

**Sweden's varying success in offsetting low fertility:  
Assessing the role of policy in the Sweden's fluctuating  
fertility rates**

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## **Preface**

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## Summary

Across Europe, birth rates are falling and family sizes are shrinking. The total fertility rate (TFR) is now less than two children per woman in all European countries, as well as in countries, such as South Korea and Japan. As a result, these populations are either growing very slowly or even starting to shrink. Low fertility also accelerates the ageing of populations. These trends portend difficult times ahead for the economies in these countries.

If governments intend to tackle the problem of population ageing at the source, they may wish to expand the workforce through rejuvenation of the population, and thus stimulating the fertility rate. After an impressive record of government investments in the Swedish family, the fertility rate is now among the highest in Western Europe. Even though Swedish family policy never had the explicit aim to raise fertility, Sweden has been a textbook example over the last decade for policymakers who wish to influence the reproductive behaviour of citizens. When taking a closer look at the Swedish case, it becomes clear that it is not a sheer success story.

Sweden's total fertility rate can be characterised as that of a 'rollercoaster', going up and down for the past decades. During the 1980s Sweden experienced an increase in fertility

exceeding replacement level of 2.1. This was followed by a marked decline since 1990 reaching a record low of 1.52 in 1999. These rather extraordinary fertility dynamics that have been referred to as rollercoaster fertility, can be partly attributed to a variety of Swedish policy initiatives.

Swedish family policy has aimed to support women's labour force participation and promote gender equality both at the household level and in the labour market. Although labeled as family policy, the set of social policy measures have been targeted at the individual and they have improved the state's support of gender equality. The parental-leave system enhances the reconciliation of work and family life for women, giving incentives to participate in the labour market before having children and easing their return to work afterwards. Furthermore, it actively encourages fathers to take parental leave by reserving time for their sole use. Universally available subsidised public childcare of a high quality enables women to combine working or studying with family life, thus increasing their attachment to the labour force. Finally, individual taxation discourages segregation of work and care along gender lines and supports women's labour force participation. Although current Swedish welfare policy may be less generous than it was during the end of the 1980s, benefits and services to children and families have been protected, and the Scandinavian model remains the most generous among OECD countries.

It is often argued that the improved gender equality in a country has a negative effect on the total fertility. The case study of Sweden demonstrates that this assumption is too simplistic. The equal gender positions in the Swedish labour market and family responsibility roles, relative to other countries, have formed the basis for family policies to succeed.

Although strong conclusions can never be drawn, it is clear that these family policies have had a positive impact on the total fertility rate, by removing barriers to couples achieving their desired number of children. Furthermore, changes in these policies have affected the TFR; during the 1980s, the heyday of family policy, fertility rose markedly, as the conflict between childrearing and labour market participation was reduced. We can see the opposite effect during the 1990s; as benefits were cut, fertility decreased.

However, the effects on fertility have been mainly through timing and spacing of births. Completed cohort fertility has remained remarkably constant. This implies that policies have not led to larger families, but there were shorter periods in between the same number of children.

Moreover, the success of Swedish family policy in promoting fertility has been dependent on the economic cycle. Unlike in most other countries, fertility rates in Sweden are positively related to the earnings of women – likely because women's earnings in

Sweden constitute a substantial proportion of dual-earner household income. Since parental-leave benefits are proportional to earnings, improvements in economic conditions lead to higher parental benefits, which can help promote increased fertility. The economic crisis during 1990s had the opposite effect and partly led to the decrease in fertility in Sweden in this period.

Despite the vast investments in the social infrastructure during the 1980s, by 1999, the fertility rate had reached an all-time low. As evidenced by the sharp fertility decline during the 1990s, absence of one or more of the inputting factors can have a negative effect on fertility.

This research paper has shown that governments can, under certain conditions, successfully confront the looming economic threats of declining fertility rates and ageing populations. Policies that remove workplace and career impediments to childrearing are a critical part of any solution. The evidence for a causal relation between government policy and fertility dynamics has made Sweden a unique example for a myriad of economists, demographers and policy analysts to advocate the introduction of similar family policies in low fertility countries.

However, the success of Sweden's heavy investments in Swedish families must be seen in perspective. Sweden's family policy have merely affected the timing and spacing of



births. And a sharp fertility decline since 1990 has absence of one or more driving forces behind fertility – including a generous set of public policy measures – can lead to a sudden drop in birth rates. Fertility rates have increased in Sweden following a mix of policies and programmes; no single policy intervention can be identified having the crucial impact in reversing low fertility.

Furthermore, we emphasise that copying Swedish family policy from one country to the other will not be a guarantee for success. Designing successful interventions is complicated by the fact that policies that work in one country may not work in another. Different interventions have varying effects because of the diverse, complex, and shifting political, economic, and social contexts in which they are implemented. The success of Sweden's family policy has been partly dependent on economic conditions. Therefore, reversing long-term ageing and low fertility remains problematic. It will take a long-term vision and political courage for policymakers to design a solution.

## **Chapter 1. Why is Low Fertility a Problem?**

Across Europe, birth rates are falling and family sizes are shrinking. The total fertility rate is now less than two children per woman in every member nation in the European Union. Other countries, such as South Korea and Japan, show similar figures. As a result, European populations are either growing very slowly or even starting to shrink.

Low fertility also accelerates the ageing of populations. As a region, Europe in 2000 had the highest percentage of people age 65 or older – 15 percent, while in Sweden this proportion was 17 percent. According projections this proportion is expected to nearly double by 2050.

Normally, the age distribution of a population is determined largely by fertility, but modified by migration and mortality. As younger age groups continue to make up a shrinking percentage of the population, this has implications for the whole population. The major concern is whether a sufficient working-age population is available to support an increasingly older population. In Europe, dependency ratios generally increased during the 1970s, with a marked downturn

in the early 1980s, and then took a steep upward reversal in the mid-1980s. The increase in old-age dependency ratios is a reflection of the fact that the population structure is moving toward including an increasing proportion of older people in relation to the economically-active population. Sweden has had the highest dependency of old-age people in the European Union (EU) until recently; the dependency ratio rose until the late 1980s and stabilised since then. Figure 1.1 illustrates the Swedish old-age dependency ratio trend in comparison to some selected other European countries.

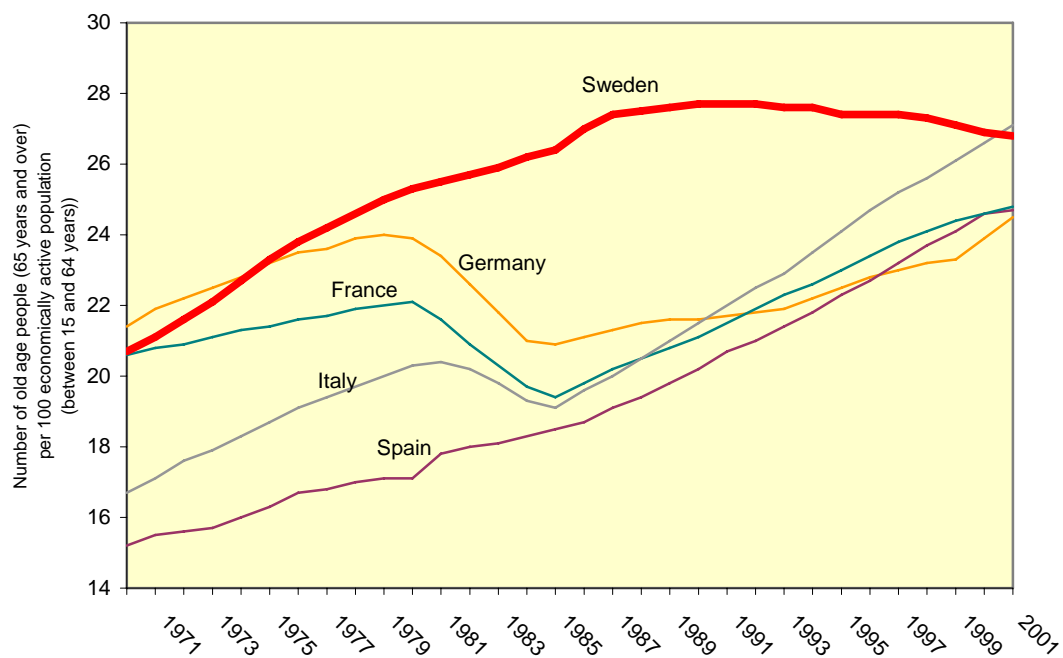
These trends portend difficult times ahead for the economies in these countries. A shrinking share of the workforce in the population implies that, *ceteris paribus*, domestic production per capita and living standards will be lower than they otherwise would have been if the share of workers had remained stable.<sup>1</sup> At the same time, the growing proportion of elderly individuals pressures the solvency of pension and social insurance systems. As household sizes decrease,

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<sup>1</sup> Some academics portray a more optimistic image of the future arguing that harnessing the “new economy” could offer a substitute response to ageing pressures. Increased productivity growth, due to new methods of work, would outweigh the shrinking rate of the workforce. This implies higher living standards, which would provide additional scope to modify pension benefit levels and contribution rates. The OECD (2001) has published a series of studies on the factors shaping the productivity growth process.

the ability to care for the elderly diminishes. Meanwhile, elderly people face growing health care needs and costs. Taken together, these developments could pose significant barriers to economic growth and reaching goals on the social agenda.

Figure 1.1. Old-age dependency ratios in selected European countries, 1970-2001



SOURCE: Eurostat NewCronos database (2002)

Concern over these trends has sparked intense debate over the most

effective policies to reverse them or mitigate their impact. The policy debate has focused on three approaches (Grant et al., 2004): (1) promoting increased immigration of working-age people; (2) reforming social policy to manage the negative consequences of these trends — including measures that could raise the retirement age or encourage more women to join the workforce; and (3) encouraging more childbearing, especially among younger couples.

Firstly, for EU countries, allowing large numbers of working-age immigrants to enter is not a feasible solution to the problem (Grant et al., 2004). The sheer numbers of immigrants needed to offset population ageing in the EU states would be unacceptable in Europe's current socio-political climate.

Secondly, measures such as pension reform or social security rationing are relatively straightforward, their costs are comparatively low and the impact is significant and visible on the short term. Hence, such ameliorative measures have recently become popular instruments of European governments to mitigate the impact population ageing on the affordability of the social security system. However, as population ageing remains unaffected, the sustainability of these measures is not guaranteed.

This paper focuses on the third approach. If governments intend to tackle

the problem of population ageing at the source, they may wish to increase the fertility level of their populations. After impressive record of government investments in Swedish society, fertility is now among the highest in Western Europe. Even though Swedish family policy never had the explicit aim to raise fertility, Sweden has been a textbook example over the last decade for policymakers who wish to influence the reproductive behaviour of citizens. When taking a closer look at the Swedish case, it becomes clear that it is not a sheer success story. This paper will address the reasons for the varying success of Sweden in offsetting low fertility.

## Chapter 2. Demographic Trends and Figures

The total fertility rate (TFR) for a given year is a measure of the number of children that a woman would have over her childbearing years if, at each age, she experienced the age-specific fertility rate of that year; this measure gives a further indication of population structure and dynamics. As often cited, the data show that TFRs have fallen and are now below replacement level<sup>2</sup> in all EU Member States. This trend inevitably contributes to natural population decline, particularly among the younger age groups. Although Swedish fertility levels have generally shown a decreasing trend since the beginning of last century, the country has been one of the few current Member States that had an interval in the past two decades during which TFRs were above replacement level. When comparing the current level to other countries, the Swedish TFR can be labeled as “highest low”: it is below replacement level of 2.1 children per woman, but still high as compared to many other developed countries (Andersson, 2005). This chapter

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<sup>2</sup> The replacement level is the number of children needed per woman for each couple to replace itself. Ultimately this leads to stable population size, and is generally taken as a TFR of 2.1 children per woman.

examines the main demographic trends in Sweden with an emphasis on its fluctuating fertility.

## **2.1 Swedish rollercoaster fertility**

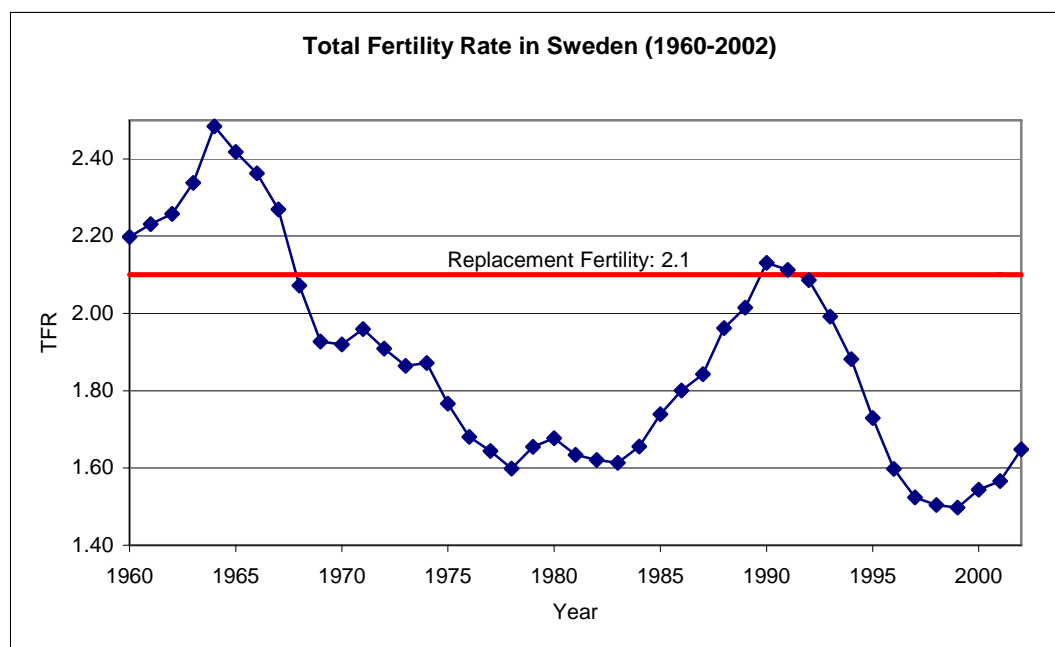
Fertility has shown drastic declines in Sweden as early as the beginning of the previous century. From 1900 until the mid-1930s the Swedish fertility rate decreased from approximately 4 children per woman to less than 2 children per woman. Following the economic crisis during the 1930s, TFRs began to rise again. Similar to many other Western European countries, after WWII, during which Sweden remained neutral, Sweden experienced a baby-boom in the mid-1940s and the fertility rate stabilised again during the 1950s. In the 1960s fertility rose again and peaked at around 2.2 to 2.5 children per woman until the mid-1960s.

