuing financial obligations upon divorce.

Internationally, women are still less likely to have jobs while their children are young in Australia (Evans 2000b), Britain and, at least until recently, the USA (Molm 1978; Waite 1980).

#### *Immigrant women.*

Immigrant women from former Yugoslavia, Italians, Greeks, and Other Mediterraneans all experience a decline in women's labour force participation when the children are born, but these declines vary considerably in size, being about 20 percentage points for the Yugoslavs, but only around 10 percentage points for the Italians and the Greeks. For all three of these groups, the drop in participation that occurs with the arrival of the children takes them back approximately to the level of participation that they experienced as young single women before marriage, so that half or more are still participating even when there are very young children in the home. Anecdotal evidence suggests that this is greatly facilitated by the babysitting by aunts and grandmothers, and that family care is seen by many of these immigrants as fine for babies and toddlers, in contrast to some other cultures which hold that babies and toddlers need to be almost entirely with their own mother. As the children age the workforce participation patterns of the women in the different groups diverge dramatically. The onset of marriage and children makes a much bigger difference to the participation of North-western European women -- the participation during the young single stage is 30 percentage points higher than during the stage with young children in the home-- than for the Mediterranean groups.

#### **5.4.7 Effects of gender role attitudes**

Australians' gender role attitudes are broadly tolerant of women's employment -- except when there are pre-schoolers in the home -- and have been becoming more favourable (Evans 1988a; Evans 1995; Evans and Mason 1996; Glezer 1990; Evans 2000b). This is true of the population as a whole (Evans 2000b), of mothers in particular (Evans and Kelley 2001), and of young women (Evans, 2001b).

Gender role attitudes appear to have a substantial impact on Australian women's labour force participation (Evans 1988; Evans, Kelley and Hayes 2000), but these have yet to be validated by structural equation models allowing reciprocal causation and by panel analyses (although the latter tend to be problematic for non-volatile characteristics).

#### **5.4.8 What kind of work do women do?**

Australian occupations are highly segregated by gender (Daniel 1993; Hayes 1991; Jones and Davis 1988; M. Western 1994). Women used to get slightly worse jobs than equally highly educated men in the 1960s, but have converged in the 1980s (Marks 1992; Broom, Jones, McDonnell and Williams 1980). One of the striking differences in the kind of work that men and women do is that women are much less likely than men to supervise and manage other workers in Australia (Baxter 1996), as is also true of other industrialized countries (Wright, Baxter, and Birkelund 1995).

Women's jobs are typically safer than men's, but raise health issues associated with particular gender segregated occupations, e.g. repetition strain injury associated with keyboarding (Williams 1992), the exclusion from Workers' Compensation of much casual and "grey" work, and many self-employed (Cameron 1994). In recent years, women in increasing numbers have been taking "casual work" where sick leave and holiday pay are exchanged for cash (Wooden 2001b).

Countries vary greatly in the balance between part-time and full-time workers among women in the workforce (Rosenfeld and Birkelund 1995), and comparisons among countries are difficult because the generosity of leave provisions and profusion of public holidays in some countries make their "full-time" employment very close to the same intensity of work as "part-time employment" where longer hours, less leave, and fewer public holidays are standard.

#### **5.4.9 Men's labour force participation (labour supply):**

A comparison of data on hours worked from 14 industrialised societies in the early 1990s showed that at every age, Australian men are among the hardest working in the developed world (Evans 1999:23).

Note also that there seem to be quite dramatic declines in men's labour force participation, for example, in the US (Juhn 1992) that may substantially delay or suppress family formation (Oppenheimer 1994)

#### **5.4.10 Impact of maternal employment on children's education**

An upward trend in the percentage of children experiencing maternal employment in Australia is clear from both ISSSA and ABS data (Evans and Kelley 2000a: Figure 1 and 2).

The finding that maternal employment, at least at the relatively low intensity typical of Australians, has little or no impact on the education of the children of early school leavers and the children of secondary school graduates, but does have a fairly small deleterious impact on the education of university-educated women was first reported for a single survey in Australia (Evans and Kelley 1995). It has since been replicated on the pooled file of ISSSA surveys (N=24,755) (Evans and Kelley 2000a: Figures 5 and 6). A parallel result has been reported on a representative cross-sectional sample for the USA (Bogenschneider and Steinberg 1994), where studies of poor populations also often report little or no impact of maternal employment (Alexander, Entwistle, and Horsey 1997; Posner and Vandell 1994). Note that full-time maternal employment was so rare in the past in Australia, that there are few cases of it even in this large sample, so one should be cautious about generalising these result without further evidence based on even larger samples.

A wild mix of effects of maternal employment is reported in the literature. Generally studies based on small samples find no effect, probably because traditional statistical tests are not powerful enough to find effects this size in small samples. Many studies do not test for interactions with mother's education, nor even proxy it with SES, so they necessarily miss the key result.

