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Low Fertility and Population Ageing

Causes, Consequences, and Policy Options

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Preface

This report, which has been prepared for and funded by the Employment and Social Affairs Directorate General of the European Commission, presents the findings of a study of how policies are interacting with demographic trends to influence social cohesion and other socio-demographic outcomes. The main objectives of the study are to assess the following.

- To what degree and in what way are micro-level decisions with respect to marriage and cohabitation, family formation, migration, and labour force participation influenced by social and economic developments at the macro-level?
- What are the effects of the choices made by individuals and households on the size and age structure of the population?
- Which policy options are available to change the population structure and to mitigate negative socio-economic consequences of a changing population?

The study includes a literature review, an analysis of demographic trends and social indicators for the 15 Member States and 10 Applicant Countries, and case studies of five countries which focus on the relationship between demographic and social change on the one hand, and on policies on the other.

This report should be of interest to policymakers in the European Commission, Member States and Applicant Countries, and to researchers who are interested in the relationship between demography and policy.

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Europe's Demographic Challenge

Nearly all European nations are experiencing long-term downtrends in fertility, and consequently, ageing of their populations. Fertility rates are now below replacement level (2.1 children per couple) in nearly all countries. As a result, natural population growth rates are entering periods of declining growth or outright decrease. At the same time, the proportion of elderly dependants continues to grow while the working-age population declines as a share of the overall population. Moreover, net immigration, which potentially could offset declines in working-age population, remains generally low in most European countries.

Taken as a whole, these demographic trends could have potentially damaging consequences for European economies. For example:

- as the working-age population decreases, countries experience declines in human capital, which potentially reduces productivity;
- pension and social insurance systems can become heavily burdened;
- the ability to care for the growing elderly population declines as household sizes decrease;
- the elderly face sharply increased health care needs and costs.

In turn, these developments are likely to pose significant barriers to achieving the goals of the European Union (EU) Social Agenda: full employment, economic growth, and social cohesion.

Concern over these trends has sparked intense debate over the most effective policies to reverse them, or at least mitigate their consequences. Three broad policy approaches have been considered:

1. encourage marriage or cohabitation and more childbearing among younger couples;
2. increase immigration of working-age people into countries that need them; and
3. reform social policy more generally, in order to ameliorate the negative consequences of these trends – measures could include raising the retirement age or encouraging more women to enter the workforce.

However, research-based information to inform this debate remains sketchy. Many aspects of the relationship between national policies and demographic trends are still not well understood, and it remains difficult to disentangle the effects of specific policy initiatives from the effects of broader social, political, and economic conditions.

Study Purpose and Approach

This study is intended to improve understanding of the interrelations between policy and demographic change. It examines the interrelations between European government policies and demographic trends and behaviour, and assesses which policies can prevent or mitigate the adverse consequences of current low fertility and population ageing.

To conduct this inquiry, the research team created a framework that highlights the interrelationships among government policies, macro-level conditions (such as economic trends, medical advances, and technological progress) and household-level demographic behaviour, all of which combine to influence population factors, such as migration and population age structure.

Guided by this framework, three research tasks were carried out:

1. the research literature was reviewed on the relationship between national level policies and (a) macro-level demographic trends and (b) micro-level household behaviours;
2. data were examined on European demographic trends; and
3. case studies of five particular countries of interest were conducted: France, Germany, Poland, Spain, and Sweden.

Conclusions and Implications for Policy

The study reached five main conclusions.

1. Replacement immigration cannot prevent population ageing or its consequences.
2. National policies can slow fertility declines under the right circumstances.
3. No single type of policy intervention will necessarily slow fertility declines.
4. What works in one country may not work in another. Social, economic, and political contexts influence policy impacts. Therefore, policies indirectly aimed at fertility which target improvements in broader conditions may have beneficial fertility effects.
5. Population policies take effect slowly, and therefore may be politically less attractive.

We discuss below each of these conclusions in more depth and explore their implications for policy. This discussion needs to be seen in the context of the complex political debate that is associated with policies that aim to affect demographic behaviour. It is a legitimate question to ask whether the state has a right to intervene and influence the private discussion of individuals and their partners in making decisions about their own fertility and family formation.

Population Ageing Cannot Be Remedied through Replacement Immigration

Replacement immigration does not offer a feasible solution to the problem of population ageing. The sheer numbers of immigrants required to offset population ageing in the EU and its Member States would be unacceptable in Europe's current socio-political climate. A record number of annual immigrants would be needed to offset ageing – at a time when the EU and its Member States are actively trying to prevent immigration. Thus the debate is more appropriately on whether immigration may be effectively used to *slow* as opposed to *prevent* population ageing.

Here it should be noted that even if large numbers of working-age immigrants were permitted to enter EU nations, it remains unclear whether this would slow population ageing in the short term but simply postpone the problem in the long term. These immigrants would themselves age, so producing the same imbalances in national age structures.

However, replacement migration is not necessarily a closed topic. Important questions remain unanswered. For example, United States and European immigration policies have diverged since the 1980s. The US has adopted a more open stance toward the immigration of skilled workers

compared with the relatively closed approach taken by Member States. Over this same period, there has been a higher rate of productivity increases in the US, which have contributed to rates of economic growth higher than in the EU. Thus, it would be valuable to understand whether the more open US immigration policy helps to explain its higher rate of economic growth.

Government Policies Can Slow Declines in Fertility Rates

Government policies *can* have an impact on fertility. For example, our case studies show instances where countries that experienced a relaxation of pronatalist policies saw declines in fertility. Two former "Iron Curtain" nations – Poland and the German Democratic Republic (GDR) – witnessed declines in fertility after pronatalist policies were eased. The GDR provides examples of the introduction of several family policy packages, with varying success. The 1986 policy package in the GDR had little impact, while the 1972 measures helped to reduce fertility. The purely economic incentives of the East German 1976 family policy package appear to have had an immediate impact on the number of births. The total fertility rate increased from 1.54 in 1975 to 1.94 in 1980. However, the longer-term effects of this policy package are less visible, perhaps because they affect the timing more than the overall number of births.

In Poland, the introduction of pronatalist policies in the 1970s reversed decreasing fertility until the mid-1980s. While fertility did decrease again in the late 1980s, during the 1990s the decrease in fertility occurred even faster with the onset of economic transformation, and its accompanying social, economic, and policy changes.

Currently, Spain has the second lowest rate of fertility of the EU Member States (behind Italy), and lacks a clear population policy. However, a generation ago (in 1971) Spain had the second highest European fertility rate. The dramatic decline in fertility since then is associated with a shift from the pronatalist Franco regime – prohibiting contraception, honouring large families, etc. – to a democratic regime with a passive population policy.

In contrast with Spain, France currently has the second highest rate of fertility in Europe (behind Ireland) and has one of the most interventionist set of policies aimed at encouraging families to have children. Some people might find the relatively high fertility rate in France surprising, since it was the first country in Europe to witness a fertility decline. However, the long-term fertility decline has prompted a deep and ongoing concern about population, resulting in the drafting of the Family Code in 1939. Family policy has been high on the political agenda ever since, resulting in relatively high fertility rates.

In most countries, policies that affect fertility typically have other objectives. For example, in Sweden, family policy and employment policies are linked to the primary objective of allowing couples to combine family formation with work. Thus, it would be wrong to describe the primary aim of policies such as parental leave, public childcare, etc. as increasing fertility (or preventing its further fall). The impact on fertility is secondary.

In turn, fertility declines, and subsequent reverses, may be attributable less to policy changes than to the social and economic environment. In Spain, for example, low fertility rates have been explained by (among other things) high unemployment rates for people under 30, high housing costs, and the tendency of young adults to live with their parents for more years than in other European countries. Thus, an indirect policy that stimulates economic growth may reduce unemployment, increase disposable incomes, and allow young couples to set up home. Making housing more affordable could have a similar effect.

No Single Policy Works

No single policy intervention by itself will reverse low fertility in all cases. Historically, governments have had success in slowing fertility declines through a variety of interventions. For example, in recent decades France has had success by focusing on the birth of the third or

subsequent child. However, the literature suggests that this is less attributable to a single policy mechanism than to its ability to create an environment, that encourages childbearing. This environment is created by a combination of policies that jointly serve this aim.