During the following period, which was marked by the introduction of modern contraception, fertility declined much in line with similar developments in the rest of Western and Northern Europe. In recent decades, Swedish fertility has fluctuated considerably; therefore, Hoem and Hoem (1996) referred to it as “rollercoaster fertility”. At its lowest, by the end of the 1970s, the TFR had declined to a level of 1.6. But while fertility rates stagnated or declined in many



European countries, the pattern in Sweden reversed, and the country experienced a baby boom after 1985; by 1990 it had even exceeded replacement fertility level (2.14 children per woman). This baby boom was largely related to an increased birth rate among younger women (Andersson, 1999a) and, remarkably, was accompanied by growth in the proportion of women in the labour force from 78 percent to 81 percent (Kohler, 1999).

Figure 2.1. Trends in Total Fertility Rates: Sweden, 1970–2001



SOURCE: Council of Europe - Demographic Yearbook (2003)

However, with the emergence of the 1990s, Swedish rollercoaster fertility experienced yet another distinctive trend, and started falling again. In 1999, the TFR in Sweden had decreased to 1.52, the lowest ever rate, although still slightly above EU average (see Figure 2.1). Since 1999 to the present day, Swedish TFR values show an upward trend again.

## **2.2 A closer look at fertility levels**

Various studies analysed this fertility decline and its relation with individual characteristics. The characteristics of reproductive behaviour in different age groups, and birth orders for example, show interesting differences. Andersson has done extensive disaggregated analysis of this fertility in Sweden.

As with other age groups, first birth fertility of women below 30 has steadily decreased since 1970s, with a slight recovery during the late 1980s. The decline in fertility during the 1990s was found among all age groups. This trend was most evident with young women, in particular those in the age group 25–29, who experienced a marked a fall in fertility (Jönsson, 2003; Andersson, 2005). Fertility decline was also observed across all educational levels, except the most highly educated women. Furthermore, women with low education levels and low

income had more impact on birth rates than older, higher-educated, higher-income women (UN/ECE, 1999). As with the baby boom a decade earlier, the fertility decline mainly occurred among first-order births of younger women, which fell after 1990 (Andersson, 1999a). The fertility level of women below 30 has stabilised since 1999.

Fertility behaviour of women in age cohorts over 30 years has shown a trend opposite to that of young women. Birth propensities of mothers and childless women aged 31 and above have gradually increased since 1980, slightly fallen in the early 1990s and markedly increased after 1997. The rise continued without interruption through 2001 and 2002 (Andersson, 2004c).

Andersson (1999a) also showed that there are differences between the occurrence of first births of women, second births, and higher order births. All birth orders follow similar trends during the past decades. However, the declines during the 1980s and 1990s were strongest in the third- and fourth-order birth rates. Third-order births became rather scarce in 1999 and the birth rate of third children had returned to the level of 1980. Furthermore, the fertility drop was also particularly visible in the first-order birth rates of younger women, whereas the decline in first-birth rates of older women was relatively unimportant. Thus, not

only have large families become unusual, the proportion of one-child families and the relative number of childless women have also decreased,<sup>3</sup> whereas the proportion of two-child families has become larger (Jönsson, 2003).

Finally, when looking at completed cohort fertility (CFR), the picture is relatively stable (Hoem, 2005; Andersson, 2005); the rollercoaster has transformed into a dull ride. Each female cohort born in 1920-1955 achieved a final number of children within a narrow range of around 1.9-2.1 children per woman. This is high compared to European counterparts such as Germany<sup>4</sup>, where CFR was lower and declined regularly to around 1.6.

There are two main reasons for this relatively constant completed cohort fertility. First, women delay family formation. As for many other European countries, the mean age for a woman's first birth is just over 28 years (2002). However, this age used to be 23 in the 1970s and even lower in the 1960s. Secondly, the intervals between childbearing have shortened. This was particularly the case during the 1980s when fertility was increasing, but this trend continued in the 1990s.

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<sup>3</sup> With the exception of a slight increase for the youngest cohort.

<sup>4</sup> And West Germany before reunification.

In sum, these figures point at a long-term relative stability of Swedish completed cohort fertility, and short-term TFR period fluctuations around its own long-term cohort fertility level (Andersson, 2005).

### **2.3 Other demographic and socio-economic trends**

A typical characteristic of the distinct fluctuations of fertility trends in Sweden is that they seem to move concurrently with cyclical economic trends more than in any other European country. During a period of economic growth in the 1980s, Swedish economic developed in line with the rest of Western Europe. Unemployment, however, remained low in comparison to other countries. Public deficits also declined considerably during this period; yet, these improved public finances in the late 1980s were not sustained in a longer-term perspective.

Between 1990 and 1993, Swedish GDP fell by 5% and employment levels were decreased nearly 10%. Lower production and higher unemployment led to a drastic deterioration in public sector finances (Lindh and Ohlsson, 2000). The Swedish economic crisis of the early 1990s was the worst since the depression years in the 1930s. The coincidence of this economic downfall and reproductive behaviour has been subject to intense scholarly debate, as we will discuss in the

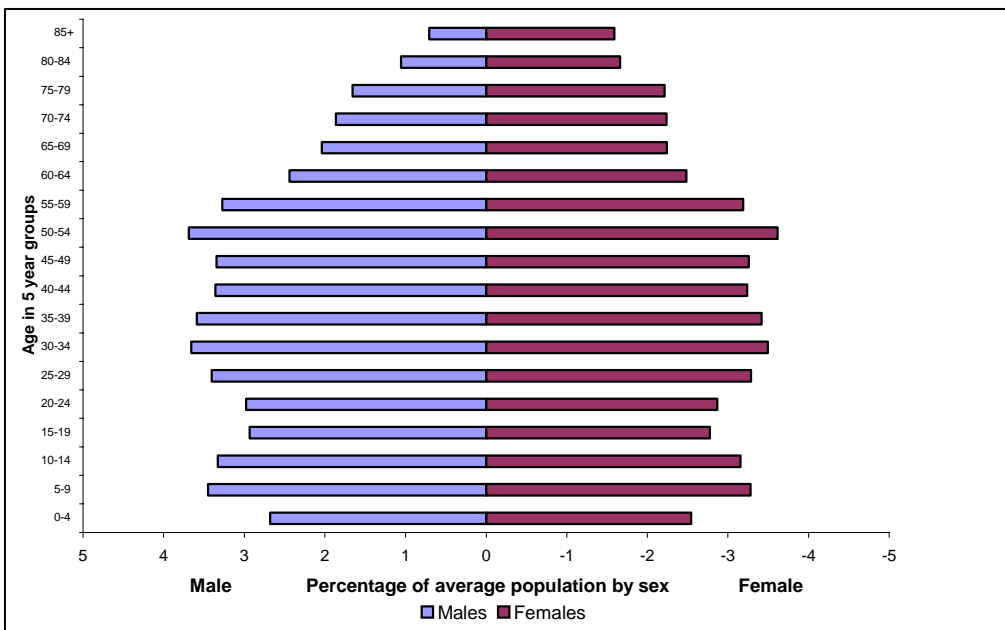
following chapter.

As with the industrial growth and large labour demand experienced in the rest of post-war Europe, Sweden welcomed increasing numbers of immigrants during the 1950s and 1960s. However, in the early 1970s there was no longer any demand for foreign labour, and labour immigration was largely abandoned since economic conditions had deteriorated in Europe. Since the 1980s, the vast majority of immigrants have consisted of political refugees and their families (Swedish Institute, 2003). Currently, 5 percent of Sweden's population are foreign and 10 percent are born outside Sweden.

Changes in fertility, and especially life expectancy, which nowadays in Sweden is one of the highest in the world (77.5 years and 82.1 years for men and women respectively), have led to a shift in the age structure of the population. As in most European countries, the proportion of the elderly has increased substantially over the past decades, while that of children has declined. Currently, children aged 0–14 comprise 18.4 percent of the total population, compared with more than 30 percent about a century ago. People over the age of 64 have doubled their share of the population during the past 40 years. With 17.2 percent of the population aged 65 and over, Sweden has one of the highest proportions of

elderly people in the world. Population forecasts indicate that this proportion will not increase extensively until the birth cohorts of the 1940s reach retirement age, which will occur in the next decade. Nonetheless, a forecast for the year 2020 estimates the proportion of people over 64 at 21.5 percent.<sup>5</sup> The population structures in the years 1980, 2000, and 2020 are displayed in the Figures 2.2, 2.3, and 2.4.

Figure 2.2: Population Pyramid, Sweden 1980



SOURCE: Eurostat NewCronos database (2002)

<sup>5</sup> Assuming a net migration of 20,000, a TFR of 1.8, and life expectancies of respectively 80.41 years (males) and 83.91 years (females) (NewCronos Database).

The projection of the population structure uses a fixed total fertility rate (i.e. 1.8), assuming that Swedish the long-term average fertility will remain constant. But as we have discussed elaborately in this chapter, while long-term fertility has been fairly stable, period fertility has fluctuated intensely in the past decades. This brings about the question: what has caused these fluctuations? The next chapter will address theory and empirical data on various driving forces of fertility.

Figure 2.3: Population Pyramid, Sweden 2000

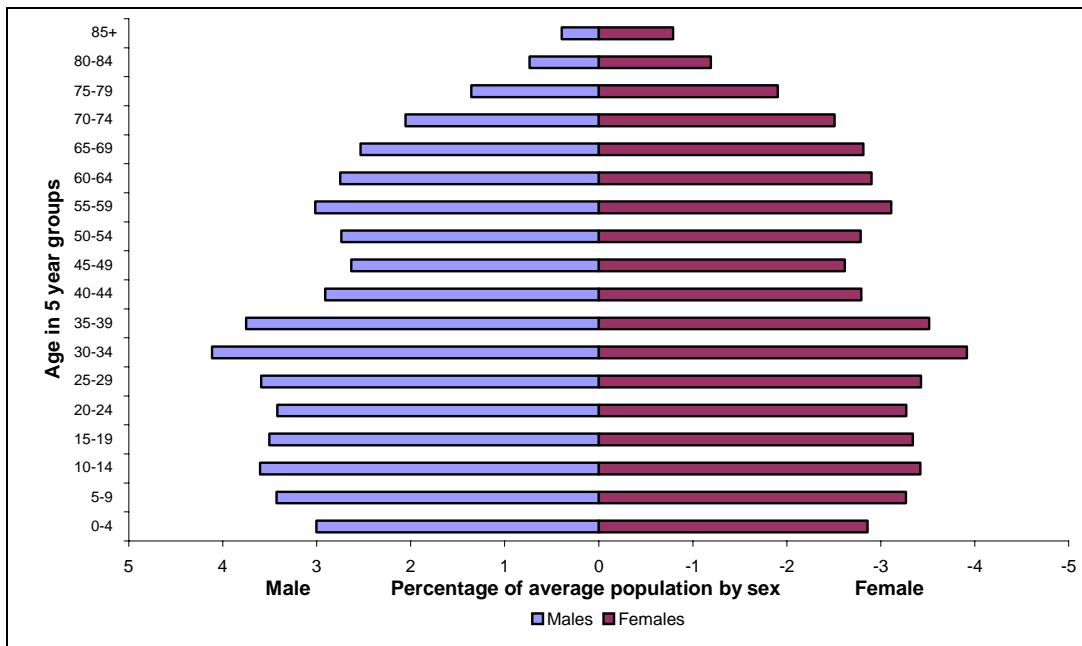
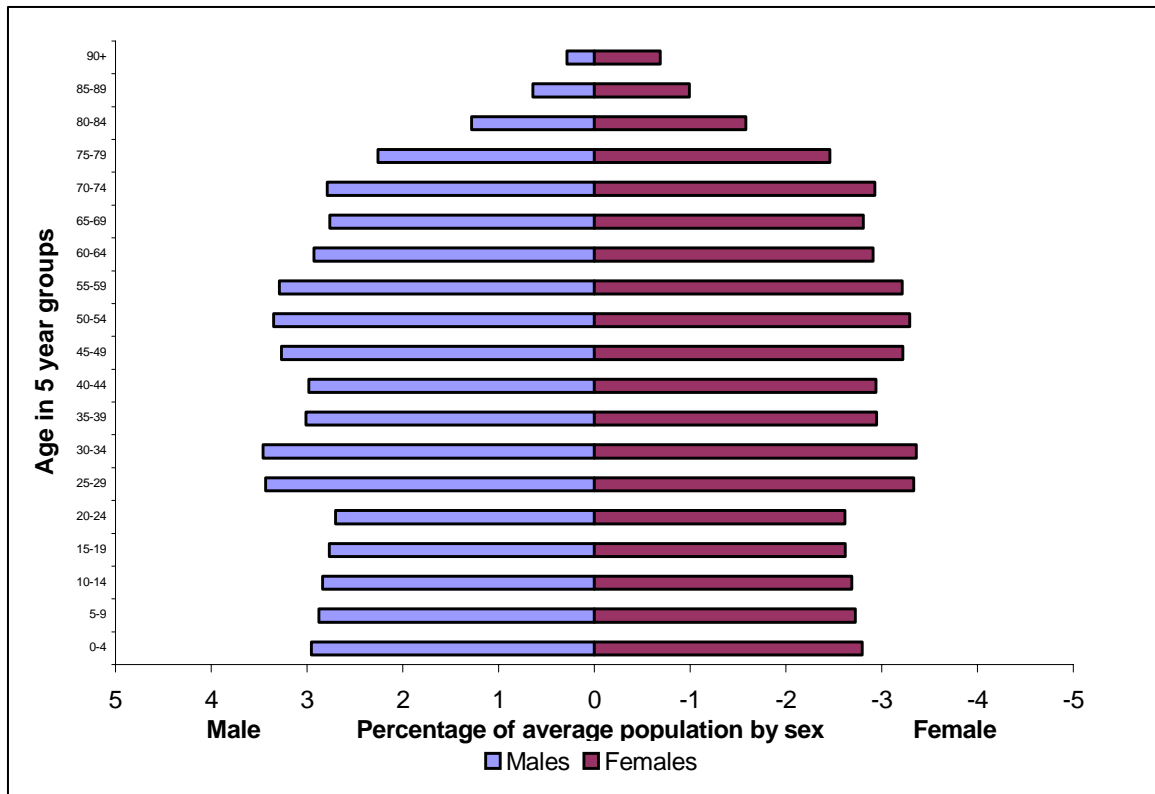




Figure 2.4: Population Projection, Sweden 2020



SOURCE: Eurostat NewCronos database (2002)

### **Chapter 3. Driving Forces of Fertility**

It is difficult to determine what exactly affects childbearing behaviour in a country. There is no one main determinant of fertility. It is the result of the interplay of numerous interacting factors at different levels. We can identify a plethora of possibly competing driving forces potentially affecting fertility in a country – and often it is impossible to isolate the effect of one factor from the other. In this paper we crudely distinguish three main types of driving forces:

- Micro-level factors: factors on individual or family level that influence the reproductive behaviour of couples.
- Macro-level factors: developments on a national or international level that influence the reproductive behaviour of couples.
- Policy levers: efforts by governments to influence reproductive behaviour of couples.