#### **5.4.11 Retirement/ withdrawal from the labour force**

Prior research has shown that Australian women are very unlikely to participate in the labour force in late middle age (Evans 1988, Rummery 1989; Young 1989). British research suggests that workforce participation in midlife depends, in part, on how healthy the woman is – an issue that warrants further attention in future Australian research-- and the effects of the husband's (and/or joint) retirement warrant further investigation.

Old age comes to home-makers and labour force participants alike, and Australia's policy makers have yet to address questions seriously of how to provide secure old age income for women in the context of a transition to a self-funded superannuation system (Beilharz, Considine, and Watts 1992).

#### *Immigrant women*

Like longer established Australians, Northwest European, Eastern European, and Mediterranean women rapidly withdraw from the workforce in midlife.

### **5.5 Caring for family members**

#### **5.5.1 Caring during the prime adult ages**

##### *Volunteer work*

In 1999, 33 per cent of Australians engaged in weekly volunteer/ charity work, up from 28 per cent in 1995, and hours contributed by participants rose, too, as shown by the ISSSA's traditional question on hours contributed weekly (Evans and Kelley 2000b: 16). This contrasts with the more mixed British situation where rates of participation were declining, but hours contributed by participants were increasing substantially in the middle 1990s (Smith 2000).

In international terms, Australia and the other New World Anglo-Celtic societies are among the world leaders in engagement in volunteer/ charity work, as shown by the ISSSA's question on annual participation (Evans and Kelley 2000b: 17). There is a great deal of international variation in the

extent of involvement in volunteer/charity work, which may reflect social trust and social networks (Putnam 2000), but may also reflect government policies that encourage or discourage participation (Baldock 1999).

The independent influences of diverse social forces are evident in multivariate analyses. Religiosity, especially churchgoing, is a prime motivator of volunteer work both in Australia (Evans and Kelley, 2000b: Figure 3) and in the USA (Wilson and Musick 1999). Education also enhances the propensity to volunteer both in Australia, but other social –class related differences are negligible (Evans and Kelley, 2000b: Figure 5) and in the USA (Wilson and Musick 1998, 1999). Age has a curvilinear relationship with engagement in charity work in Australia – rates of volunteering increase steadily over the 20s, 30s, and 40s, plateau across the 50s, and decline gently in the 60s (Evans and Kelley, 2000b: Figure 4). Rural upbringing, National Party allegiance, and female gender all have small but significant effects enhancing engagement in volunteer/ charity work (Evans and Kelley, 2000b: 20-21).

### **5.5.2 Caring during middle and old age**

#### *Caring for family members among Immigrant families*

In midlife many Mediterranean women take their turn at shouldering responsibility as deeply involved grandparents (Tisay 1985: 80) and some of them taking increasing responsibility for their and their husband's aging parents -- a tradition of care very strong, for example, in traditional Yugoslav society that continues into modern times and forms an obligation enshrined in the Constitution of Yugoslavia during the communist period (Tisay 1985: 103). This responsibility may be especially heavy because aging parents who do not speak English need extra help from their children (and strongly prefer help from children to help from strangers provided by social service agencies).

## 6. Some concluding comments

We undertake two tasks in this final chapter. We explore what has been learned about theory and applications in economic and sociological approaches to the family and we make some suggestions for future research in relation to the family. In the latter we return to the two motivations for the survey, exploring the implications for family policy particularly in relation to income support, and we consider changes in family life.

### 6.1 Implications of economic and sociological analyses

What are the implications of the economic and sociological theories for family development and trends in family structure and function?

Economics has a rigorous language that allows complicated concepts to be written in relatively simple abstract terms (Lazear, 2000). The language permits economists to strip away complexity. Complexity may add to the richness of description, but it also prevents the analysts from seeing what is essential. We might expect that the economic theory and associated empirical literature will reveal general themes and lead to understanding of the importance of phenomena and of consequences of actions. The sociological literature might provide a rich description of the range of experience and together with the economic literature provide a more robust knowledge reflecting the diversity and depth of family experience.

In this section we compare and contrast what has been learnt from work in the two disciplines. We reconcile the roles of sociology and economics starting with the theory of chapter three, almost entirely developed from economic paradigms.

#### 6.1.1 Theory and application

Economics typically starts with a theory of the way people behave. While motivated by observation or intuition from application elsewhere, theory is initially abstract, general and much simplified in relation to reality. It is an unfair test to expect it to adequately explain all possible empirical observation. A better approach is to see theory as providing a framework for understanding. From this point of view the Becker models outlined in chapter three, are consistent with many developments we see in family life. They need to be tested more rigorously and await an appropriate data set. It is also possible and desirable to extend and develop them to more accurately portray families and family life - while present models may be limited future models may be improved.