Sweden has been successful in reversing fertility declines through a different set of policies. Its policy of parental leave during the 1980s allowed many women to raise children and remain in the workforce. In Sweden, neither high-quality childcare nor extensive parental leave on reasonable economic terms appears to be individually responsible for the relatively high fertility rates in the late 1980s. It appears that the *combination* of policies targeted at equal responsibilities for men and women as wage earner and care provider, and at the welfare of children, was essential for supporting family formation and the quality of family life.

In the former GDR, the introduction of a family policy scheme in 1976, including prolonged maternity leave, paid educational leave, interest-free loans to newly-wed couples, substantially raised birth grants, increased monthly family allowances, and improved day care, had a subsequent impact on fertility. Again, it was not a single measure, but the generosity of the whole package that had an effect on family formation. However, a similar package that was introduced in 1986 did not have the desired effect.

Finally, what works in one country may not work in another. The literature showed that a correlation between the magnitude of social transfers to the family and fertility levels exists in several countries while this correlation is absent in others, although it should be stressed that this in itself does not imply causality. Therefore, family policies may be necessary, but not sufficient, for affecting fertility levels.

While the countries above employed a "suite" of policies, there is no evidence that such an approach was coordinated or intended to affect fertility per se. However, if the EU wishes to prevent (as opposed to mitigate) population ageing and the decline in human capital over the next generation, it will be necessary to acknowledge – and "mainstream" – population policy. This will still mean that governments can use either direct or indirect policy interventions, but the primary and secondary consequences of those interventions will be openly explicit.

Political, Economic, and Social Contexts Influence Policy Impacts

Different interventions have varying effects because of the complex and shifting political, economic, and social contexts within which they are implemented. This is perhaps best illustrated with the political transitions of the GDR, Poland, and Spain. The fertility decline in the former GDR after unification cannot be attributed to specific policy, but rather to a changing social environment. Women who faced the unification with concerns about their personal economic situation were less likely to have children in the following months. Similarly, the transition to a free market economy in Poland changed the economic environment and incentives for childbearing and also diffused Western ideas and values to broad segments of the public. In Spain, a dramatic decline in fertility was associated with the democratic rule that emerged following the dissolution of Franco's regime.

France has demonstrated a long-term concern that declining fertility poses a threat to its economy. As a result, the French have been more open to state intervention in family life than their counterparts in some other European countries, such as Spain. Although we did not identify any studies that focus on the degree to which the general public's acceptance of family policy enhances the effectiveness of that policy, we conjecture that openness to state intervention in family life might improve the effectiveness of policies to affect fertility.

In Sweden, the economic context is an important determinant of fertility. There, levels of (female) earnings are positively related to levels of childbearing. Thus, policies to encourage female labour force participation help to promote economic growth, but they will ultimately

reduce fertility *unless* they are accompanied by family-friendly policies that enable women to combine childbearing and rearing with work.

Population Policies Take Effect Slowly

Government policies that are intended to reverse fertility declines, whether directly or indirectly, tend to have a long-term focus and require many years to implement. For this reason, they tend to lack political appeal as well as political champions. Some population policies may have an immediate impact (for example, abortion policy), but these are exceptions. The final stage in the cycle for population policies to affect fertility takes a generation before they affect the number of new entrants to the labour force.

This has two implications. First, there is a disconnection between electoral cycles (typically 4–5 years) and the longer cycle of population policy. This means that politicians have limited incentive to advocate such policies, especially when political capital could be expended needlessly in entering a contentious policy domain. Second, partly as a result of the latter point, politicians tend to focus on policies that have shorter time horizons. These include, for example, social security reforms that aim to reduce the economic burden that states face with declining contributions to "pay-as-you-go" welfare systems. There is a considerable debate in the literature about the desirability, feasibility, and effectiveness of these policies. Related to this is the need for cost containment of welfare as the population ages, notably through the rationing of health care.

Third, one way to mitigate the adverse consequences of low fertility and population ageing is to increase human capital by encouraging people to work longer. This can mean promoting a longer working life and encouraging new entrants into the workforce, such as women. Related to this is the need to develop "pro-elderly" policies that encourage elderly people to be active and productive members of the workforce.

Finally, employment policies that encourage women to enter the workforce can have a perverse effect on fertility if women choose a career over family. However, Sweden provides a counter to this generalisation: employment policy and family policy have gone hand-in-hand. During the 1970s and 1980s, Sweden created the conditions in which the adverse effects of family formation from labour participation were minimised and equally shared between both parents. These conditions enabled relatively high fertility and high female labour participation to coincide, which was unique in Europe. However, from the Sweden case study it appears that this equilibrium may be unstable, since it seems to depend on a thriving economic environment.

Areas for Further Research

The study identified several areas where gaps in knowledge exist and where improved understanding could provide a sounder basis for policy decisions. To address these gaps, the study proposes a short research agenda.

- Examine the relationship between open immigration and high economic growth in the US and closed immigration policy and relatively lower economic growth in Europe.
- Identify natural experiments that can shed light on the impact of particular policy changes and collect data to enable "before/after" comparisons.
- Study the role of contextual factors in demographic change. It is important to understand the magnitude of the effects of different population policy interventions in different contexts, and at a regional as well as country level.
- Review the existence and quality of data for studying the relationship between demographic change and policy, and provide a standard taxonomy for direct and indirect policies.

- Assess the sustainability of efforts to mitigate the adverse socio-economic consequences of population ageing.

Concluding Observation

In conclusion, replacement migration and policies to increase fertility are unlikely to stop the ageing of Europe's population, although they may slow it down. Thus, it is important for the European Commission, Member States and Applicant Countries to consider other ways to pursue the Social Agenda of full employment, economic growth, and social cohesion.

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CHAPTER ONE

The European Demographic Context – Study Goals and Methods

The Setting

The differential pace of economic growth between Nordic and Southern Member States, and between European Union (EU) Member States and Applicant Countries[1] – all in the context of very different cultural and policy heritages – has led to challenges in social cohesion and related outcomes that matter to Europeans. European integration is bringing attendant regional difficulties to the fore, beside longstanding internal challenges in many Member States and Applicant Countries. A manifestation of this is the European Social Agenda, which provides the political basis for a comprehensive strategy of mutually reinforcing economic, employment, and social policies (European Commission, 2000b).

At the centre of the Social Agenda is the demographic and household structure of the European population, its nation states and regions. This centre is dynamic, as are its implications. For example, Europe's ageing population, which is itself a consequence of low fertility and increased life expectancy, is likely to force governments to rebalance social insurance systems. Similarly, declining household size and less stable unions are shrinking the caring capabilities of families.

While these policy challenges are common to all Member States, there is considerable regional disparity. For example, social protection systems and payments – a key policy for strengthening social cohesion – vary considerably in the EU. Taking account of differences in price levels between countries – that is, measuring spending in terms of purchasing power standards (PPS) – expenditure varied from 8,600 PPS per head in Luxembourg and 7,100 PPS in Denmark, to 3,100 PPS per head in Greece and Portugal. The EU average was approximately 5,500 PPS per head (Eurostat/European Commission, 2002). Such differences among countries reflect differences in their demographic structures; in other social, institutional, and economic factors; and ultimately in their social protection systems. Similar variations in social policy and social policy outcomes are apparent in educational access and attainment, employment, health, and other domains. Enlargement of the EU by the accession of Applicant Countries will only increase the extent of regional variation.

Broadly considered, in the face of the changing demographic and household structure of European populations, the EU, Member States and Applicant Countries have three policy options.

1. To encourage marriage/cohabitation and childbearing through government action to alter the costs or benefits to couples as they decide on forming stable unions and having

[1] Applicant Countries have applied to become Members of the European Union. During the course of this study 10 Applicant Countries joined the Union in May 2004. This included one of our case study countries., Poland.

children. Over time, any resulting additional births will change the population's age structure, thereby ameliorating those challenges to the Social Agenda that result from fewer children, fewer workers, and many pensioners (Pinnelli, 1995). Of course, over time additional births will become additional workers, but only beginning some two decades hence. Such pronatalist policies – including tax benefits, bonus payments, employment provisions, childcare subsidies, and various public service offerings – are being pursued or seriously discussed in many countries, including some in the EU such as France. Other countries, such as Sweden, have long maintained a policy environment of tax, employment, and benefit programs that is friendly to childrearing, although it is in place for other reasons.