In this chapter we will show what literature tells about micro- and macro-level factors, and explain how they have developed in Sweden. Finally, we may ask

ourselves, to what extent government intervention can have an impact.

### **3.1 Micro-level influences on fertility**

Changes in population structure – and in fertility in particular – are essentially the result of decisions made at the micro or individual/family level. These choices typically relate questions whether to have children and the number to have. Such decisions are affected by factors such as the household's financial situation and the costs of rearing children. Decisions regarding marriage, divorce, cohabitation, and the woman's level of involvement within the workforce are generally the driving forces.

#### **3.1.1 Marriage**

In nearly all societies, traditionally childbearing occurs predominantly within marriage, a relationship characterised by a legally binding contract. Empirical evidence cross many settings shows that the incidence of marriage responds to the same causal factors, among others, that lie behind fertility.<sup>6</sup>

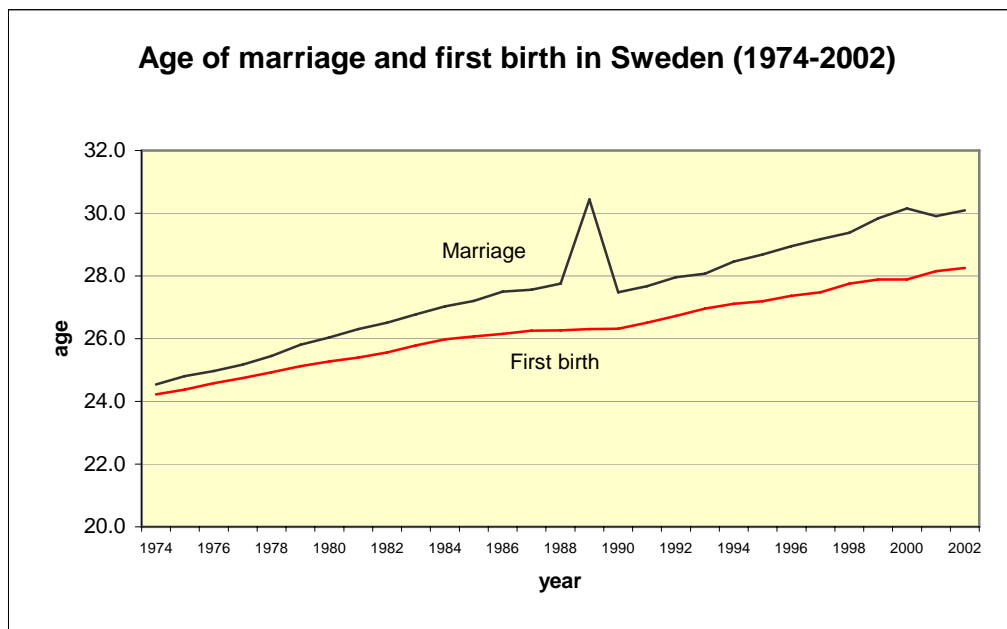
The age at which couples first marry has been increasing steeply during

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<sup>6</sup> Willis and Haaga (1996) integrated Becker-type models of marriage and fertility in order to identify possible reasons for the long-increasing incidence of out-of-wedlock births in nearly all industrialised countries. See also Ermish (1991).

the last decades (see: Figure 3.1). Sweden currently has the highest mean female age of first marriage of European Union, 30 years in 2002. A similar trend can be observed for the age of women at which they have their first child. However, this trend is less steep. In Sweden as well as other industrialised countries, the nature of the marriage contract has changed both legally and socially over the past 40 years or more. Accordingly, the incidences of marriage and of alternative arrangements have changed.

Figure 3.1. Average age of marriage and first birth in Sweden, 1974-2002



SOURCE: Council of Europe - Demographic Yearbook (2003).

The marriage rate (nuptiality) has been declining in Sweden since the early 1940s (see Figure 3.2). Between now and then this pattern was interrupted by the upward trend during the early 1960s when the Swedish society was characterised a booming economy and optimistic views about the future. Secondly, a spectacular peak was observed in 1989 when the Swedish government introduced new rules to phase out eligibility for future widow's pensions. This appeared to be a unique incentive to marry, for the marriage rate jumped from 44,000 to 109,000 marriages between 1988 and 1989, an almost 250% jump in one year. Another, similar trend break was observed recently, in 1999, albeit at a smaller scale.

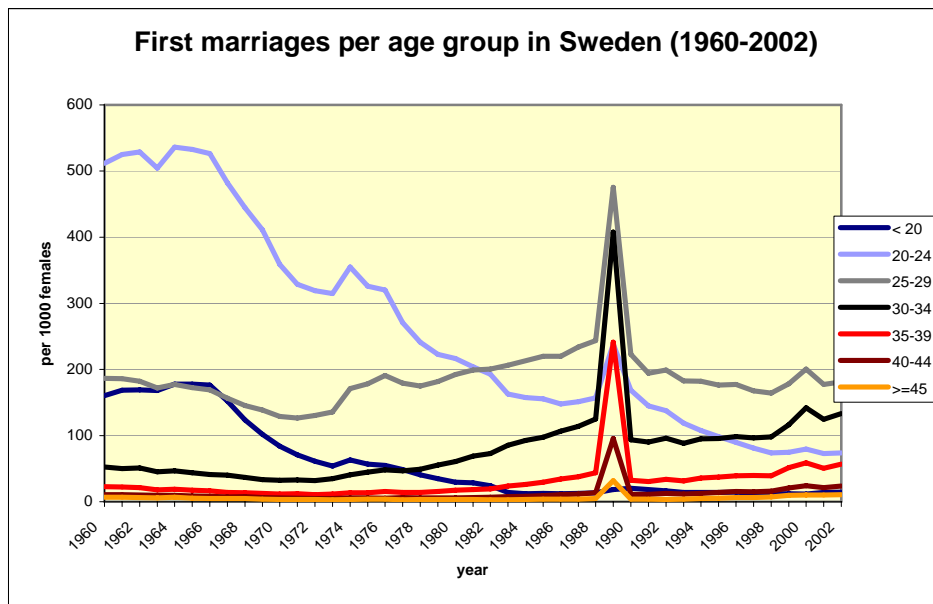
Currently, Swedish marriage rates are the lowest in the world; in 1997 Sweden reported a marriage rate as low as 3.6 per 1,000 population. That is a factor 2.7 lower than the level during the early 1940s.

While, as mentioned above, marriage rates have always been considered as an appropriate proxy for the fertility trend, in Sweden the role of marriage in family formation has become less important. Most significantly, declining nuptiality has occurred simultaneously with increasing cohabitation rates, both as a precursor to, and a substitute for, marriage. Typically, a Swedish marriage is

preceded by several years of cohabitation. In Sweden, the other Nordic countries and France, women aged 25–29 are evenly split between cohabitation, marriage, and single status.

This has led to the phenomenon that around half of the children are born to unmarried parents, but only 5–10 percent by single women (UN/ECE, 1999). The role of nuptiality as a driving force of fertility has therefore become less important in recent decades.

Figure 3.2. First marriages per age group, Sweden, 1960-2002.



SOURCE: Council of Europe - Demographic Yearbook (2003).

### 3.1.2 Cohabitation and Divorce

In concurrence with declining nuptiality, cohabitation rates have grown, both as a precursor to, and a substitute for, marriage. Today, Sweden is the only country in Europe where more first births occur within cohabiting unions than within marriage (Kiernan, 2002).

Dissolution of marriage through divorce has been increasing in many industrialised countries for at least a century and is now at historically high levels. The Swedish divorce rate has steadily increased during the last decades with a remarkable peak up to the end of the 1970s (see Figure 3.3). This peak from 15,000 to 25,000 divorces in one year was the immediate result of liberalisation of divorce legislation, which passed in 1974.

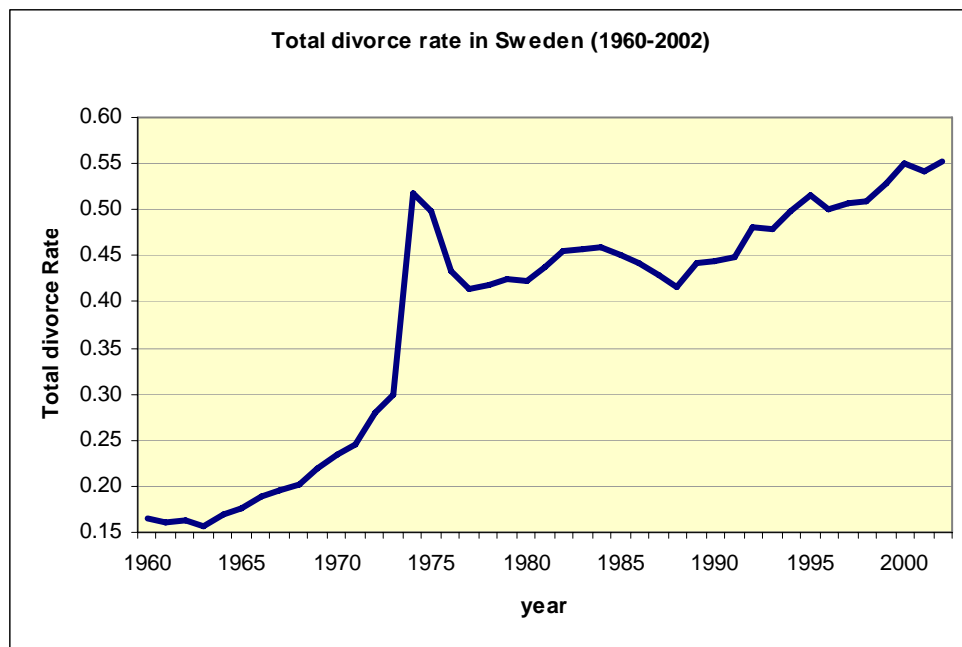
Clearly, a complex set of interactions between two individual characters determines the stability of a marriage. Nonetheless, scholars have identified factors that increase the risk of marriage disruption. For example, cohabitational unions show higher chances of disruption, and those that become marriages are more likely to end than marriages not preceded by cohabitation (Cherlin, 1992; Waite, 2003)<sup>7</sup>. Furthermore, Blossfeld et al. (2003) claim that female labour

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<sup>7</sup> These findings were not specific for Sweden.

market participation positively correlates with divorce rates. Economic independence among women, as a result of their labour market participation, as well as education, may therefore have an impact on the dissolution of marriage. As female labour market participation in Sweden is among the highest in the world (see section 3.2.2 on “Influences of employment and family income”), this would explain the high divorce rates in Sweden.

Figure 3.3. Total divorce rate in Sweden, 1960-2002



SOURCE: Council of Europe - Demographic Yearbook (2003).<sup>8</sup>

<sup>8</sup> In the Demographic Yearbook (Council of Europe, 2003), the divorce rate is defined as follows: “The probability of divorce for a married person if he or she were to pass through his/her marriage



Untangling the complex relationships between marriage, divorce, cohabitation and fertility to uncover systematic patterns and causes is a scholarly work in progress. Public policy can affect these trends through legal and regulatory changes, but it is difficult to predict how the distribution of persons between the states of marriage, cohabitation, and being single would respond to a tightening of divorce laws, for example. Accordingly, it is difficult to predict the effects on fertility.

Löfström and Westerberg (2002) present three possible effects of divorce rates on reproductive behaviour. Firstly, high divorce rates, as present in Sweden, can indicate an apparent risk of becoming a lone parent and this may have a discouraging effect on fertility. Secondly, the high risk to women of becoming solely responsible for her household income imposes the necessity to gain a permanent position in the labour market prior to becoming a parent. This may delay family formation. Thirdly, women's personal negative experiences from divorces may prevent them from starting a family. In their model results, Löfström and Westerberg find that the divorce rate indeed has a negative effect on the

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years conforming to the duration-specific divorce rates of a given year. The rate refers to a synthetic marriage cohort. It is computed by the summation of divorce rates by duration of marriage (generally up to 30 years), observed in a given year.”

changes in fertility.

For cohabitational unions, fertility is also nearly everywhere lower than marital fertility and begins at a higher age. Hence, the secular substitution of cohabitation for marriage in Europe has reduced fertility through several avenues. This fits perfectly in the image of the “second demographic transition” as described by van de Kaa (1987) as a regime that is characterised by a low proportions of adults currently married, unstable unions, high proportions of births outside marriage, and fertility rates well below replacement level.