The empirical work drawn from the economic literature and described in chapter four does not draw explicitly on the theory of chapter three though many of the applications can be seen as reduced forms of equation systems similar to those defined in chapter three. In fact when the economic applications of chapter four and the sociological applications of chapter five are compared there is a great deal of commonality of approach and the supposedly different discipline base is not apparent. Perhaps the only really obvious difference is in the nature of the behaviour they test. The economic literature is largely focussed around the labour market with marriage and fertility decisions related to participation of partners. The economic review explicitly identifies norms while attitudes are implicit in the discussion of many of the sociological approaches under each subheading. The economic review identifies models, which include home production and are concerned with decisions about marriage, fertility and workforce participation. This is partly a reflection of the focus of economic models that generally have been concerned with aspects of behaviour that are measurable (in money terms). The more general sociological approach allows investigation of childrearing practices, domestic violence and caring.

#### 6.1.2 Complementarity of empirical work

There are many instances where the two literatures provide complementary and supporting evidence.

##### *Relation between employment and divorce:*

Section 4.2 discusses the estimation of a simultaneous model of divorce rate and female earnings. It is found that the causal relationship between these two variables goes in both directions. In 5.1.2

evidence is presented for the correlation between employment and divorce in the sociological literature and mention is made of the possibility of a causal relation going in both directions.

*Relation between earnings and fertility*

Section 5.4.4 reports that women with higher (potential) earnings are more likely to be in the labour force and have lower fertility. This is confirmed in 4.2 where a simultaneous model of fertility, female labour supply and wages is estimated. It finds that wages and fertility are jointly determined and that a higher wage profile results in a slightly lower fertility profile.

*Persistence in employment*

Section 5.4.6 provides conflicting evidence on the effect of childbirth on labour force participation. One study finds an enduring although diminishing negative effect, whereas the other finds no enduring effect. The economic studies in 4.2 all find persistence in employment, which means the decision to remain in employment or not after childbirth is important for labour force participation decisions at later stages in life.

*Job segregation by gender*

Section 5.4.8 reports that women are less likely to supervise and manage other workers, which may be because these types of jobs are more difficult to combine with family responsibilities. The economic theory explains the different types of jobs by the different amount of energy required to do these jobs. High-energy jobs are less appealing to women with children because more of their energy is required at home. An alternative economic study explains segregation in jobs by declining chances in the marriage market if an individual takes a gender non-conforming job.

## **6.2 Further work**

A dominant theme in the discussion of family research has been the paucity of data to support the models outlined in chapter three. In part this will be alleviated by the availability of longitudinal data on families from two major new surveys recently commissioned by FaCS. The first of these is the Household income and labour dynamics of Australia (HILDA) survey being run by the Melbourne Institute in association with the Institute of Family Studies and The Australia Council for Education Research with the first wave of annual collections of data becoming available in 2002. As its name suggests this survey will obtain detailed data about family income and employment. The second is the Longitudinal Survey of Australian Children. The lead organisation for this survey is the Australian Institute of Family Studies and this survey will provide information with a major focus on understanding early childhood development.<sup>18</sup>

The review has also considered the development of economic theories of the family. While many interesting and important issues may be and have been explored without formulating an explicit theory the application of theory does help explain and contextualise family formation and function. Much remains to be done. This will include the testing of existing models – how does the basic single family utility function stand up in comparison with bargaining models in which partners maximise individual utility functions; how important is it to include home production in the model – as well as the development of more complicated models. The availability of data such as that emanating from HILDA may well herald the opportunity to apply Becker type models in a more rigorous way.

While the development of theory and the issue of adequate data are pervasive concerns for researchers, the review of the empirical literature has raised a number of areas, about which further research would be desirable. The discussion suggests further work in the development of policy and in the effect of changes in family structure and function.

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<sup>18</sup> more information about the HILDA survey is available from the Melbourne Institute website ([www.melbourneinstitute.com](http://www.melbourneinstitute.com)) while for the childhood survey see the FACs website ([www.facs.gov.au](http://www.facs.gov.au)) and follow appropriate links.

### **6.2.1 Development of policy**

In the introduction we outlined a number of issues directly relevant to government support of families. These were:

- the extent to which families provide the income and other support to individuals that reduce the need for income support and other services from government;
- the way in which labour market behaviour is determined by family rather than individual circumstance;
- sharing of resources within families;
- factors affecting family formation, maturation and dissolution, and
- Intergenerational aspects of families.

We consider the research issues in relation to each of these.