2. To encourage immigration of prime-age workers into countries that are short of such workers. Of course, every European knows by now that such migration can be substantial, even without explicit policy encouragement. We also know that frequently such workers bring their families along and continue to build them after arrival. An economically more viable age structure of the population is far from the only effect of such migration. Nevertheless, governments have policy tools – controversial as they can be to employ – to influence the number and characteristics of immigrants, where they settle, and how long they stay.
3. To reform social policy more generally, so that social inclusion and cohesion, along with other important aspects of the Social Agenda, can be attained over the medium term, even while accepting current and future demographic trends as they arrive. Following this approach, for example, a country might raise the statutory retirement age or encourage more women to work in order to increase labour force participation and employment, thereby contributing to the longer-term stability of pension systems (European Commission, 2000c).

The long-term objective of the Lisbon Summit is to enable "the Union to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion". Attaining this objective requires understanding, both within and across countries, of the relationships among particular social and non-social policies, the intervening demographics, and the social and economic outcomes of interest.

The aim of this study is to advance this understanding; to learn how demographic change constrains and moulds social policy; and how policy can alter, in turn, the course of demographic change, thereby influencing social inclusion and cohesion in the EU.

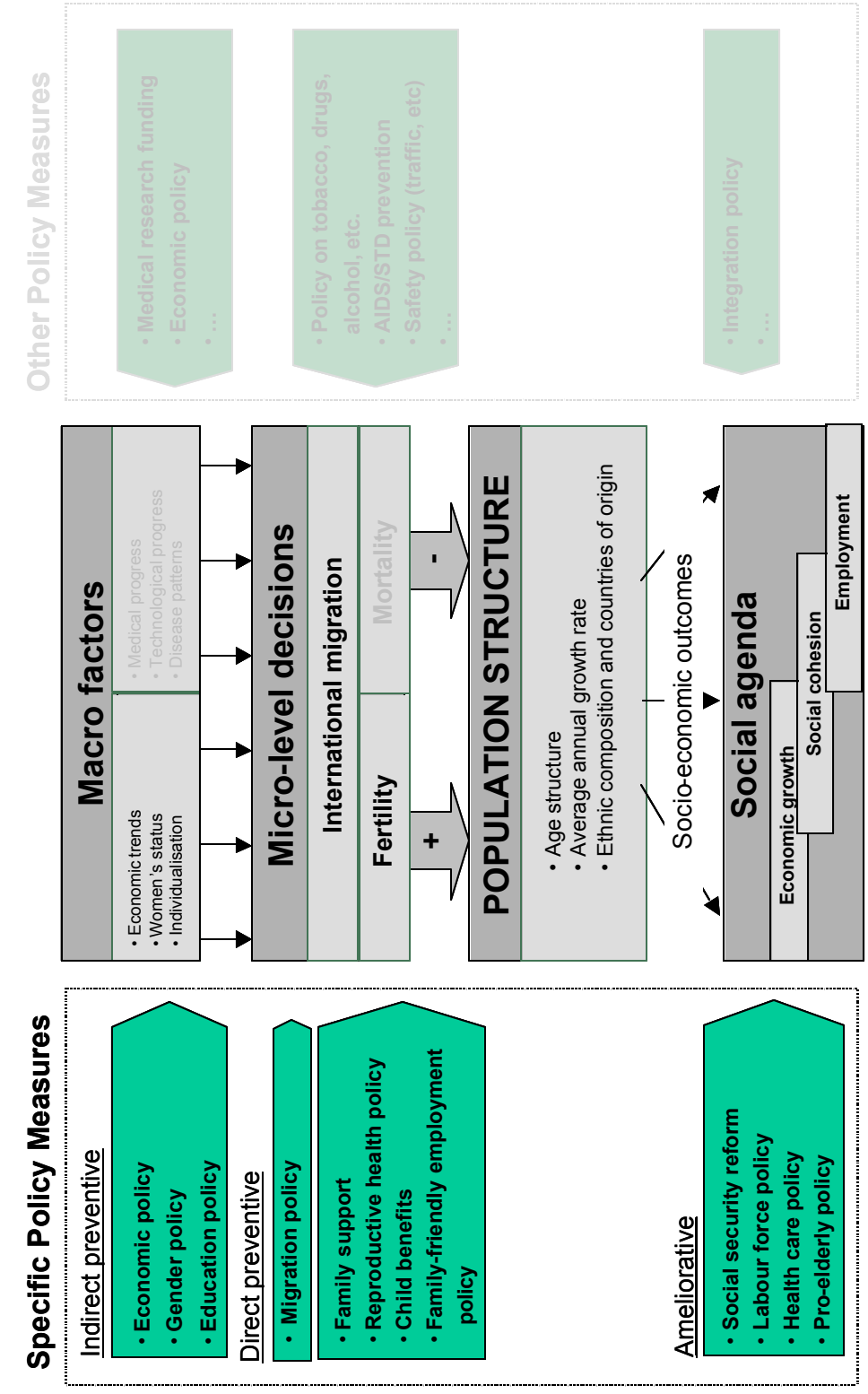
Conceptual Framework

Figure 1.1 presents the conceptual framework that guides our study. The population structure (its age structure and ethnic and religious composition) and its rate of growth are at the centre of the conceptual framework. Leading to this box are the demographic processes that either increase or decrease the size of the overall population and affect its composition. Fertility clearly increases the population, while mortality has the opposite effect. Immigration will lead to an increase in population, while emigration has the opposite effect. All of these demographic processes also affect the composition of the population.

Changes in population structure are, in essence, a result of the decisions made at the micro or individual/family level. Those choices, as shown, typically relate to location, family size, and structure. In this case, the two most relevant aspects are international migration and fertility. International migration changes the population structure of both the receiving and the sending

countries and may have an economic impact on both. Immigration may also affect a country's fertility rate if immigrants have different fertility rates from natives.

Figure 1.1: Conceptual Framework



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The main influence on natural population growth (the difference between births and deaths) is the choice of individuals regarding whether to have children, and how many. Such decisions are affected by factors such as the household's financial situation and the costs of childrearing. Decisions regarding marriage, divorce, cohabitation, and the woman's level of involvement within the workforce are generally the driving forces. However, such decisions are complex and can have both negative and positive effects on fertility. On the one hand, if women decide to work, they may have less time to devote to having and rearing children, which then may decrease the overall fertility rate of a country. On the other hand, they may have more income to contribute to the costs of having and rearing children, which may then increase the overall fertility of a country. For completeness, individual decisions that affect mortality (e.g. smoking, drinking, and safety precautions) are included, but are not of primary interest.

Macro-level variables can influence micro-level decisions. One of these could be the economic situation within a country. For example, when a country has a weak economy, families may be more hesitant to have children. Other examples of macro-factors could include norms regarding female emancipation and individualisation, both of which can have a direct impact on micro-level decisions. Macro-level trends, such as medical and technological progress and disease patterns, can also affect mortality.

Of primary interest here are the socio-economic consequences of little or no (or negative) population growth and population ageing. Lack of population growth is not a problem in and of itself, but its impact on the affordability of the social security system is. Our conceptual framework uses the Social Agenda, as formulated by the European Commission (2000a), to assess those consequences. The Social Agenda consists of three components: economic growth, employment, and social cohesion. While measurement of the first two is fairly straightforward (e.g. the growth rate of gross national product (GNP) or GNP per capita; the size of the labour force; the labour force participation rate, or unemployment rate), social cohesion can be viewed from a variety of perspectives including the economic, political, and cultural. However, most social cohesion indicators used within the EU centre on the economic well-being of its citizenry (e.g. a universal system of social protection). Population changes can affect all three of these components. Identifying the various pathways that lead to those changes can help national and European governments to prevent or mitigate these consequences.