Despite the predicted negative effect on fertility, increasing cohabitation and divorce rates did not cause a steep reverse in the fertility trend. As with the decreasing importance of marriage as driving force of family formation, cohabitation and divorce have merely imposed a timing effect on family formation. Still, the great majority of children under 18 live with both parents (78%). Some 14% live with a single parent, usually the mother, while 7% of all children live in 'mixed' families, i.e. where the custodial parent is living with a new partner.

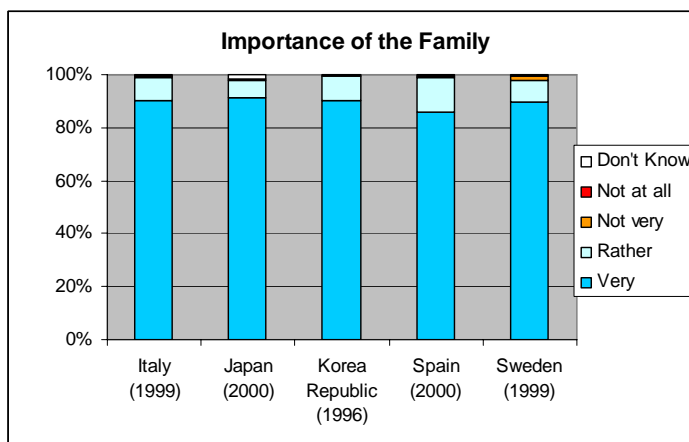
### 3.1.3 Influences of attitudes towards the family

As it has become clear in previous sections, the Swedish perception of the family has gradually changed over the last decades. Marriage has become less

important, children are born in cohabiting couples or in lone-parent families. And while the relative importance of the family in Sweden is comparable to other countries, the views upon the roles of men and women within the family deviate from abroad. This section briefly illustrates that the Swedes are relatively tolerant towards lone-parent families and towards working mothers.

The results from the World Values Survey indicate that, the family is still considered to be important to most citizens. Also compared to other countries, the support for the Swedish family is similar; 89.7% states that the family is very important (See Figure 3.1).

Figure 3.4. Total divorce rate in Sweden, 1960-2002

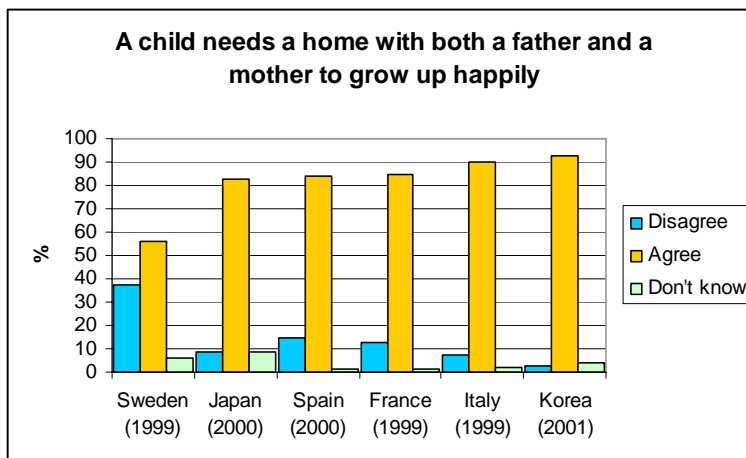


SOURCE: The World Values Survey (WVS)

Despite the relative importance of the family as a concept, the traditional

family is not the cornerstone of Swedish society anymore. Only 56% of the respondents of the WVS indicated that children need both a father and a mother to grow up happily, while more than 37% does not find this a crucial prerequisite (see Figure 3.5). The tolerance towards lone-parent families, or those other than the traditional father and mother, is substantially smaller in other countries, such as South Korea (2.9%), Italy (7.4%) and France (12.8%).

Figure 3.5. The importance of the traditional family

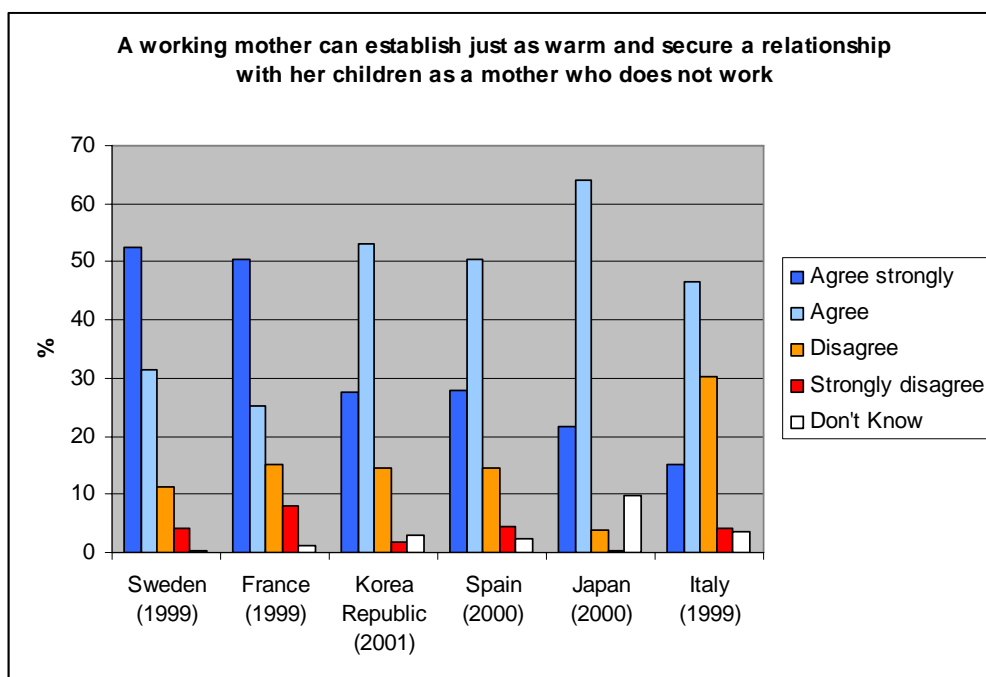


SOURCE: The World Values Survey (WVS)

Finally, Swedes are very tolerant towards working mothers compared to other countries. More than half of the respondents of the WVS indicated that they strongly agree with the notion that a working mother can establish just as warm

and secure a relationship with her children as a mother who does not work (See Figure 3.6).

Figure 3.6. Tolerance towards working mothers.



SOURCE: The World Values Survey (WVS)

These figures do not present a comprehensive picture, but they point towards one direction; perceptions in Sweden on topics as the family and gender roles indicate a modern, tolerant, and perhaps even an individual society in which

men and women should have equal opportunities. Although the precise impact on fertility remains unclear, there is little doubt that these attitudes have an influence on childbearing behaviour.

### **3.2 Macro-level influences on fertility**

Macro-level trends can influence decisions at individual or household level. One of these could be the economic situation within a country. Economic cycles may affect income of a household, which in turn may influence the decision of family formation. Other examples of macro-factors could include cultural values regarding female emancipation and individualisation.

#### 3.2.1 Classic theories

Judging from the millennia-long history of census taking,<sup>9</sup> the size and basic characteristics of human populations have long interested governments. Documented investigations into the *causes* of population change – fertility, mortality, and migration – are much more recent. In the 18th and 19th centuries, Thomas Malthus (1798), John Stuart Mill (1848/1929), Francis Galton (1869), and Karl Marx (1890/1906) each proposed a different theory to account for trends

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<sup>9</sup> See, for example, the accounts in the Biblical books of Exodus and Mark.

and variations in fertility.

Halfway through the twentieth century, scholars studying fertility trends came to observe that fertility rates tend to fall as a country's income rises, and that high-income people tend to have lower fertility than low-income people. This widespread observation sparked the emergence of two new theoretical approaches during the 1960s by economists Gary Becker and Richard Easterlin. Why should children be different from nearly all the other items that people desire, where demand increases with income?

Easterlin (1968) proposed that couples' fertility responds not to their absolute level of well-being, but rather to the level relative to the well-being to which they are accustomed. The latter, he speculated, is a function of well-being in the households in which they grew up. To this assumption, Easterlin added the proposition that small cohorts of persons in a society are at an advantage in their families, in school, and later in the labour market: they enjoy a higher level of well-being throughout. Easterlin embodied these propositions in an empirical model of relative cohort size, driven by cycles of births, accustomed well-being, relative well-being some years later, and then births in the next generation. The model tracked time-series fertility rates in the US and some other countries quite well.

In a very different approach to the income-fertility puzzle, Becker (1960)

proposed that parents' interest in children extends beyond their numbers to include the children's acquired characteristics, such as health and education. Parents may value this "quality" of their children more than they do the number of children, so that increasing income induces them to substitute quality for quantity, resulting in falling fertility. Moreover, Becker emphasised that raising children is costly to parents, particularly in the opportunity cost of parental time, and most particularly in the opportunity cost of the mother's time. Hence, as labour market opportunities expand for women during the process of economic development, the cost of raising children increases. Between the incentives to invest more in fewer children and to allocate the mother's time toward market work and away from childrearing, fertility falls as income rises.

Alongside these two approaches, Caldwell (1976) proposed, in a series of publications, that fertility declines with economic development for two principal reasons. First, job market incentives for increasing the years of schooling, along with other factors, reduce the productive value of children and adolescents for their parents. Thus the costs of having children rise, and their economic benefits are reduced or eliminated.

In this model the level of education is also identified as a potential causal



influence. The hypothesis, also proposed by Willis (1973), suggests that the opportunity cost of children increases as female education rises, inducing rational individuals to cut their demand for children. The main explanation for this is the effect that higher education has in increasing the value of women's time and their labour market opportunities.

In the context of industrialised countries with good maternal and child health and nutrition, dependable government-provided old-age support, and widely-available access to means of spacing and preventing births, the Becker-model abstracts from the complex of intentional and unintentional factors that impinge on fertility to focus on a small number of potential causal influences. These are:

- Household income;
- The female partner's potential earnings in the labour market;
- The degree of incompatibility of her working while caring for children;
- The cost and availability of substitutes for her time in childcare;
- Her level of education (which influences the efficiency with which she can care for her children);
- The cost of other components of childbirth and basic childcare; and

- The cost of other contributors to child quality.

The theory has no unambiguous prediction for the association between household income and fertility; this depends on the child quantity–quality trade-off. Otherwise, factors that decrease the cost of children are hypothesised to induce increased fertility.

### 3.2.2 Influences of employment and family income

In neo-classical economic theory of fertility behaviour (see: Becker, 1960, 1981; Becker and Lewis, 1973; Butz and Ward, 1979), literature assumes that the supply of female workers will grow with increasing female wage. It therefore predicts a negative relationship between the female labour market participation and the fertility rate. Such countercyclical fertility (Butz and Ward, 1979) has been empirically validated for Sweden by Wilkinson (1973). He studied the effect of both male and female earnings on Swedish fertility throughout the period of 1911 to 1965. And he found that the effect of female earnings in Sweden on fertility has been negative and significant in this period. Numerous other studies confirmed this negative association for other countries.<sup>10</sup>

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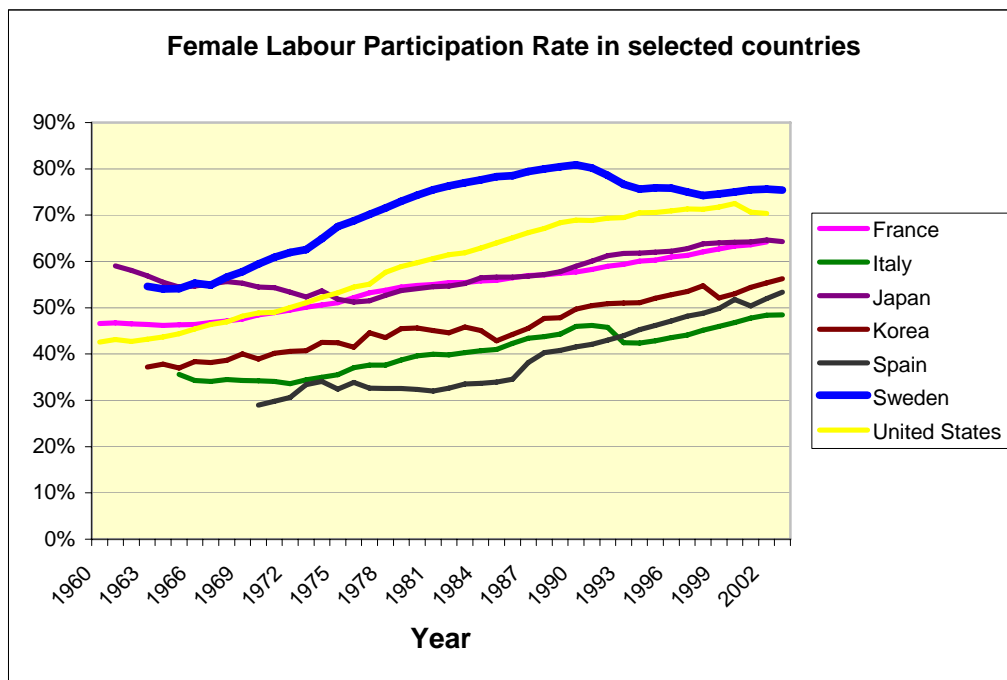
<sup>10</sup> For example: Lee and Chuen (1989); Wang and Famoye (1997); Melkersson and Rooth. (2000); and Santos Silva and Covas (2000).

In recent decades however, the countercyclical behaviour of Swedish fertility has been questioned. While female labour participation in Sweden peaked in 1990 at a level of 81 percent, it is still among the highest in the world at around 75 percent (see Figure 3.7). So if female labour participation should be considered as a cause for low fertility, Sweden should have among the world's lowest fertility rates. However, as shown in the previous chapter the qualification "lowest low fertility" does not apply to Sweden. In fact, several authors show that in the case of Sweden there is a positive relationship between female labour market participation and the probability of having a child. According to a UN/ECE report (2002: 134) "countries with high female labour participation rates are generally the ones where the discrepancy between desired and realised fertility is the lowest." Only 8.7 percent of Swedish women who have "completed" their fertility (between 38 and 43 years) perceive a discrepancy between desired and achieved number of children (this figure is small compared to, for example, 18 percent of women in Spain).