#### *Family support*

Home production is a major resource for families and the importance of government support is considerably less relatively, if the value of this production is brought to account. For instance if goods and services produced at home are valued according to the price they would fetch if sold in the market the total value would be of the order of forty percent of the value of goods and services included in national accounts (see Ironmonger 2000).<sup>19</sup> Should government reduce or increase its support for families the degree and nature of home production might be expected to adjust to smooth the total level of family consumption. However there are very few existing models that allow for substitution (or complementarity) between home and market production and as discussed in section 4.3, these are subject to strong assumptions. We recommend the commissioning of research to apply models that allow for substitution or complementarity between home production and the market economy.

#### *Labour market behaviour*

The family structure is critical to labour market behaviour. Government policies that promote employment need to be cognisant of the influence of changing family structure. Conversely, the effectiveness of a policy that encourages parents to stay at home after having children, at least for the first few years, will depend on the family structure. The recent government proposal to provide stay-at-home parents with a payment for up to five years related to their pre-birth income will depend on a wide range of influences including the availability of childcare. We suggest research be commissioned to evaluate the impact of recent government policies that aim to support parents staying at home after having children.

#### *Sharing within families*

The survey has yielded little discussion or evidence of sharing within families. Many existing and past studies assume the family acts as a single unit. The development of approaches that recognise husbands and wives (and also children) have different objectives such as the bargaining models of section 3 are a first step towards an understanding of arrangements within families. However with few exceptions explicit sharing within families is not recognised in most studies. We support the commissioning of research to further investigate sharing within families.

#### *Family formation, maturation and dissolution*

The statistics presented in Chapter 2 reveal increasing longevity, increased numbers of singles and couples without children, falling marriage rates and increased rates of divorce, and falling fertility. In sum they represent dramatic change in the structure of Australian families. The economic theory suggests that these trends can be explained, at least in part, by families maximising utility subject to constraints on expenditure and time. While empirical work in this area has only recently started, the evidence seems to support the theory. However further research is needed to explore these issues with Australian data and to develop and extend the theory to cover more complicated circumstances.

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<sup>19</sup> The true value is likely to be less than indicated because the market price would adjust with such a large extra volume of production.

*Intergenerational aspects*

There are a number of areas in which intergenerational aspects are important in family policy. For instance we have mentioned support between households/ families including support by children of elderly parents and support by parents of children (provision of monetary support or in-kind support such as childcare). Recent policy has not favoured taxing of intergenerational transfers of wealth, however some commentators have called for new consideration of death and gift duties. We recommend that research be commissioned to investigate the extent of intergenerational transfers, and to explore the implications of reforms to wealth, gift and death duties.

**6.2.2 Changes in family life**

*Families and community*

One area that does not appear to have received much attention is the relationship between families and community. This is of particular interest for two reasons. First, FaCS has two major themes in its mission statement, stronger families (discussed in section 1.2) and stronger communities, yet there is no explicit mention of how the two themes relate. Second, the issue of community is an emerging theme with discussion of social capital and its role in economic development.

Families interact with communities in many respects and at many levels and causation works in both directions. However in terms of this report we note the following list of areas of interaction that are of importance: the level of Social capital, volunteering, community engagement, trust and social networks; Family and school; Local community and work opportunities; neighbourhood quality of life; impact on families of public incivilities and crime; impact of access to services.

Families are often said to be the foundation of social capital (Winter, 2000 cites Putnam 2000, Bourdieu 1985 and Fukuyama 1995 to support this claim) yet other authors point to a more ambivalent situation. Family life may limit world views and sociability. The breakdown of family may result in a loss of social capital emanating from the family but lead to family members forming ties outside the family, which strengthen social capital. Winter argues that the social capital literature tends to under-emphasise the role of families in constructing social capital instead focussing on the comparatively small amount of time spent in voluntary associations.

The connection between family and the community within which families reside has been relatively under-researched. Some recent writers have pointed out that there may be some ambiguity in family and community policy. Cox and Caldwell (1999, p71) suggest that while the government professes that family policy is aided and furthered by the creation and fostering of social capital, in fact many of its policies inhibit the development of social capital. Policies which encourage contracting out of local government services, the corporatisation and privatisation of utilities and increase the exposure of many government services to market forces may reduce the role of government in fostering social capital. These are contentious claims, however it does raise the issue of the nature of the accord between family and community policy. We recommend further research be undertaken to explore the interaction of family and community policy.

*Prospective changes in family life*

In chapter 2 we outlined dramatic changes in family life – in longevity, fertility, family size, partnering, labour market participation, family roles and structure; can we expect further changes? While continuing change is expected and it is not the place of this paper to predict how this might occur, we can anticipate some policies. For instance continuing falls in fertility are likely to lead to policies promoting increased fertility. Continuing improvements in medical science and in other factors affecting health are likely to lead to further increases in longevity. Improvements in labour-saving domestic appliances are likely to further emancipate women and, with affirmative action, lead to convergence in male and female labourforce participation. All of these prospective future developments need to be explored in more depth and we suggest that each be the subject of specific further investigation.

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