It may be possible to counter the negative outcomes of population change through the implementation of specific policies. These policies could be preventive (i.e. designed to reduce the incidence of demographic behaviours that are deemed to have undesirable effects) or ameliorative (i.e. designed to ameliorate the effects of demographic changes). Preventive policy measures can be divided into two types: direct and indirect. Direct preventive policies are created with the intent to influence micro-level decisions. For example, migration policy can be written in such a way that it either encourages people to move to, or discourages them from moving from, a given country. Specific policy measures also exist that have a direct impact on families' decisions about whether to have children, such as family benefits, reproductive health policy, or policies that encourage women to combine maternity and participation in the labour force. Indirect preventive policies do not influence micro-level decisions directly but instead affect arenas, often at the macro level, that may in turn affect demographic decisions. Some key examples of indirect preventive policy measures are those related to gender, education, and economics. By actively promoting the position of women within society, a government could provide women indirectly with more influence in the decisions about family formation.

The final policy category, ameliorative policy, attempts to mitigate the social and economic consequences that result from demographic change. Examples include the provision of pensions to the retired segment of the population and policies that attempt to increase the labour force

Box 1.1
Study Questions

- To what degree and in what way are micro-level decisions, with respect to marriage and cohabitation, family formation, migration, and labour force participation, influenced by social and economic developments on a macro level?
- What are the effects of the choices made by individuals and households on the size and age structure of the population?
- Which policy options are likely to be effective to change the population structure and to mitigate the negative socio-economic consequences of a changing population?

participation rate. Health care policy is another example – one that will become increasingly important as the ageing population places more pressure on this area.

Most policies are designed with a specific outcome in mind, but they may affect other outcomes as well, sometimes in unexpected or unintentional ways. For example, proactive propaganda in favour of condom use to prevent sexually transmitted diseases may reduce birth rates, while a policy to support the children of single mothers may (unintentionally) lead such mothers to bear more children or encourage women to become single mothers.

Figure 1.1 abstracts from various feedbacks and secondary effects, from conditioning factors that may influence the principal pathways, and from the biological, behavioural, and policy time lags that condition the various responses. Furthermore, each policy area represents a wide range of particular policies extant or possible in the EU and Applicant Countries. The purpose of the framework is to emphasise, but not to limit, the specific outcomes, policies, and relationships on which our data gathering, harmonisation, and analysis will focus.

Objectives of the Study

As illustrated in Box 1.1, the framework clarifies and focuses the original objectives by highlighting the interrelations that are found among its many pieces. A key first step is to understand the relationships between macro factors and micro-level decisions, which are a crucial building block for any policy analysis in this area. The next step is to identify the consequences of the micro-level decisions, which in turn leads one to assess how the resulting demographic changes affect the social agenda of particular policymakers. Once it is clear how the various building blocks fit together, effective policy options for desired outcomes could be provided. In sum, the conceptual framework demonstrates visually that it is important to identify the policy options and assess their impact on the population structure, as well as the social and economic outcomes.

Method

To meet the study aim and objectives, we have:

- reviewed theoretical and empirical studies of the phenomena of interest;
- assembled and reviewed quantitative data that show trends in relevant demographic and socio-economic indicators in all Member States and Applicant Countries; and

- conducted case studies for five countries (France, Germany, Poland, Spain, and Sweden) that describe relevant policies and their effects.

Literature Review

Our literature review has been guided by the conceptual framework and has contributed to the selection of countries for the case studies. The focus of the literature review was geared towards developed countries, as that is the political categorisation for all EU Member States and Applicant Countries. The literature review, which is presented in Chapter 2 below, is structured around the conceptual framework (Figure 1.1).

Data Review

Our data analyses have been conducted using the Eurostat NewCronos database (2002), *Theme 3: Population and Social Conditions*. We have focused on the data related to population and social conditions. Within the population and social conditions dataset there are 20 domains: the most important for the purposes of this project were those related to demographics, education, employment, income, and living conditions. This dataset includes data collected as early as 1960, and as recently as 2002. The Eurostat NewCronos database (2002) contains over 44 million statistical data points documenting key indicators for every European Member State and, in many cases, Applicant Countries.

Case Studies

We selected five countries to be the subjects of case studies (France, Germany, Poland, Spain, and Sweden) and using these countries, we developed and attempted to answer five specific research questions, one for each country.

1. Can the relatively high fertility rate in France in the period 1975–now be explained by French family policy, and if not, which factors might contribute to it?
2. Can the divergent trends of fertility levels between the GDR and the Federal Republic of Germany (FRG) be explained by the different family policies in those two countries?
3. How have changes in family and social policy related to changes in fertility during the last 50 years in Poland? In particular, given Poland's relatively recent transition to a free market economy, what policies and other factors may have contributed to its dramatic drop in fertility during the 1990s?
4. Can the relatively low fertility rate in Spain in the period 1975–now be explained by the lack of family policy, and if not, which other factors might contribute to it?
5. Is it possible to explain the rollercoaster nature of fertility in Sweden since the 1970s by specific policy measures and/or contextual factors?

By evaluating these five questions we are able to address the study objectives that are set out in Box 1.1.

Organisation of Report

The report is organised into five chapters. This chapter introduces the study aims and methods. Most importantly, as noted above, it also introduces the conceptual framework (Figure 1.1) that provides a "road map" for the report. Chapter 2 reviews the literature around the conceptual framework and is organised into two sections. The first section assesses past studies associated with the four central boxes of the framework. That is, it examines the processes that either

increase or decrease the size of the population, thereby affecting its structure and subsequent impacts on the Social Agenda. The second section in Chapter 2 reviews the evidence associated with the left-hand panel of Figure 1.1, that is, the list of specific policy measures.

Chapter 3 then reviews the empirical evidence associated with the conceptual framework using the Eurostat NewCronos database (2002). Chapter 4 reports on our case studies. An introductory section explains how the five countries were selected, and is followed by the case studies, with a concluding section providing synthesis and cross-case analysis. The final chapter summarises our findings in light of the study objectives, assessing policy implications and future research needs.

CHAPTER TWO

What the Literature Shows – Relationships in the Conceptual Model and the Effects of Policies

This chapter reports on the main findings of our literature review. It is structured around the conceptual framework and is organised into two sections. The first section assesses past studies that are associated with the four central boxes of the framework. That is, it examines the demographic and socio-economic processes that either increase or decrease the size of the population, thereby affecting its structure and subsequent impacts on the Social Agenda. The second section reviews the evidence associated with the left-hand panel of Figure 1.1, that is, the list of specific policy measures and their effects.

Influences on Fertility and Family Formation and on International Migration

Influences on Fertility and Family Formation

Judging from the millennia's long history of census taking,[2] 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 and variations in fertility, the component that had been the most important driver of overall population change, apart from mortality in plagues and wars.

The average family size in much of Europe and North America had already begun a long secular decline, in spite of generally falling mortality rates. Declining fertility was making the difference. By the 1930s, and in the depths of a world depression, both policymakers and researchers were expressing alarm over the long-term prospects of a world in which childbearing was an increasingly rare event. Some demographers (Spengler, 1938) charted future rates and speculated about causes, while economists (Hansen, 1941; Keynes, 1936) analysed the features of "secular stagnation", in which ever-smaller populations would fail to sustain the aggregate demand necessary to induce investment and maintain economic growth. With the post-Second World War baby boom, these fears of population decline disappeared, only to re-emerge recently in Europe. Teitelbaum and Winter (1985) provide an excellent description and analysis of population declines, reactions to them, and research into their causes and consequences.

Between these two eras of declining and then rising fertility in the industrialised world, Frank Notestein (1945) and Kingsley Davis (1945) developed a "theory of the demographic transition",

[2] See, for example, the accounts in the Biblical books of Exodus and Mark.

which was based on the widespread observation that each of these countries had passed through three historical stages. In the first stage, both birth and death rates were high, with the resulting population size holding fairly steady. In the second stage, mortality fell, causing population size to increase. In the third stage, fertility also declined, creating a post-transition regime of steady or slowly changing population size.

This empirical generalisation of the "demographic transition" was no sooner formulated than a new and alarming phenomenon captured the world's attention – rapid population growth in the non-industrialised countries. Mortality, which in some of these areas had begun to fall in the 1930s and before, was clearly diminishing as a check on population growth. Demographic transition theory provided an historical context for this post-war development and, more importantly, an expectation that fertility declines would follow. As they did not follow over a period of 20–30 years, demographers, economists, and then psychologists increasingly turned their tools towards understanding the determinants of fertility – marriage, fecundity (the physical ability to reproduce), couples' desire or demand for children, contraceptive knowledge and practice, the costs of childrearing, and the benefits that parents derive from having children.