When plotting Sweden's total fertility rate and the female labour participation rate in one graph, it becomes clear that, after an initial delay in the 1970s, there has been a clear-cut concurrence in trends. Figure 3.8 illustrates that

both parameters have experienced an increase in the 1980s and have consecutively fallen during the 1980s. Finally, for both parameters a recovery can be observed since 1999.

Figure 3.7. Female labour participation rate in selected countries, 1960-2005

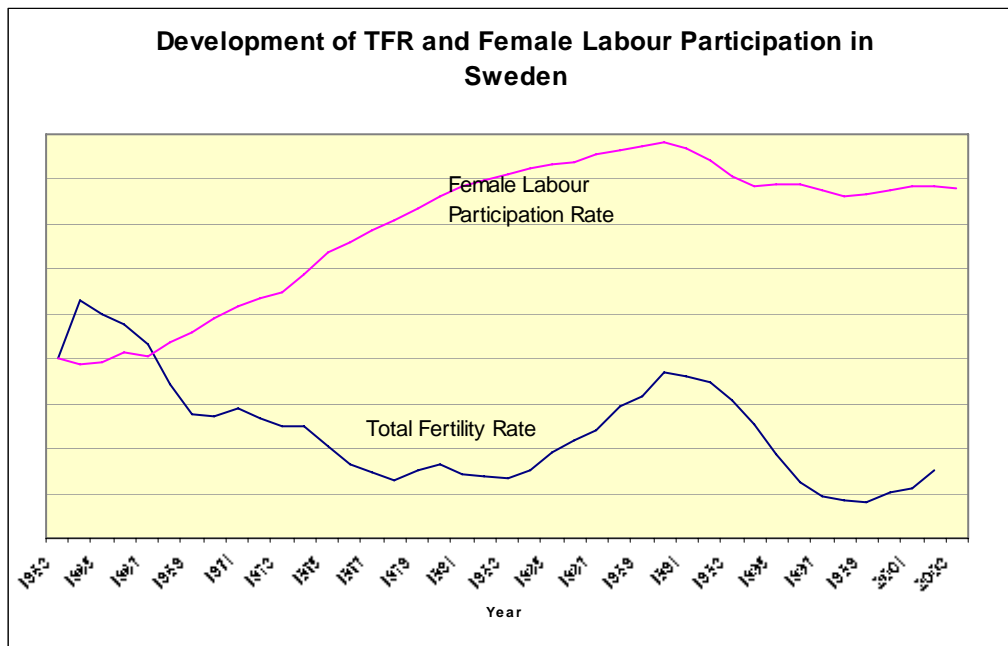


SOURCE: OECD Labour Market Statistics (2005).

The idea behind this procyclical association is that economically prosperous times induce increasing wages and a collective sense of economic and social security. During these times welfare state expansion and new policy

concerns are stimulated. Therefore, the growth in transfer payments lead to reduced costs of children and therefore stimulates fertility (Becker and Barro, 1988). Economic downfall on the other hand leads to a sense of insecurity with stagnating income development and potential unemployment threats and a reduced generosity of the welfare state (Stanfors, 2005). While the desired number of children may stay the same, families will postpone childbirth as a result of these higher costs of children and insecurity, leading to falling fertility rates.

Figure 3.8. Development of TFR and female labour participation in Sweden,  
1960-2005



SOURCE: OECD Labour Market Statistics (2005) and Council of Europe-Demographic Yearbook (2003).

The idea behind this procyclical association is that economically prosperous times induce increasing wages and a collective sense of economic and social security. During these times welfare state expansion and new policy concerns are stimulated. Therefore, the growth in transfer payments lead to reduced costs of children and therefore stimulates fertility (Becker and Barro, 1988). Economic downfall on the other hand leads to a sense of insecurity with stagnating income development and potential unemployment threats and a

reduced generosity of the welfare state (Stanfors, 2005). While the desired number of children may stay the same, families will postpone childbirth as a result of these higher costs of children and insecurity, leading to falling fertility rates.

One of the main reasons for the low fertility rate in Sweden during the late 1990s is most likely the relatively high level of unemployment among young people. Young adults experienced difficulties gaining a position in the labour market. A structural change in the Swedish labour market, with an increase in the proportion of temporary jobs, has no doubt affected the willingness of young people to start having children (Bernhardt, 2000). Job security is an important determinant of fertility.

Several authors have recently empirically studied procyclical fertility. Stanfors (2005) shows a positive association between fertility and family income in recent decades. Andersson (1999) found that women with a relatively low wage and women who are enrolled in education have lower birth risk than others. He analysed the effect of a number of different economic indicators on the propensity to give birth at common birth orders in Sweden. He claimed that the increase in the number of women with such characteristics has been the main reason for the lower number of births during the 1990s.

Hoem (2000) showed that first-fertility rates concur with employment developments in different municipalities. He focused on first order births of Swedish women and the influence of labour market developments between 1986 and 1997. Given the situation in the labour market, he calculated the risk for the first birth. Additionally, Hoem found a strong effect of female labour income on the risk for first childbirth. Finally, he acknowledged that the women enrolled in university usually have a smaller risk of first childbirth. This may have influenced the results of his study.

Finally, Stanfors (2003) also emphasised the relevance of part-time work in relation to women's labour force participation. Today, the major reason for women's employment interruptions is the birth of the first child. Part-time work has facilitated the return of women to the labour market after childbirth. The labour interruption is probably of more significance to a woman's career than her employment as such.

The shift from counter-cyclical to pro-cyclical fertility behaviour can be explained by the parallel shift from a breadwinner model to a dual-earner society (Stanfors and Svensson, 2003). The latter is characterised by families in which both spouses are responsible for the household income. The Swedish labour



market has been restructured and gender roles have changed. The proportion of women in the labour force has reached similar levels as that of men and the wage levels have been nearly equalised. The relative income effect of female labour participation has therefore become larger. Female labour force participation has therefore exerted a positive effect on fertility.

In the current Swedish dual-earner society a decent level of income for a woman in Sweden has become a prerequisite for her childbearing. The system is thus sensitive to economic variations, which have recently fuelled the roller-coaster movements of Swedish fertility (Andersson, 2005).

### 3.2.3 Influences of gender equality and education

In demographic literature some researchers argue that the process of decreasing birth rates are a result of women's quest for equality, and their attempt to escape from their dependence on a male breadwinner, as evidenced by rising female employment (Beck and Beck-Gernsheim, 1995; Popenoe, 1993). Within this reasoning, female emancipation is one of the causes of declining fertility. Similar conclusions were drawn with regard to female education. Various studies confirmed a negative correlation between fertility and a woman's educational

status<sup>11</sup>.

However, the findings of Kunzler (2002) question those approaches that blame (or welcome) modernisation of gender relations as a cause of family decline. He argues that gender equality within the family is a prerequisite for the “stabilisation” of the family. But also equality between the sexes outside the family (e.g. in the workplace) could lead indirectly to a greater sharing of family responsibilities (Milivoja, 2002). A recent study by Andersson, Duvander and Hank (2005)<sup>12</sup> suggests that there is at least some degree of gender equality in the way Swedish couples deal with their family building. They studied childbearing patterns by the labour-market attachment of Swedish women and men and found that the impacts of female and male earnings on a couple’s childbearing behaviour turn out to be fairly similar.

Oláh (1998) also concludes that increasingly, Swedish women and men share the role of income provider and the responsibilities of childcare tasks. According to her this has stimulated one-child parents to continue childbearing.

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<sup>11</sup> For example: Castro Martin (1995); Mazur (1973); Graff (1979); and Weinberger (1987)

<sup>12</sup> Cited in: Andersson G. (2005). A study on policies and practices in selected countries that encourage childbirth: The case of Sweden. MPIDR Working Paper 2005-005, Max Planck Institute for Demographic Research. March 2005

Most patterns are similar for both women and men: “This reflects a convergence of gender roles that has taken place in Sweden from the late 1960s onwards.”

Further education of women does not necessarily lead to a decreased number of desired children either. Although women with higher education have somewhat lower fertility and are more likely to stay childless than are other women (see e. g. Blackburn, Bloom, and Neumark, 1993), when attending higher education, young women generally postpone family formation (Gustafsson, Kenjoy and Wetzels, 2001). Postponing the first birth may also mean fewer children and in some cases no children at all. However, Cigno (1991) shows that the negative effect from higher female education on the fertility rate can be smaller than expected, since higher educated women have a smaller space between their children. The effect on the total completed fertility may therefore be limited.

### **3.3 So how about the influence of government intervention?**

Previous sections pointed out the impact of various macro and micro factors on fertility. Many of these factors, for example those related to attitudes towards the family or gender equality, are cultural factors. If these were the most

crucial determinants in childbearing behaviour, then one would expect very different fertility dynamics of people from different cultural origins (Andersson, 2005). It appears however, that Swedish- and foreign-born women demonstrate remarkably similar behaviour in response to recent period effects in Swedish fertility (Andersson, 2004a) and how their participation to the labour market has an impact on their childbearing behaviour (Andersson and Scott, 2005).

This suggests that institutional factors are important in shaping a Sweden's fertility behaviour. In his book *The Three Worlds of Welfare Capitalism*, Esping-Andersen (1990) underlined the importance of a country's political and institutional characteristics in determining fertility. The question that has intrigued numerous scholars over the past decades is, how important is this role, and what are the key institutional characteristics. By answering this, we can address how governments can implicitly or explicitly influence childbearing behaviour.

In the case of Sweden, we may ask ourselves whether the strong variations in total fertility rate are (partly) due to government policies. Therefore, we can distinguish four approaches that have a potential influence on a country's fertility rates:

- Import of high-fertility immigrants;
- Discourage couples to use contraceptives or to abort pregnancies;

- Incentives for couples to increase the number of desired children;
- Remove barriers for couples to decrease the gap between desired number of children and actual number of children.

In Sweden the focus has been on the last approach. In the next chapters will we investigate what policies have been used to remove barriers towards family formation (Chapter 4), and subsequently, how effective these government initiatives have been in raising fertility (Chapter 5).

#### **Chapter 4. Family Policy aimed at the Individual**

Sweden's family policies abide by the "Scandinavian model" (UN/ECE, 2002), in which the state and municipalities have major responsibilities for the well-being of the people. It has a long tradition of social policies that are directed at the family. However, unlike countries such as Austria, Belgium, France, and Germany, modern Swedish family policy is not targeted explicitly at the family as a unit. In these countries the family is benefited with allowances, while in Sweden, children are identified as the target for benefits in order to improve their status out of wedlock (Kaufmann, 2002). Traditionally, Swedish family policy is characterised by a tendency to encourage both parents to accept responsibilities with regard to children. Hence, it is closely related to gender policy, in line with increased individualisation and gender equality principles. In addition, reproductive health policy remains a fundamental constituent of Swedish family policy. Various instruments facilitate couples' family planning, such as sex education, access to contraceptives (since 1938), and abortion (since 1975 women have been able to obtain abortions free of charge within the first 12 weeks of pregnancy).

Swedish family policy is also linked closely with employment policy; for many years it focused on enabling couples to combine raising children with gaining employment. The breadwinner family model was abandoned for the dual-earner family model in the 1970s. Men and women were regarded as equal both in the family and the labour market, at least in theory (Jönsson, 2003).

The policy measures used for this purpose consisted of a generous scheme of paid parental leave that was related to childbirth and child sickness, and public day care. Three major decisions in the 1970s shaped the formation of current family policy in Sweden: the introduction of individual taxation (1971), which makes it less attractive for couples to pursue gendered segregation of work and care; parental leave with income replacement (1974) that was related to childbirth and child sickness; and the decision to expand heavily subsidised public childcare, which allows women to return to work after parental leave. Further improvements in parental leave insurance, regarding both duration and financial compensation, and expansion of subsidised public childcare were implemented in the 1980s (Jönsson, 2003). In addition to the above universal benefits, there are also means-tested benefits targeted at those on low incomes (social assistance and housing allowance) which make special provision for those with children;

however, such benefits are targeted at those in temporary financial need and are not pronatalist in intent.

Swedish family policy measures were subject to alteration during the 1990s. After 1990, when unemployment was extremely low in Sweden, its economy experienced various financial crises. These caused, amongst other things, a sharp drop in employment, particularly among young women. As a result of a deterioration in public finances, a trend emerged towards less generous provision and decreased coverage for both social security and family support, as municipalities (where social services are administered and financed) were forced to cut their expenses (Bernhardt, 2003). In this chapter we examine the constituents of Swedish family policy as outlined above, their development, and their adaptation to the economic climate of the 1990s.

#### **4.1 Parental Leave**

Paid, job-protected maternity, paternity, and parental leave constitutes a significant component of Swedish family policy. It was designed to meet three goals: the well-being of children, women's economic independence, and the involvement of men in family life and childcare (Jönsson, 2003). All parents are



entitled to the leave, whether they are participating in the labour force or not, with benefits paid out of the general tax system with no direct cost to employers (Duvander and Andersson, 2005).

The right to maternity leave was introduced in 1939, becoming paid leave in 1955. The current policy dates from 1974, when fathers became entitled to share parental leave, allowing division of parental leave between parents according to their wishes. Initially parents were entitled to six months' leave, but this grew progressively during the 1970s and 1980s to 450 days by 1994. In 1995, a "daddy month" was introduced, whereby 30 days of parental leave was reserved for the exclusive use of the father (and, equally, 30 for the mother); if the father does not use these days, they are lost. In 2002, parental leave was extended by a further 30 days that cannot be transferred, taking the total entitlement to 480 days (Figure 4.1); however, if parents want to use all 480 days, each parent must use at least 60<sup>13</sup> (Nyberg, 2004). In the case of multiple births, parents are entitled to an additional 180 days leave. Parents can use parental leave on a flexible basis until the child is 8 years old (Pylkkänen and Smith, 2004).

Furthermore, the father is entitled to 10 days of paternity leave and

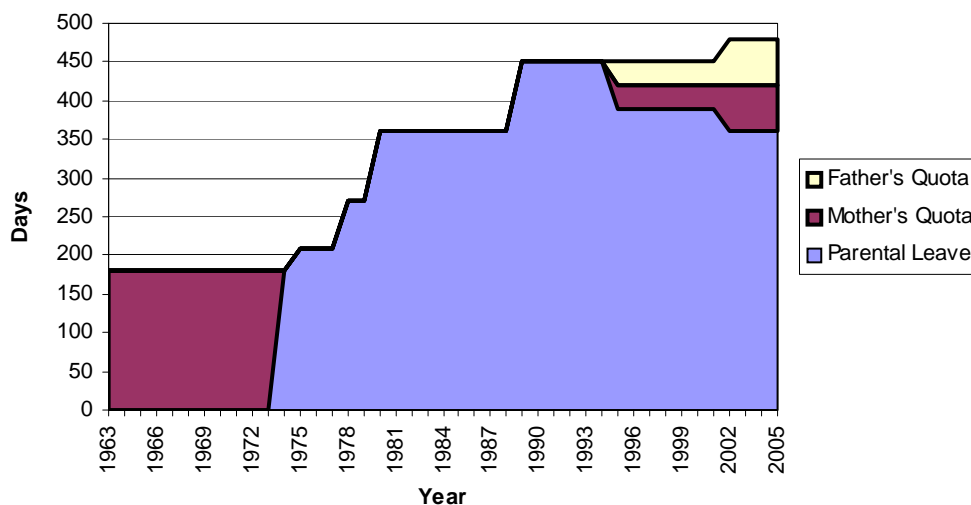
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<sup>13</sup> Single parents are entitled to the full period (Sundström and Duvander, 2002).

allowance when the child is born, and there is a provision of up to 120 paid days per year per child for sick-child care. Parents are entitled to unpaid (but job-protected) leave after the paid parental leave, until the child is 18 months old. Additionally, parents have the right to cut back their working hours from full time to 75 percent, exercisable until children reach the age of 8 (Hoem, 2005; Baizán et al., 2002; Björklund, forthcoming).

The level of benefits depends on the parent's earnings during the 240 days preceding birth. Non-employed parents receive a flat-rate benefit of SEK180 (about €20), a substantial increase from the rate that applied from 1987 to 2001, SEK60 (Nyberg, 2004), although most women have a job preceding their first childbirth (Andersson, 2000).

Figure 4.2. Number of days of parental leave, mother's quota and father's quota, Sweden 1963-2005.



SOURCE: Björklund (forthcoming), Nyberg (2004). Paternity leave of 10 days is not included.

Parents entitled to income replacement are compensated at 80% of earnings up to a ceiling of around €32,000<sup>14</sup> for 390 days, with the final 90 days compensated at a low flat rate of SEK60 (€7), which has remained constant since 1987. The income replacement level was initially 90% of earnings when

<sup>14</sup> The ceiling of the income-replacement level has not matched income growth, so a larger minority of parents now have their benefits constrained by this limit; between 1996 and 2001 the number of people with an income above the ceiling doubled to around 36% of the full time employed in 2001 (Nyberg, 2004).

introduced in 1974, but this was curtailed to 80% in 1995, and 75% in 1996, because of budgetary pressures. However, the allowance was reinstated to 80% in 1998 when the economy recovered somewhat.

The allowance is taxable and the benefits count as an income source that gives future pension rights.

Since 1980 the parental leave programme has had a special feature (the “speed premium”) which has encouraged a closer spacing of births (Berinde, 1999). If another child is born within 30 months, the parents are entitled to the same income replacement as for the first child, irrespective of income between the two births.

Almost all families with children make use of parental leave, and most also use the full entitlement; 97% use some of the income related days and around 90% at least some of the flat-rate days, with around 60% of families using their full entitlement (Nyberg, 2004). Fathers use only a fraction of total leave; Duvander and Andersson (2005, table 1) report that fathers used 18.7% of benefit days in 2004, although it has increased substantially from just 0.5% in 1974 and 11.9% in 1999. After the “daddy month” was introduced in 1995, the fraction of male leave users increased, but fathers on leave took fewer days on average.

Sundström and Duvander (2002) suggest that there was a rise in the contribution of less motivated fathers, who use a few leave days as they would otherwise be forfeited.

Overall, the Swedish parental leave system is very generous in terms of income replacement, length, and flexibility (Duvander and Andersson, 2005). Tanaka (2005) studies 18 OECD countries<sup>15</sup> and finds that Sweden has the most generous job-protected paid parental leave (as of 2000) at 68 weeks<sup>16</sup>, with the average over the 18 countries studied just 18.2 weeks.

Although parental leave policies have been subject to regular change, including some restrictions during the 1990s, they form a massive constituent of public support to family formation, which contribute to individual decision-making with regard to family formation (Oláh, 1996, as cited by Basián et al., 2002).

## **4.2 Public Childcare**

Approximately two-thirds of the mothers with young children work

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<sup>15</sup> 16 European countries, the US, and Japan.

<sup>16</sup> This differs from the figures given above as Tanaka includes maternity leave and excludes paternity leave.

outside the home, most of whom have their children in public day care (Bernhardt, 2003). Until the 1960s, public childcare was merely intended for lone mothers. But in line with various other Swedish family policy measures, provision of public subsidised childcare facilities began to be implemented from the early 1970s. Traditionally, policies targeted at subsidising, improving, and expanding the supply of childcare have met with wide support from both parliament and public. According to a recent OECD report (2001), Swedish childcare policy has had two objectives: (1) to make it possible for parents to combine employment or studies with family life; and (2) to support and encourage children's development and learning, and help them to grow up in conditions that are conducive to their well-being. In the 1970s and 1980s, Sweden experienced a period of extensive expansion of public childcare facilities and the expansion of childcare services became a generally accepted policy objective. From January 1995, municipalities (which are responsible for arranging childcare) were obligated to provide pre-school activities without unreasonable delay (within 3-4 months of a parent applying for childcare); in 2003 this was achieved by 94% of municipalities (Nyberg, 2004). The Swedish day-care system is now widely considered as exemplary in terms of availability, quality and price (Andersson et al., 2003, and

references therein).

Families with two working (or studying) parents, or children with special needs, are eligible for subsidized care, with fees only covering about 10-20 percent of all costs (varying by municipality) (Björklund, forthcoming). Eligibility was extended to children of unemployed parents<sup>17</sup> in July 2001, and children of parents on parental leave with another child in January 2002 (Nyberg, 2004). The fee for the second or third child is normally much less than for the first, and having a child in day-care already gives priority access for the next child (Berinde, 1999); priority is also extended to families on low incomes, lone mothers, and children from immigrant families.

The fee structure has altered substantially over the past 15 years. As part of a general process of decentralization, the municipalities gained higher autonomy over public childcare from the Swedish central government, which led to less uniformity in fees, and to some extent, quality. In 1996 and 1997, the median price paid by parents for a year of full-time day care for a child aged 1-12 years was slightly above 12,500SEK. About a fifth of parents lived in a municipality where they had to pay less than 11,400 SEK, while another fifth

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<sup>17</sup> For at least 15 hours per week.

lived in areas with prices of 14,000SEK or more (Andersson et al., 2003).

Furthermore, in the 1990s many municipalities attempted to shift costs towards the parents; almost all introduced a time-related fee and 90% linked fees to income by the end of the decade (up from 75% at the beginning). In 1990 parents paid 10% of the total gross costs of childcare; by 2000, this proportion had increased to 19%, although this varied by municipality. However, the central government introduced a maximum childcare fee<sup>18</sup> in 2002; consequently, almost all families pay lower fees, and fees now account for 9% of the total cost for public childcare (Nyberg, 2004).

Budget constraints in the 1990s led municipalities to cut spending on childcare. The resources spent on childcare per full-time child decreased in the early 1990s, but then rose again in the second half of the decade, exceeding the 1991 level by 2002. Other indicators of quality have displayed downward trends; the number of children per staff member rose from 4.2 in 1991 to 5.3 in 2002, and average group size increased from about 15 in 1991 to 17.4 in 2002, with the increase more pronounced in leisure centres for school children than in pre-school

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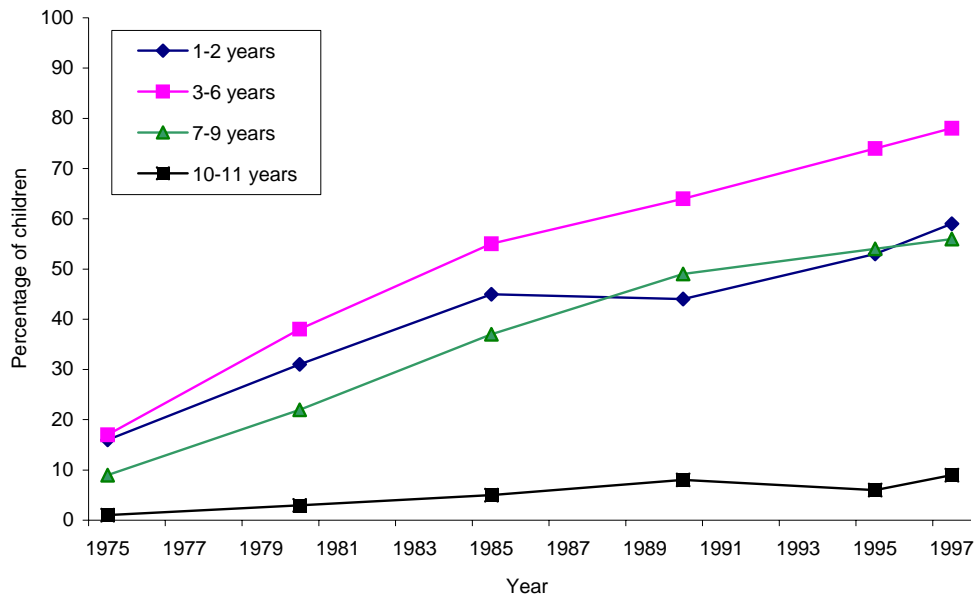
<sup>18</sup> The maximum fee is set at 3% of income before taxes for one child, 2% for a second child and 1% for a third child. There is also an upper nominal bound to the fees (Nyberg, 2004).



care (Nyberg, 2004; Jönsson, 2003). Nevertheless, staff quality is generally good; staff typically have two years of special training after high school (Björklund, forthcoming). Overall during the 1990s, quality was “somewhat reduced” (Andersson et al., 2003) but still fairly high in an international setting when measured by the staffing and economic resources spent on public childcare (Pylkkänen and Smith, 2004, and references therein).

Access to public childcare is excellent, as illustrated by the proportion of children in public childcare. While in 1975, just 15.1% of children (0-6 years) were in public childcare, that proportion had increased to 49.0% in 1990, 58.7% in 1995, and 68.8% in 2002 (see Figure 4.2). Moreover, this understates the true picture as parental leave means that the proportion of children below two years old in public childcare is much lower (in fact, for children under one, it is negligible). The proportion of 4-year olds in public childcare increased from 65 percent in 1990 to 96 percent in 2003 (Nyberg, 2004); the experience of other age brackets is similar.

Figure 4.2. Percentage of children in public childcare institutions, Sweden, 1975-1997



SOURCE: Jönsson (2003)

Another effect of the budget constraints of the 1990s was a noticeable increase in the proportion of private childcare institutions. These institutions set their own fees, but receive the same subsidy as public institutions so long as they meet the same childcare standards (Rønsen and Sundström, 2002). Most of the private institutions are, in fact, non-profit making, with 40% run by parent cooperatives, many set up in response to the shortage of public childcare places in the 1980s (Nyberg, 2004).

### 4.3 Child Benefits and Taxation

Aside from policies that target the compatibility of labour and childrearing, a generous child allowance scheme is also a hallmark of Swedish social policy. Child allowances are universal non-taxable cash benefits granted to parents of all children under 16 and to children enrolled in education through the upper-secondary level (Berinde, 1999). The allowance is currently 950SEK per child per month, with a large family supplement of 254SEK for the third child, 760SEK for the fourth child, and 950SEK for the fifth and each additional child; the allowance is paid to the mother (Försäkringskassan, 2005).

A special child allowance is payable to children of widows, widowers, and other single parents, which is displayed in Figure 4.3. Child maintenance or support in one-parent families is expected to be paid by the non-custodial parent, regardless of whether the parents are unmarried, separated, or divorced. If the non-custodial parent does not or is unable to pay maintenance the government will pay maintenance support (Swedish Social Insurance Agency - [www.forsakringskassan.se](http://www.forsakringskassan.se)).

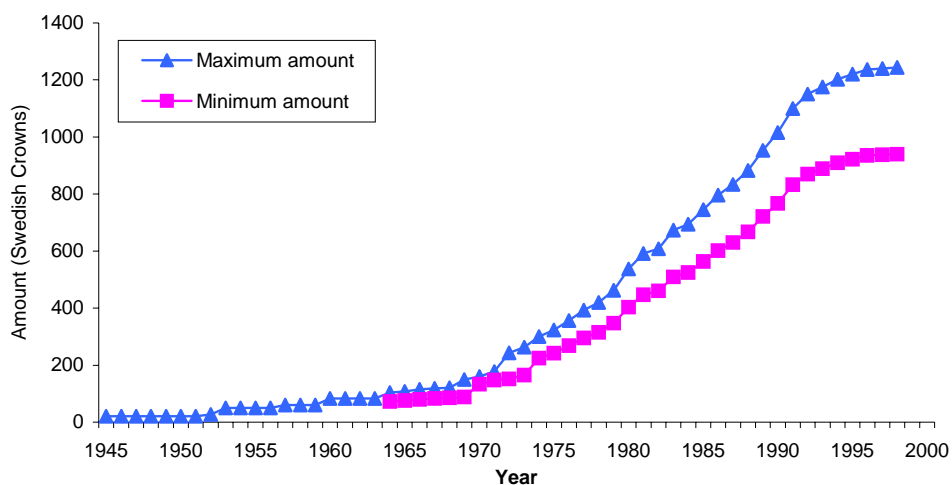
During the economic setback of the mid-1990s, Sweden curtailed the nominal value of child benefits for the first time in its history by approximately 20

percent (Figure 4.4 illustrates the child benefits for first-order births (minimum benefit) and the benefit for fourth or higher birth orders (maximum benefit) in the past 50 years). In particular, supplementary benefit for families larger than two children was eliminated in 1996. However, these allowances for large families were reintroduced in 1998, and by 2001 child allowances had returned to their nominal high of a few years earlier (Baizán et al., 2002). This policy aimed at reducing unemployment and restoring economic support to families with children at the rate made possible by improving public finances (UN/ECE, 1999).