Demographic transition theory has not proven helpful. Although demographers have speculated about the causes of the initial mortality decline in now-industrialised countries (and particularly the subsequent fertility decline), little by way of a predictive theory has emerged. Although accurate as an historical generalization, little practical policy guidance has emerged, either for the high-fertility or low fertility countries in Europe. In the meantime, fertility in the former countries (apart from much of Africa) has declined steadily, beginning as early as the mid-1960s, and fertility in much of Europe has fallen below replacement levels, where it remains. Hardly anyone expected this latter phenomenon. Indeed, a common presumption among demographers was that fertility would approach the replacement level of 2.1 births per woman and then stay firm. As Demeny (1997) has explained, it is impossible to say in retrospect why fertility consistent with this (or any) aggregated target would be particularly attractive to individual women or couples.

During the 1960s, two new theoretical approaches to marriage and fertility emerged, both at least partially in response to widespread observations 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 negative association between income and fertility puzzled 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.

Both Easterlin and Becker, along with many others, have extended their theoretical models and tested them against data in many settings. While continuing to provide insight, neither approach has avoided refutation entirely. Perhaps because the Becker approach has proven much richer in testable predictions and actionable policy implications, its scientific literature has grown much more rapidly over the last 40 years.[3] For the same two reasons, our literature review on fertility and marriage now concentrates on the findings that have emerged from econometric investigations of Becker-type models. The relationships that regularly emerge in these investigations constitute some of the most important potential causal linkages in Figure 1.1. It is partially through these linkages, within the middle core of the figure, that the direct and indirect preventive policy measures at the left of the figure might have their impacts.

In the context of Europe – that is, 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.

Across hundreds of studies with data from dozens of countries, the predictions of the Becker model are generally upheld. Of most relevance here, couples in settings with lower costs of children (including the factors that influence the cost of the mother's time spent with children) do tend to be couples with larger families. Such couples include those with wives who cannot earn as much in the labour market, those in work settings that are compatible with childcare, those with readily available high-quality day care, and those with wives having more education (holding constant their work opportunities).

The Becker framework, however, also allows for positive "income" effects on fertility from women's labour-force participation. Evidence of such positive effects have been seen recently in

[3] The same two comparisons with fertility models from psychology and sociology would strongly favour the Becker approach.

analyses of an emerging positive relationship between women's labour-force participation and fertility in some developed countries (Ahn and Misra 2002; Adsera, 2004 forthcoming).

In nearly all societies (with the exception of the Nordic countries), childbearing occurs predominantly within marriage, a relationship characterised by a legally binding contract. In the Becker framework, the desire to be married is partly derived from the desire to have children. Hence, people who are more likely to be married tend to be those who want more children. Therefore, the incidence of marriage should respond to the same causal factors, among others, that lie behind fertility. In fact, the weight of empirical evidence across many settings confirms these relationships as well.[4]

For at least 40 years, the nature of the marriage contract has been changing, both legally and socially, in industrialised countries. Accordingly, the incidences of marriage and of alternative arrangements have changed. Most significantly, declining marriage rates have occurred simultaneously with increasing cohabitation rates, both as a precursor to, and a substitute for, marriage. Kiernan (2002) has documented large variation in cohabitation among European countries. In the Nordic countries and France, women aged 25–29 are evenly split between cohabitation, marriage, and single status. However, in Italy, Spain and Portugal, more than 60, 50, and 30 percent respectively of such young women are neither cohabiting nor married.

Dissolution of marriage through divorce has been increasing in many industrialised countries for at least a century and is now at historically high levels. Cohabitational unions show even higher chances of disruption, and those that become marriages are more likely to end than marriages not preceded by cohabitation (Cherlin, 1992; Waite, 2003). Cohabitational fertility is lower than marital fertility nearly everywhere and begins at the higher ages of women. Hence, the secular substitution of cohabitation for marriage in Europe has reduced fertility through several avenues.

Untangling these complex relationships 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. The Becker framework (Becker, 1991) emphasises the roles of women's increased labour market earnings and of technological advances in the home, as causes of declining marriage incidence and stability. These relationships have been upheld in empirical studies but imply no clearly acceptable policy measures to increase stable marriages.

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.

A great deal of methodological attention has focused on this challenge in the last 30 years. Progress has occurred on four broad fronts. The first has been the design of quasi-controlled social experiments, sometimes with randomised assignment of persons into treatment and control groups. The second has been the collection of longitudinal survey data that document the behaviour of the same survey participants before and after changes in their environment. The

[4] 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).

third has been the collection and integration of data on institutions outside the household that may induce household participation or alter members' behaviour. The fourth has been use (sometimes in conjunction with the first three) of econometric methods that can account partially for joint or backward causation (as in the job compatibility example in the previous paragraph) and for unobserved factors (such as talents or preferences) that give rise to data correlations without causal relationships. Along all four methodological fronts, the challenge is to find particular empirical proxies for the income and cost concepts in the theory – proxies whose variations in the data are not themselves influenced by those personal characteristics and activities that are the outcomes of interest.

Settings, data, and methodologies vary across the scores of empirical investigations into the determinants of fertility and marriage patterns in Europe and other industrialised countries. The resulting estimates vary accordingly, and not always understandably. Moffitt (1998) emphasises that replication, robustness, and reconciliation studies to resolve the discrepancies have not been conducted frequently.

Nevertheless, the effect of the relevant components of child cost on the fertility of couples in industrialised countries is a finding of sufficient regularity to commend it to the attention of policymakers. The cost components that are relevant will necessarily vary across settings. (Aspects of this variation emerge in Chapter 3 and in the case studies.)

Making use of these linkages along with the policy links discussed in Chapter 3, European governments will encounter either long and uncertain response lags or short-lived (although initially strong) responses. At worst, they may confront the results of a "second demographic transition", described by van de Kaa (1987) in a paraphrase by Haaga (2001: 9):

> A regime characterized by low proportions of adults currently married, unstable unions, high proportions of births outside marriage, and fertility rates will below replacement level. In this post-modern regime, adult men and women work for non-family-based organizations; women spend a portion of their adult lives raising a small number of children, with help from the biological father, the state, and a current male partner; and old people support themselves with pensions from the state and former employers. Adult men have relationships of varying levels of intensity with their own families of origin, the children they have fathered, and their current partners and co-resident small children.

If this syndrome is indeed the regime which Europe tends toward, slowing or reversing particular aspects of it – for example, fertility – will be difficult. This report, in its entirety, assesses the prospects for success.

Influences on Immigration[5]

Decisions regarding whether to leave one's country of residence ("origin" or "sending country") to move to another country ("destination" or "host country") are influenced by factors in both locations. In general, by relocating, international migrants are seeking to improve their well-being. An increase in earnings for a family's main breadwinner is, typically, a key motivation for such moves. People tend to leave origins with poor economic opportunities to move to destinations that offer better ones. Some migrants are highly skilled, whereas others have few skills and fill jobs that natives may not be interested in holding. In deciding whether and where to move, potential migrants consider the expected value of income gains. They consider not only the wages that they might receive but also the likelihood of being employed. As LaLonde and Topel (1997: 805) note, "income uncertainty in the receiving country may deter risk-averse persons

[5] This section draws on the literature reviews by Serow et al. (1990) and LaLonde and Topel (1997).

from migrating, even if expected earnings gains are positive". LaLonde and Topel also conclude that host countries with greater income inequality are more likely to attract highly skilled immigrants than those with less inequality, and that this explains why countries such as Germany and Sweden attract fewer skilled immigrants than the US. In general, international migrants are disproportionally men (because they tend to be the main breadwinners, especially in the cultures of most sending countries) and in the earlier years of working ages (younger people have more years over which to reap the return from an investment in migration and they may also be less risk-averse).