Despite the reductions in child benefits during the 1990s, the extent to which the Swedish government has kept the purchasing power of family allowances relatively stable throughout the past decades is remarkable (Chesnais, 1996). In fact, the real value of child benefits increased substantially between 1974 and 1995; the payment of 750SEK per month in 1995 represented a 30% increase in real terms over that paid in 1974 (Björklund, forthcoming), and child benefits have recently resumed their upward nominal trend. The protection of families' economic status remained relatively strong after 1990, as family allowances were only reduced marginally in comparison with other economic reforms.

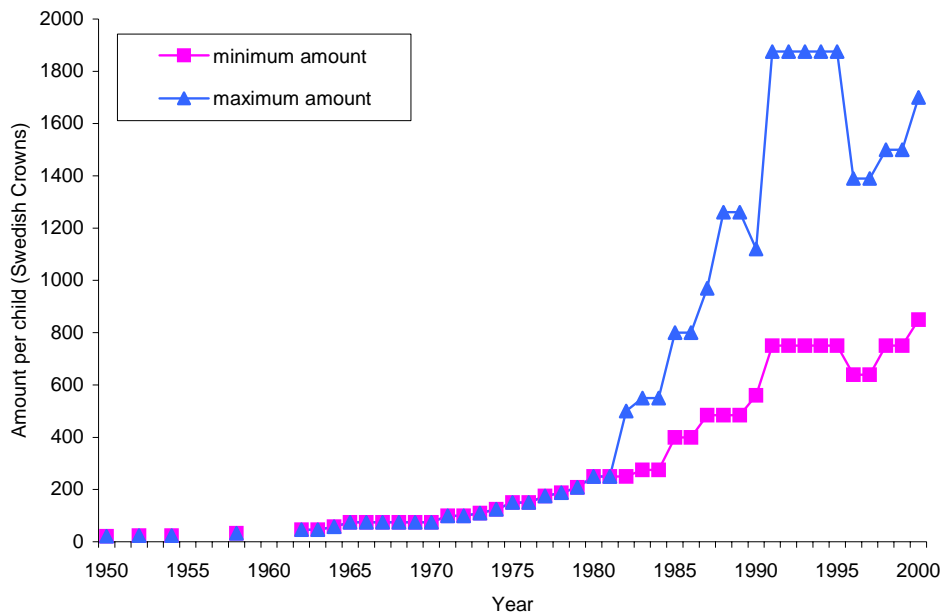
The relatively modest and temporary cuts in family benefits did not have a substantial impact on family income alone. However, Sweden experienced an additional combination of cuts in cash benefits (especially housing allowances), tax rises (higher social security contributions), expanding unemployment, and reduced salaries. It was this sum of factors which caused a deteriorated economic situation for households, especially those with more than two children.

Figure 4.3. Minimum and maximum child benefits for one-parent families, Sweden, 1945–1998



SOURCE: Austrian Institute for Family Studies (ÖIF) Family Policy Database (2000)

Figure 4.4. Child Benefits for first-order children (minimum) and fourth-order children (maximum): Sweden, 1950-2000



SOURCE: Austrian Institute for Family Studies (ÖIF) Family Policy Database (2000)

In contrast to other European countries (e.g. Germany), tax concessions for families are not recognized in the Swedish system. Mandatory individual taxation for couples in Sweden was introduced in 1971, with an explicit aim to promote gender role equality and support women's labour-force participation (Gustafsson, 1992, as cited by Basián et al., 2002; Andersson, 2005). Moreover, a

strongly progressive tax system makes a dual-earner system advantageous (as at each level of family income, less tax is paid if that income is spread over two persons than if it is earned by just one) as opposed to gendered segregation of work and care. The net household income for families with children is improved by increasing the tax benefits of mothers, in particular their incentives to participate in the labour force. Policy measures supporting flexible working hours and part-time work, which were progressively implemented, also contribute to household income.

#### **4.4 Social Assistance and Housing Benefit**

Social assistance and housing benefit are means-tested, in contrast to the universal benefits discussed above. Social assistance is intended to be an aid for persons in temporary financial need, but in recent years the period of dependence on assistance has increased especially among lone mothers, young unemployed, and refugees; overall, about 4% of the population claimed assistance in 2003. Couples with children constitute around 15 percent of recipient households and lone mothers around 25 percent (in 1995). About one-third of all lone mothers claimed assistance in 1995, primarily because of unemployment

([www.childpolicyintl.org](http://www.childpolicyintl.org)).

Housing benefit is available for families with children and is based on the make-up of the household, the amount of housing costs and household income. The rationale for the housing allowance in Sweden for households with children is partly to enable households with children to secure good quality and spacious housing, and partly to be a special support to low income families with children (Ditch et al., 2001). To this end, there is also an additional allowance based on the number of children in the household. For families with one child the allowance is 600SEK per month, for those with two children the amount is 900SEK, and for those with three or more children it is 1,200SEK. In common with other programs, the scope and generosity of housing allowance was reduced in 1996 and 1997, with restrictions imposed on eligibility and becoming more sharply targeted on low-income families.

#### **4.5 Family Policy and Gender Equality**

In this chapter, we have seen that Swedish family policy has aimed to support women's labour force participation and promote gender equality both at the household level and in the labour market. Each of the public policies outlined



above improves the state's support of gender equality. The parental-leave system enhances the reconciliation of work and family life for women, giving incentives to participate in the labour market before having children and easing their return to work afterwards; furthermore, it actively encourages fathers to take parental leave by reserving time for their sole use. In this respect, "Sweden is the only country in the EU which really can be considered as developing a system with the potential of altering gendered behavior in breadwinning and child care" (Duvander and Andersson, 2005, p2). Universally available subsidised public childcare of a high quality enables women to combine working or studying with family life, thus increasing their attachment to the labour force. Finally, individual taxation discourages segregation of work and care along gender lines and supports women's labour force participation.

Whilst Swedish family policy has never been directed specifically at encouraging childbearing (Andersson, 2005), the removal of barriers to family formation, through the policy instruments of paid parental leave, subsidised public childcare, child benefits, and individual taxation, has undoubtedly affected the fertility rate in Sweden. Although current Swedish welfare policy may be less generous than it was a decade ago, benefits and services to children and families

have been protected, and the Scandinavian model remains the most generous among OECD countries. We examine the effects of these family policies on fertility in the next chapter.

## Chapter 5. The Mixed Success of Swedish Policies

The great and persisting challenge within all this research is to establish the degree of *causality* behind statistical associations in the data. Consider the positive statistical association between job compatibility with childcare, on the one hand, and women's fertility, on the other hand. It may be that the first indeed causes the second. If so, governments may institute policies to increase this compatibility with some confidence that the affected women's fertility will increase over time, compared to what it would have been. Alternatively, this same positive statistical association may arise because women who desire more children seek out jobs, even locales, where flexible hours and/or workplace day care are common. In this alternative scenario, government policy to increase this compatibility might affect overall fertility very little or not at all, whatever good it may accomplish in other ways.

To further confound attempts at evaluating the effects of policy, changes in welfare policy have not occurred in a vacuum; that is to say, there have been numerous other developments during the period we study that could also affect fertility. Therefore, we must be wary of attributing all changes in fertility rates to

changes in family policy. For example, since 1965, methods of birth control have become more prevalent; laws regarding abortion and divorce have been liberalised; attitudes to children and family structures have changed; and the economy has been through times of boom and bust. It is often useful in this context to use comparator countries, such as Denmark, Finland, and Norway, which have experienced similar changes but do not have identical welfare systems.

In this chapter, we first examine the extent to which we can predict the effects of Sweden's family policy on reproductive behaviour and assess the evidence for those effects. Then, we relate changes in fertility to the historical evolution of Sweden's family policy, incorporating the effect of simultaneous changes in other areas, which may have affected fertility. Finally, we summarise and present our conclusions.

### **5.1 Effectiveness: theory and evidence**

Only limited effects can be directly attributed to individual policies; however, a combination of policies can be seen as supporting the compatibility of work and family life. In this section we first examine the effects on fertility choices that can be attributed to individual policies and then turn to the wider

issue of whether family policy as a whole has successfully removed the barriers to family formation.

#### 5.1.1 Parental Leave and the “Speed Premium”

Paid parental leave reduces the amount of foregone earnings for the parent who must abstain from paid work in order to care for the child. However, in order to be eligible for income-related benefits, as opposed to a lower flat rate, women must participate in the labour market prior to starting a family. As a consequence of this, Björklund (forthcoming) predicts that the average age for first births became higher than it would have been without the parental leave legislation. His data shows that the average age of women at the birth of their first child increased from about 24 for women born in the mid-1940s to over 26 for women born in 1956 (and thus reaching child-bearing age after the implementation of parental leave in 1974). However, other countries, particularly the Netherlands, have experienced similar patterns despite differing family policies. This suggests that the increase in average age at first birth is not (solely) attributable to the introduction of parental leave.

Furthermore, the income-replacement character of the parental leave benefit since 1974 gives strong incentives for women to obtain as high a level of

income as possible before having a child. Andersson (2000) finds that the propensity for childless women in their twenties to have a first child is increasing in earned income<sup>19</sup>, and those enrolled in education generally have much lower birth risks than those who are not, as discussed in Chapter 2. However, Gauthier and Hatzius (1997) find that maternity leave has no significant effect on fertility in any of the countries that they analysed, which included Sweden.

Andersson (1999b) and Hoem (1993) demonstrate that the establishment of the so-called “speed premium” in 1985 on birth spacing in the parental leave system was followed by a faster tempo in childbearing there. In these cases, one could always argue that perhaps this policy intervention simply strengthened a trend that was under way. But by using Norway as a reference, Andersson (2002; 2004b) showed that this was not the case. These studies offered the rare case where a clear-cut causal relation between a policy intervention and fertility dynamics can be demonstrated.

### 5.1.2 Childcare

The childcare system is considered to be an important component of

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<sup>19</sup> Except for those in the highest income bracket; he attributes this result to career concerns of the women in this bracket.

Sweden's strategy towards relatively high fertility rates in the 1980s (e.g. Hoem and Hoem, 1996). Qvist (1994)<sup>20</sup>, for example, established a positive and significant correlation between the number of children between 0 and 6 years old in child care centres and the total fertility rate for the period 1963-1993. Löfström and Westerberg (2002) are less strong in their conclusions that childcare allowance and places in childcare "seem to have a positive but sluggish effect on fertility" for the period 1965-1998. Finally, Andersson et al. (2003) barely find any impact of regional variations in childcare characteristics on Swedish couples' continued childbearing, during a brief calendar period of reduced fertility levels. They interpret this as evidence that, first, overall coverage of childcare is sufficiently good, despite regional variations, that parents can make fertility decisions independent of local characteristics; and second, given the overall generosity of the Swedish welfare state, other supportive family policies can cushion minor deficits in local childcare.

### 5.1.2 Child Benefits and Taxation

The offsetting of the costs of raising children through a generous child benefit may serve to increase fertility, although the magnitude of any effect is

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<sup>20</sup> Cited by Löfström and Westerberg (2002).

likely to be small (Kohler et al., 2005). Andersson (2005) argues that child allowances are unlikely to encourage childbearing, and in the Swedish context, support to child-rearing is provided through other elements of the welfare state which allow people to combine work and family life.

Individual taxation is a key element of Sweden's support of the "dual earner" model, as well as promoting gender equality. As the policy has remained unchanged since 1971, and many other policy changes occurred around the same time, it is difficult to assess the impact of individual taxation alone. It is therefore useful to do an aggregated assessment of the set of policy measures, which includes the taxation of individuals.

#### 5.1.4 The Infrastructure of Social Policies

Taken as a whole, Swedish family policy has aimed to enable the combination of work and family life for women and support women's labour market participation, and so remove the barriers to family formation and promote gender equality. For example, the suite of policies including paid parental leave, subsidised public childcare and individual taxation create an "infrastructure" that supports and encourages female labour force participation in conjunction with family life. For this reason, each policy cannot be seen in isolation. They also



combine with the flexibility of employment status (such as the right to cut back working hours and the importance of part-time work), and Swedish attitudes and culture (section 3.2.3) to promote lifelong labour force attachment.

Social policies therefore facilitate the combination of the competing role of income provider and responsibility for childcare tasks for individuals, especially for women. High-quality childcare and parental leave on reasonable economic terms are regarded as essential for supporting family formation and the quality of family life. Combined with more gender-equal parenting practices, these policies have had a positive influence on fertility.

It is crucial to recognise the necessary integration of childrearing and labour force participation created by Swedish family policy, with much of the generosity of benefits conditional upon previous employment. This creates interactions with the state of the labour market – a theme we shall return to below.

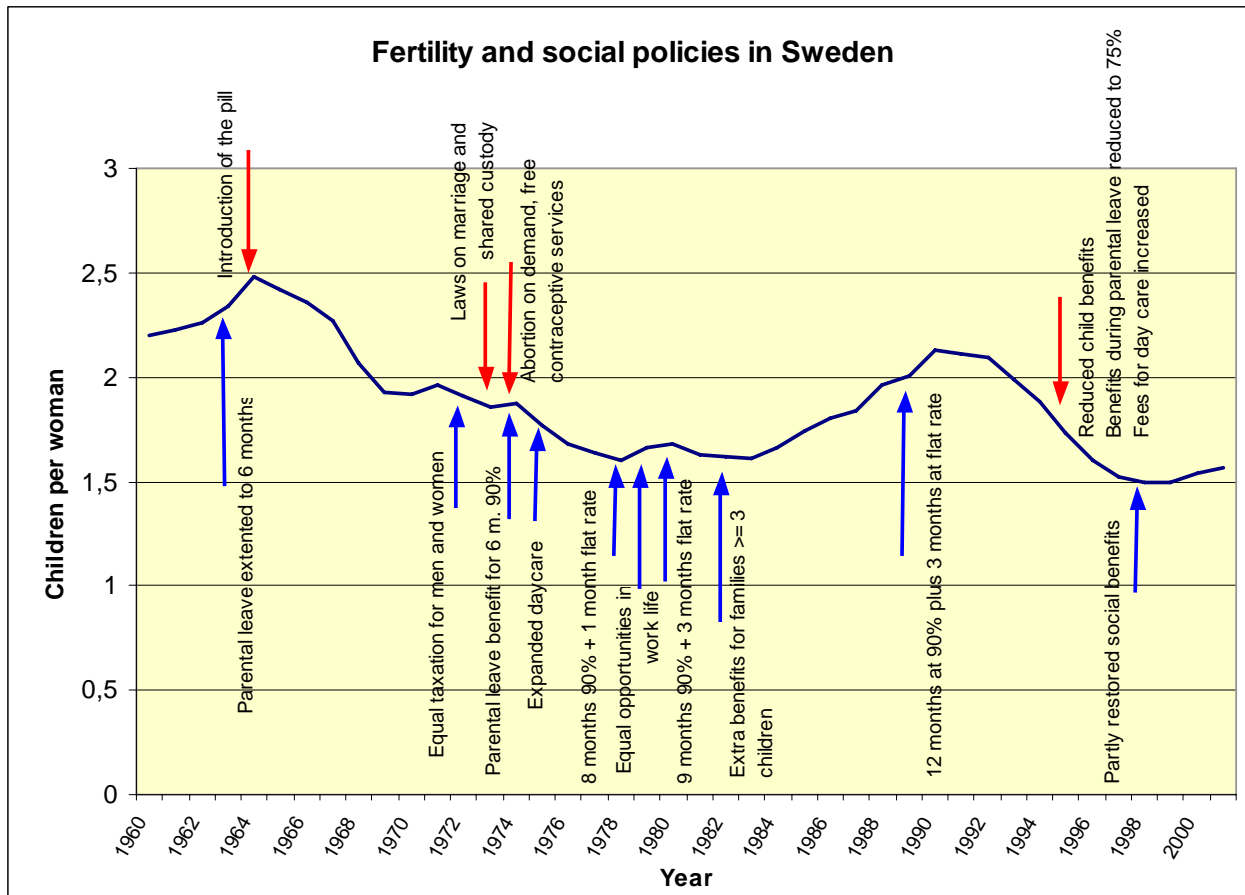
## **5.2 The Evolution of Family Policy**

As described in Chapter 4, family policies have undergone many changes since their inception. Figure 5.1 illustrates the interaction of social policy changes and fertility in Sweden since 1960. Here, we concentrate on the relationship

between changing family policy and swings in fertility in the period since the mid-1970s when the major elements of the current system were introduced.

During the 1980s, the generosity and scope of Swedish family policy was progressively extended, with increases in parental leave duration, the amount of child benefits, and the quality and availability of public childcare. These undoubtedly decreased the direct and indirect costs of childrearing – enabling women to combine labour market participation with childrearing and providing cash support in the form of allowances. In particular, the expansion of public childcare was an important factor, with the proportion of children in public childcare increasing from 31% to 49% during the decade (Hoem and Hoem, 1996; Nyberg, 2004). As we have seen before, one of the marked successes of family policy was to enable women to participate in the labour market throughout childbearing and childrearing, removing barriers to family formation.

**Figure 5.3. Fertility and Social Policies in Sweden**



SOURCE: Sundstrom (2001), Björklund (2002) and Eurostat NewCronos database (2002)

Whilst the total fertility rate (TFR) was low in the 1970s, the country experienced a baby boom after 1985 and by 1990 TFR had exceeded replacement level (see: Chapter 2). However, the extent of causality between the extension of

family policy and the increase in fertility needs further examination. The 1980s was also a period of strong economic growth in Sweden, so families could progressively more easily afford a first child (or more children). Hoem (2005) argues that the increase in the TFR was brought about by a combination of the two factors and their interaction. Because parental leave benefits are related to earnings, parents are induced to time their births so as to maximise the amount of benefits (and income) received; thus, times of economic prosperity not only increase fertility because parents are better able to afford children, but also because as earnings increase (and as the employment rate is higher), the associated benefits are more favourable.

These effects will contribute to an increase in the TFR; however, we also observed in Chapter 2 that the cohort fertility rate has remained fairly constant over time at a level just below two children per woman, suggesting that women obtain their desired number of children, but shift the age and tempo of childbearing so as to optimise income and benefit streams.

The interaction with economic prosperity does not reduce the importance of family policy in encouraging fertility during the 1980s. The decade is often referred to as the “heyday” of Swedish family policy and it is clearly a crucial

component in our understanding of the increase in the TFR until 1990.

### 5.2.1 Post-1990 Policies

Not only have the increasing fertility rates during the 1980s been studied, the marked decline in fertility since 1990 has also been subject to much analysis. Two important factors may have contributed to this decline; first, the economic downturn that Sweden experienced from 1990 onwards, and second, the reduction in the generosity of family policy during the 1990s. Again, causality and interaction between the factors is not simple.

Hoem and Hoem (1996) argue that the withdrawal – or at least rationing – of the generous family policy during the 1990s has partly caused falling fertility rates. The changes in family policy increased the direct and indirect costs of child-rearing, for example by reducing the income replacement rate for parental leave, the quality of childcare provided, and the level of child allowance.

Also, the economic cycle, and its interaction with family policy, had an important effect. Jönsson (2003) argues that in countries such as Sweden, where women's incomes constitute a substantial proportion of dual-earner household income, these families' behaviour will be sensitive to changes in macroeconomic conditions. As the unemployment rate increased dramatically during the early

1990s, this not only directly affected many families' disposable income, but also reduced confidence and perceptions of security for the future. As we have discussed section 3.2.2, this has obvious effects on families' fertility decisions.

Furthermore, the special features of Sweden's family policy, in particular the link between previous earnings and benefits during parental leave, meant that there were interaction effects between the economic downturn and family policy. The economic changes in the 1990s led to weaker labour market attachment of young adults. In particular, there was an increase in the fraction of women who were unemployed or participated in vocational-training programs; in 1990, around 12 percent of childless women in their twenties received some amount of unemployment benefit – by 1993 that had increased to as much as a third (Andersson, 2000). Furthermore, childless young women delayed joining the labour market by prolonging their participation in educational programs, so that the fraction of students among them increased from just above 20 percent at the end of the 1980s to 30-40% between 1993 and 1995. Thus, the composition of the employment status of young women changed significantly; large segments of women moved from high- to low-income groups, and many became students.

Due at least in part to the features of Swedish social policy, women on

higher incomes have a higher first-birth 'risk' than women on low incomes (Chapter 3). In other words, the propensity of childless women on high incomes to have a first child is higher than that of childless women on low incomes. Therefore, the strong decrease in women's earnings during the 1990s and an increase in the number of young women who were enrolled in education were related to the falling fertility levels during these years, not only because of economic insecurity but also because of consequent lower benefits after childbirth. Andersson (2000) reports that the first-birth intensities of childless women in their twenties declined by almost 40 percent during the 1990s. Second-birth intensities declined more moderately (by around 20% between 1990 and 1996) as the "speed premium" feature of parental leave compensation means that benefits are linked to recent earnings in fewer cases. Finally, the propensity for childless women in their thirties to begin a family remained stable as they were less affected by changes in the labour market.

To summarise, changes in Swedish family policy, the economic downturn, and the interaction between the economic cycle (in particular, female labour force participation) and family policy all contributed to the decline in fertility rates during the 1990s.

### 5.2.2 Pro-cyclical Fertility

As described in Chapter 3, Sweden is characterised by a pattern of “pro-cyclical” fertility, where levels of female earnings are positively related to levels of childbearing. A report from Statistics Sweden argues that fertility behaviour in other countries is not as sensitive to fluctuations in employment and economic conditions as it is in Sweden (see Hoem, 2000). This seems to be caused by Swedish family policy, in particular the structure of the parental leave system, where benefit levels are directly related to the income of the parent in the year preceding birth. Indeed, Björklund (forthcoming) reports that among the other Nordic countries, Denmark shows some fluctuations in fertility rates but they are not as closely related to the labour market as those in Sweden, and Finland’s fertility rates did not respond to the severe labour market shock in the 1990s, when the rise in unemployment was even stronger than in Sweden. Furthermore, whilst other North European countries also experienced labour market shocks in the 1980s and 1990s, there is no evidence that total fertility rates responded to these shocks. These findings reinforce the importance of Swedish family policy, and its interaction with economic conditions, in driving fertility fluctuations.



### 5.3 Concluding comments

Strong conclusions can never be drawn, as causality is always difficult, if not impossible, to establish. However, it is clear that policies aiming at the compatibility of work and family life have had a positive impact on the total fertility rate, by removing barriers to couples achieving their desired number of children. Furthermore, changes in these policies have affected the TFR; during the 1980s, the heyday of family policy, fertility rose markedly, as the conflict between childrearing and labour market participation was reduced. We can see the opposite effect during the 1990s – as benefits were cut, fertility decreased.

However, the effects on fertility have been mainly through timing and spacing of births. As we saw in Chapter 2, completed cohort fertility has remained remarkably constant. This implies that fertility has not increased due to larger families, but there were shorter periods in between the same number of children.

Moreover, the success of Swedish family policy in promoting fertility has been dependent on the economic cycle. The crucial determinant is the extent of women's participation in the labour market. Marked increases and decreases in fertility rates were associated with changes in female employment rates. This is inevitably due to the generosity of family policy being dependent on previous

labour market experience before childbirth. As evidenced by the sharp fertility decline during the 1990s, an absence of one or more of the inputting factors can have a negative effect on fertility.

## Chapter 6. Conclusion and Discussion

In the previous chapters we have shown that Sweden's rather extraordinary fertility dynamics can be, at least partly, attributed to a variety of Swedish government interventions. The main challenge has been to establish the degree of *causality* behind statistical associations in the data. It appears nearly impossible to isolate the effect of one driving force from the other. Therefore, scholars have long disputed the influence a government can have in affecting reproductive behaviour. Even for the case of Sweden, contradicting findings have been published. Nonetheless, it is hard to sustain the statement that there has been no effect of Swedish public policy on fertility dynamics.

We have seen that the attitudes towards the family in Sweden have gradually changed over time, and are now different than those in many other industrialised countries (see: section 3.1.3). We have been unable to establish the statistical significance of Sweden's prolonged policies towards promoting gender equality and individualisation. Although we think that socio-cultural values are important context factors that are only marginally influenced by public campaigns, our hypothesis is that the perceived emancipation of women in the family and the

labour market must have been – at least partially and indirectly – facilitated by government programmes.

In demographic literature referring to the second demographic transition, it is commonly reasoned that the status of women in a country and the level of total fertility are negatively correlated. The case study of Sweden demonstrates that this assumption is too simplistic. The equal gender positions in the Swedish labour market and family responsibility roles, relative to other countries, have formed the basis for family policies to succeed. This research paper has shown that tolerance for working mothers and fathers, secure incomes, improved employment conditions, and heavy investments in Swedish families, in combination with favourable economic conditions and low unemployment, have been successful in raising Sweden's fertility in the 1980s.

The evidence for this rather unique causal relation between government policy and fertility dynamics has made Sweden a textbook example for a myriad of economists, demographers and policy analysts to advocate the introduction of similar family policies in low fertility countries.

However, these policies have been particularly effective in influencing the timing and spacing of births; families have not become larger. And a sharp fertility

decline since 1990 has shown that absence of one or more of these factors can also have a direct or indirect negative effect on fertility rates. In sum, economic cycles and varying social policy have resulted in rollercoaster fertility in Sweden.

In other words, we may conclude that while government policies can have an impact on fertility, absence of one or more driving forces behind fertility – including a generous set of public policy measures – can lead to a sudden drop in birth rates. Fertility rates have increased in Sweden following a mix of policies and programmes; no single policy intervention can be identified having the crucial impact in reversing low fertility.

Furthermore, we emphasise that copying Swedish family policy from one country to the other will almost certainly not do the trick. Designing successful interventions is complicated by the fact that policies that work in one country may not work in another. Different interventions have varying effects because of the diverse, complex, and shifting political, economic, and social contexts in which they are implemented. The impact of these contexts appears in some of the sweeping political transitions Europe has witnessed over the past two decades. Unlike in most other countries, fertility rates in Sweden are positively related to the earnings of women — likely because women’s earnings in Sweden constitute

a substantial proportion of dual-earner household income. Since parental-leave benefits are proportional to earnings, improvements in economic conditions lead to higher parental benefits, which can help promote increased fertility. Part of the decrease in fertility in Sweden during the 1990s is likely related to the decline in economic conditions.

Finally, government policies that should offset fertility decline typically have a long-term focus and require many years to bear fruit. Few policy measures may have an immediate effect (for example, those restricting/allowing abortion), but they are exceptions. Additionally, once a significant raise of fertility rates can be observed, it will take at least one generation before this ultimately increases the number of new entrants to the labour force. As a result, politicians tend to focus on policies for mitigating the effects of population ageing, which have shorter time horizons. This explains the current trend in Europe to increase the eligibility age for pensions and the reform of social security systems, which may be necessary but not sufficient strategies to successfully confront the looming economic threats of declining fertility rates and ageing populations.

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