If other family members might move with the main breadwinner, the likely effects of the move on their well-being also affect the migration decision. The current generation of workers may not experience a substantial increase in earnings but may move because of the opportunities that they feel the new location will provide to their children (in terms of better schooling and, as a result, better labour market opportunities when they are adults). In other instances, typically in the earlier phases on migration from a particular origin country, economically-motivated international moves result in family disruption: the person with the best opportunities abroad moves, while other relatives (initially) remain behind in the origin country. Such migrants often send remittances back to the relatives that they have left behind. This means that not all of the immigrant's earnings remain in the destination country, but some are sent back to the origin country. Such remittances are a non-negligible proportion of Gross National Income in some poor origin countries.

Non-economic factors also play a role in decision-making about migration. People feel more comfortable moving to countries where they know the language or there is already a community of countrymen or family members that they can join. This is why particular destination countries tend to draw migrants from particular origin countries – for example, people from Francophone countries in Africa move to France; people from South Asia and Anglophone parts of Africa and the Caribbean move to the UK; Turks (and more recently Poles) move to Germany, etc. People may also move in response to unstable political conditions in their country of origin, and sometimes seek asylum in the host country.

Because border crossings are (in theory, and typically in practice) legally controlled (although sometimes with varying degrees of success), migration decisions are much more directly amenable to policy influences than those regarding fertility. [6] Nearly every country in the world has laws regarding who is allowed to enter, and some regulate exit as well. These laws can be used to determine the types of people who are allowed to leave or enter a country and the duration of time that they are allowed to stay. For example, special visas can be available for students or for people who work in particular industries or have particular skills. Many European countries have given preference to immigrants from their former colonies. The laxity or restrictiveness of who is allowed to enter has varied over time in most countries, often over the business cycle; e.g. typically, immigrants are more welcome in a booming economy when jobs are plentiful, than in recessionary times when there can be a fear that immigrants will take scarce jobs away from natives. Some sending countries regulate the activities of recruiters, and from time-to-time they have offered incentives for migrants to return home.

Some countries have family reunification policies that allow other family members, who probably would not move on their own for economic reasons, to join a relative who has already moved for economic reasons. Some countries have had "guest worker" programmes that limit the amount of time that an immigrant can stay in a country. (If effective, such policies would enable a country to benefit from immigrants' labour, but to send them back "home" before they reach less

[6] For a review of migration policies and the characteristics of immigrants in a number of countries in Europe (FRG, Ireland, Italy, the Netherlands, and the UK), see Serow et al. (1990).

productive older ages. Some immigrants choose on their own to return to their home countries. The money they have earned in the host country enables them to buy a house or establish a business, and their savings stretch further because of the lower cost of living.) With any programme that limits the duration of stay in a country, there is a risk that people will overstay their visas.

Many immigrants are productive contributors to their destination country's labour force although, as noted above, some of their earnings may leave the country and be sent back home. Countries differ in the extent to which they are able to tax immigrants' earnings (e.g. the immigrants may participate in the informal economy) and in the extent to which they provide government benefits to immigrants. Typical debates about the merits of immigration concern the issue of whether migrants put stresses on service delivery systems (e.g. for health care or education) and whether they contribute more to public coffers than they draw, and how they affect the labour market and the wages of natives. Migrants can indeed put stresses on health and education service delivery systems, but research suggests that in general, immigrants contribute more to the public coffers in the taxes that they pay than value of the public services that they use (e.g. Serow et al., 1990). Research also generally finds that migrants have a modest effect on the labour market in the receiving country and that they mainly depress the wages of other immigrants rather than those of natives (LaLonde and Topel, 1997). LaLonde and Topel conclude that, "at least in the United States, natives derive modest pecuniary benefits from immigration" (1997: 801). They also note that a substantial portion of the empirical research on the labour market consequences of immigration has been on Australia, Canada, and the US, and that more research is needed on this topic for countries in Europe. They also note that there is considerably less empirical research on the determinants of international migration than on the determinants of internal migration within countries.

Influences of Fertility, Family Formation, and Migration on the Population Structure

The micro-level decisions discussed above – cohabitation, marriage and divorce, childbearing, and immigration and emigration – each affect the size and composition of the population. In turn, these demographic changes may affect employment, economic growth, and other aspects of the Social Agenda.

All of the micro-level decisions just mentioned determine the number and size of households. (For example, for a given total population size, if the average household size is two, there will be twice as many households as there would be if the average household size were four.) These, in turn, affect the demand for housing (and hence the price of housing) as well as other aspects of consumption that may have economies or diseconomies of scale.

Fertility decisions affect the number of new children entering a population. These will become potential new workers 18–25 years later, but they will be non-productive dependents for a number of years before they are ready to enter the labour force. If the number of births exceeds the number of deaths, there will be positive natural population increase.

Immigration also adds people to a population, but these tend to be people of working age (sometimes disproportionately of one gender). Hence, immigration can lower dependency ratios (the ratio of dependents – both young and old – to workers), whereas *ceteris paribus* increasing the population by increasing fertility rates will increase the dependency ratio for a number of years. Immigration can also affect population dynamics in the future if immigrants have different (typically higher) fertility rates than natives. Emigration has the opposite effects as immigration, since it is typically people of working age who leave, hence reducing the number of workers and

increasing the dependency ratio. Immigration and emigration also affect the ethnic composition of the population (an effect that can be magnified in the future if immigrants have higher fertility rates than natives) and will affect the skill mix of the labour force if immigrants and emigrants have a different human capital and skills than (remaining) natives. If there are more immigrants than emigrants, this will, *ceteris paribus*, lead to population growth. In sum, a population will grow if the number of people added through births and immigration exceeds the number that are subtracted through deaths and emigration, and vice versa.

The changes in population age structure discussed above refer to a point in time. Over time, the babies that are born today become the workers of the future, and current workers, including those added though immigration (unless they subsequently leave), become the elderly population of the future. Reductions in mortality and improvements in life expectancy further increase the ageing of the population.

In addition to just the number of people, micro-level decisions about labour force participation and investments in human capital also affect employment and economic productivity. If young people go to school for longer, it will be more years until they enter the labour force but presumably they will be more productive when they do so. If groups that are not fully participating in the labour force (e.g. women and older people) increase their labour force participation rates, the size of the labour force will increase accordingly, even if the overall population does not increase in size.

Influences of the Population Structure on Social Cohesion

When discussing social cohesion, there are several aspects that must be taken into consideration (e.g. political/legal, economic, social, technological, and environmental). As with different levels of policy, there are multiple facets to social cohesion, all of which can be measured at the local, national, and European level. The following indicators and subsequent discussions are concerned primarily with cohesion at the local or national levels and not at the larger European level.[7] Philosophically, social cohesion is the essence of society; thus it cannot be defined simply or quickly. Karl Marx, Émile Durkheim, and Max Weber, among many others, have put forth their theories as to what creates the "perfect" society, free from whatever social ills were most important at the time of their writings (Coser, 1971). However, ultimately there is no right or wrong answer, and societies continue to grow, change, and redefine themselves according to the current demographic and socio-political environment. For this reason, social cohesion is discussed typically as a series of indicators as opposed to a single entity with one definition and measurement of success.

Political or Legal Aspects

The Organisation for Economic Co-operation and Development's (OECD) report, *Society at a Glance* (2002), provides a number of indicators that are more diverse than the economic markers provided by the European Commission. Within the political realm, the OECD is concerned with parliamentary elections measured by voter turnout as a percentage of the voting population in addition to voter turnout for first-time voters (International Institute for Democracy and Electoral Assistance (IDEA), 2002). Direct participatory behaviour is important to assess as an indicator of the level of confidence and trust that the population has in its governments. Satisfaction and belief in one's government are chief elements to political "buy-in" and a sense of ownership relative to one's country.

[7] See Jeannotte (2000), and Jackson et al. (2000) for futhter information regarding social cohesion.

In addition to voter turnout and participation, other important political and legal aspects are the number of clubs or services that are available, as well as the number of active participants (i.e. religious services, volunteer activities, political parties and activities, philanthropist activities, professional organisation). Literacy levels are probably among the most vital indicators, as being without basic reading and writing skills is highly exclusionary from social participation.
Measuring the level of political and legal involvement within a community provides insight into the level of voter complacency. Involvement in the political system is essential to the building, creation, and maintenance of a society. In a politically active community the power resides with the citizenry. Furthermore, the active participation of the population in politics helps to create an appropriate social agenda and provides policymakers with suitable information in order to make stronger communities and nation states.

Economic Aspects

The relationship between economic policy and population change has been widely debated and commented on in the literature. A recent study assessing how population growth affects economic development has reviewed this literature, and identified three schools of thought (Bloom et al., 2003). The "pessimists'" view is that population growth restricts economic development, because the demand of people outstrips the supply of fixed resources. The lineage of this theory can be traced back to Malthus (1798), but it has been advocated periodically throughout the centuries, most notably in Ehrlich's seminal *The Population Bomb* (1968). By the early 1980s, economists had begun to reject the pessimists' school, arguing that the prices of many of fixed resources decline in the long-term due to technological innovation. In other words, as populations increase, so does human ingenuity (Bloom et al., 2003). This group of "population optimists" was led by Julian Simon in his book *The Ultimate Resource* (1981), who showed that rapid population growth can lead rapidly to positive impacts on economic development (as cited by Bloom et al., 2003). However, subsequent economic analysis has concluded that the statistical correlation between population and economic growth is weak and has led to the "neutralist" school that accords population issues a relatively minor place in the role of the wider environment. As Bloom et al. (2003: 20) concluded: "Proponents of population pessimism, optimism, and neutralism can all fall back on theoretical models and more or less robust data to support their positions."
A unanimous view is that economics plays a crucial role in social cohesion. If people do not have access to the necessities of life (e.g. food and shelter), then it is unlikely that they will be able to contribute to the growth of a healthy society. Many of the economic indicators used by the European Commission are concerned with poverty levels and unemployment. However, within increasingly diverse societies the importance of economics goes beyond poverty-stricken families and financially secure individuals. Unfortunately, in many countries, those most at risk of poverty are marginalised groups, including women and minorities. Within the EU it is important to ensure that particular attention is paid to these two high-risk groups. Economic strife and conflict between the larger society and minority groups are often reflected in public demonstrations and can evolve into racial fissures, resulting in costly riots (Bonneuil and Auriat, 2000). Considering the importance of the role that women play in bearing and raising children, their financial well-being and ability to balance work and family life should be paramount. This has been recognised by the EU in their directives to the Member States on how to facilitate balance in work and family life.[8]

[8] Council Directive of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding (92/85/EEC); Council Directive of 3 June 1996 on the framework agreement on parental leave (96/34/EEC).

Economics is one area of social cohesion that can be easily affected by other areas such as technology. The EU and Council of Europe have identified the importance of this relationship as it relates specifically to the digital divide. It is clear that in order to be competitive in today's market, one must have a basic understanding of, and willingness to use, computers. Europe has identified this need; in light of its ageing population and potentially limited pool of young workers, the European Commission has dedicated resources to limiting the digital divide and considers it a central component to social cohesion (European Commission, 2000c).

Social Aspects

The "social" aspect of social cohesion is the most diverse and is composed of many aspects that are not encompassed within the other categories (e.g. geographic mobility, health care, education, and crime). Each of the elements within this category is either directly or indirectly connected to all other aspects of social cohesion. Geographic mobility could become increasingly important within the EU as larger numbers of people move to other Member States. Considering the history of Europe, this element may become important as ties between families and communities change with an increasingly transient population. Access to sufficient health care, educational opportunities, and freedom from crime are fundamental for societal participation, health, and feelings of safety and security.[9] In line with these elements, the protection of human rights is imperative as this provides the foundation upon which all of the other elements are built. Without any one of these elements, an individual or group of individuals runs the risk of becoming socially excluded.

Environmental Aspects

The final aspect to social cohesion is environmental: this includes everything that makes a place habitable, such as water quality, pollution levels, traffic, and basic infrastructure. All of these elements are central issues for quality of life; if people lack sufficient infrastructure, daily life becomes more difficult and less time is spent on building community ties.

Social cohesion is not simply economics, freedom from political strife, or proper infrastructure. Social cohesion is composed of many elements that interface on many different levels. The strength of a society is often measured by the same elements that are used to measure social cohesion. For this reason, no social agenda should be created or policy suggestion made without first considering the ramifications that this has on the cohesiveness of a given society. The importance of social cohesion has not been lost on any of three large political bodies in Europe. Jeannotte (2000: 2) put it aptly:

> [T]he ambiguity of the concept of social cohesion has opened up space for a host of actions by the EU, OECD and the Council of Europe which speaks as loudly or louder about their levels of concern than their conceptual vagueness on the subject.

Specific Policy Measures

Terminology

In the literature, various terms are used to describe governments' attempts to influence demographic developments such as population ageing. Most commonly, these government

[9] The UN provides a global victimisation survey (available online) that is used by the OECD in their *Society at a Glance* write-up. International Crime Victims Surveys, March 2002. See http://www.unicri.it/icvs/publications/pdf_files/key2000i/app4.pdf.

interventions are referred to as "population policy". Such policy can include measures that are designed to have an impact on the population structure, of which birth rate or fertility rate is the most prominent indicator. However, Livi-Bacci (1974: 192) uses a broader definition that does not focus on indicators, such as fertility or birth rates, but rather on the micro-level context in which population alterations take place. He defines population policy as

> legislation, and measures of economic and social policy [that] influence the behaviour of the individual and contribute to modify the environment, considered in the broad sense of the word, in which decisions are formed and taken: among them the decision to marry, to have children, or to migrate either within or abroad.

Although the term "population policy" would suggest that it is directed towards the population as a whole, this definition implies that population policy intervenes with the micro-level unit of the individual or family.

Many authors use a definition comparable to that of Livi-Bacci, but the term they employ is "family policy". Such interventions refer to governmental goals that are concerned with family well-being and resultant activities that are directed towards families with children (Aldous and Dumon, 1980).

Although the policy objective of both terms seem to differ considerably – family on the one hand and population on the other – the actual definitions of family policy and population policy do not make clear distinctions. Often written in ambiguous language and intended to affect society as a whole, population policies regarding fertility still depend on micro-level changes in a couple's perceptions of the costs and benefits of having children (David, 1992). Defining family policy or population policy also depends on the cultural background of the geographic region where a government attempts to regulate demographic developments. In Germany, for example, the term "population policy" is nearly extinct, due the negative connotation of Hitler's intention to affect the "reproductive" behaviour of citizens during the fascist era (Höhn and Schwarz, 1993; McIntosh, 1983).

From an ideological viewpoint, there is a debate as to whether a government should intervene at all in decisions taken by the family. As a result it is sometimes difficult to determine whether the primary objective of a policy is to encourage families to have more children. Kamerman and Kahn (1978) note that family policy can be either *explicit* or *implicit* or not exist at all. The distinction between explicit and implicit family policies depends on the perspective of an objective observer. The problem here lies in the addition of "the perspective of an objective observer". There is no explicit family policy that embodies an overall value rationale or codifies all the governmental measures affecting families' decisions and population structure (Buric, 1978 and de Bie, 1979, as cited by Kaufmann, 2002). Especially in Western Europe, governmental efforts to affect fertility have been generally implicit policy measures to steer family formation decisions with financial incentives (e.g. tax exemptions), or family-friendly facilities (e.g. childcare facilities). Therefore, family policy in Western Europe has been based on implicit assumptions and highly pragmatic instruments. Explicit population policy in classical demographic literature is often referred to as *pronatalist policy*; it entails a publicly supported effort to increase the fertility rate. The term pronatalist policy is often used in association with the strict procreative policy in the former socialist regimes of Eastern European countries, but policies intended to boost fertility (or at least to prevent it from falling) have been pursued in other parts of Europe, such as France.

Our framework recognises that governments' efforts to deal with low rates of population growth and population ageing take one of two forms:

1. preventive policies that attempt to affect the demographic behaviours that are believed to lead to adverse outcomes; or

Box 2.1
Policy Taxonomy

- Indirect Preventive
  - Economic policy
  - Gender policy
  - Education policy
- Direct Preventive
  - Migration policy
  - Family support
  - Reproductive health policy
  - Family-friendly employment policies
- Ameliorative
  - Social security reform
  - Labour force policy
  - Health care policy
  - Pro-elderly policy

2. ameliorative ones that attempt to affect the outcomes of interest directly.

As noted in Chapter 1, preventive measures intervene *indirectly* at the macro-level (emancipation, economy, individualisation) or *directly* in fertility, mortality, and migration decisions taken at the micro-level; whereas ameliorative policy aims to mitigate the consequences of population change on the Social Agenda. In the remainder of this chapter, we review the various preventive and ameliorative policies identified in the conceptual frame and summarised in Box 2.1.

Economic Policy

Through the tools of monetary, fiscal, regulatory, and trade policy, national governments (and increasingly the EU) are able to influence interest rates, capital investment, the price level, and the rate of growth of real output, along with aggregate employment and personal income. However, these economic policy tools cannot be geared precisely to their target economic outcomes, either in magnitude or timing of effects. On the one hand, government actions that are aimed at overall aggregates such as the unemployment rate, inflation rate, and growth of real output, are particularly blunt instruments, for neither economic theory nor practice has managed to keep up with the changing complexities of modern economies and their global linkages. On the other hand, government policies that are aimed at particular markets or behaviours have considerably more predictable effects. Hence, the economic effects of particular changes in the tax code, price ceilings, production subsidies, and other myriad components of a government's economic policy portfolio, can be predicted quite accurately with respect to direction of effects, and often usefully so with respect to timing and magnitude.

Many of these effects of economic policy are of interest here because they form the employment and income context – shown as "economic trends" in Figure 1.1– in which persons make decisions about marriage, divorce, fertility, and migration. Economic policymakers may pay no

mind to these demographic behaviours when setting monetary targets, balancing government spending against tax revenues, or subsidising production in a particular industry. Regardless of these policymakers' attention, the context in which persons make decisions that add up to the aggregate demographic rates may be affected.

The linkages between economic factors such as family income and female wages, on the one hand, and demographic outcomes such as fertility and migration, on the other hand, are summarised above. As we have seen, these linkages operate with their own lags and uncertainties. In this section we acknowledge a prior set of lags and uncertainties: those between the intent of government economic policy, on the one hand, and family income and female wages, on the other. For example, a government that sets about to increase birth rates by improving the economic circumstances of young adults, should anticipate both sets of lags and uncertainties, one following and compounding the other.

We emphasise that economic policymakers are not empty-handed in this circumstance. On the contrary, they have tools that work. Instead, we caution that consistency and persistence in policy are essential, and that the predicted effects may emerge slowly and unevenly. We also caution that economic policies that affect persons' incentives to work, marry, raise children, or migrate will do so regardless of policymakers' intent. Therefore, a government concerned with altering aggregate demographic rates must attend to the consequences of all policies that affect the environment in which individuals and couples make these decisions. Some policies which are desirable on other grounds may require alteration or abandonment if their unfavourable demographic consequences are judged to be sufficiently harmful.

Gender Policy

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, 1990; Popenoe, 1993 as cited by Kunzler, 2002: 253). Within this reasoning, female emancipation is one of the causes of declining fertility and, as a result, policy measures could be targeted at promoting a more traditional breadwinners' model, in which women are discouraged from participating in the labour force.

However, this type of thinking has not been embraced by European countries, all of which have legislated equal opportunity policies. In most countries, societal modernisation of gender relations is relatively advanced (Kunzler, 2002), and the emancipation of women that has occurred would suggest a change in the normative and behaviour structure that underlies fertility and childrearing decisions (Rindfuss and Brewster, 1996: 457). But, as McDonald (2000: 427) argues the "very low fertility in advance countries today is the outcome of a conflict or inconsistency between high levels of gender equity in individual-oriented social institutions and sustained gender inequity in family-oriented institutions". Thus, a recent study (Cuijvers and Kalle, 2002) concluded that, in micro-level family situations, men are generally the dominant force in blocking the decision to have children. As Cuijvers puts it: "Men follow, support, give way, apply the brake and sometimes block" (Cuijvers and Kalle, 2002: 24). Men seldom lead in discussions on family formation, but they do apply braking and sometimes blocking strategies in "negotiations". Therefore, creating a stronger position for women in the family might equalise the unbalanced male and female weighting in the family formation process. This argument is further supported by Windebank (1996: 147) who undertook a cross-national study of France, Sweden, and UK in order to review the ways in which different welfare regimes may have challenged the dominant "ideology of mothering". He concludes that "social polices which do not address the father's role in providing the flexibility necessary to reconcile child care and parental employment will result in a 'zero sum game' for women as a group vis-à-vis their caring duties".

Table 2.1
Gender Policies in European Countries

	F	G	GR	IRL	IT	ES	SW	UK	EST	HUN	POL
Pension credits for childbearing	+	+	+	+	–	–	+	+	–	+	+
Measures targeting boys and men	+	–	–	–	–	–	+	+	–	–	–
Media campaigns for woman	+	+	–	–	–	–	+	+	–	–	–
Quotas for women in public life	+	+	–	–	–	–	+	+	+/–	–	–
Woman – friendly arrangements	+	+	–	–	+	–	–	+	+/–	–	–

SOURCE: Hantrais (2003)

The findings of Kunzler (2002) also 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: 17). For example, and as examined in detail in the Swedish case study (see Chapter 4) the empowerment of women has proven to be an effective strategy against very low birth rates, a phenomenon referred to as the "future feminist paradox" by Chesnais (1996). In Sweden, 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 as well as in the labour market (Jönsson, 2003). Other measures included quotas for women in public life and media campaigns targeting young men and boys. The European Commission-funded Improving Policy Responses and Outcomes to Socio-economic Challenges (IPROSEC) project assessed the existence of gender policy in several European countries (see Table 2.1).

Education Policy

Numerous studies have confirmed a negative correlation between fertility and a women's educational status (e.g. Castro Martin, 1995; Graff, 1979; Haines, 1977, Lindert, 1977 and Weinberger, 1987, cited in Graff, 1979; Mazur, 1973). 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, thereby increasing the opportunity costs of their time spent doing household activities and raising children (Lesthaeghe, 2000: 12). However, and as discussed above, policy to further gender equality through raising female economic autonomy makes it inconceivable that there could be a serious effort to restrict educational and occupational opportunities for women (McIntosh, 1981: 198).

The continued higher education of both men and women is often a substitute for unemployment of young adults and, as discussed below in the section on youth unemployment, Ekert-Jaffé and Solaz (2001) have demonstrated that the first job comes before the first union and thus family formation.

Although a higher education level of women generally leads to postponement of family formation and, consequently, a lower fertility level, other forms of education policy may focus on educating the public about the implications of fertility decline. Since people seem to act in their own interests, even if they are aware of population goals, some authors recommend that governments educate the public about the advantages and disadvantages of population growth (Leeuw, 1987). Such awareness campaigns have been used by Eastern European socialist regimes with the

objective of increasing birth rates. Using the term "value education", Demeny (1986: 347) is pessimistic about the likely effectiveness of such efforts in modern democratic states. He argues that such

> ministerial exhortations, posters of happy three-child families, and medals to heroine mothers are neither well received nor effective in influencing fertility […] since individuals realize their fertility decisions affect their own welfare substantially while exerting only a minuscule influence on aggregate fertility trends.

Thus it is not clear whether public education campaigns are very effective without financial incentives to back them up.

Migration Policy

Throughout history, European countries have depended on immigrants to supply labour in times of economic prosperity (McIntosh, 1986: 326). Nonetheless, except for internal migration within the EU, European governments have tightened controls over immigration generally in recent years, leading to various complex and often uncoordinated systems of incentives and disincentives to influence international flows of population. Today, in Europe, the general objective of migration policy is to restrict the number of new immigrations and the *perceived* "social discohesion" that is thought to come with them; such policies usually have no direct population objectives (Coleman, 1995: 197–8; Höhn, 2000: 6; Livi-Bacci, 1974: 200). The impact of these policies on population dynamics, nonetheless, is relevant and significant (Livi-Bacci, 1974: 200).

A decade ago, Höhn (1993) claimed that immigration is the only practical means of preventing population stagnation in Europe and that uncontrolled immigration and integration of immigrants should be the future policy focus. More recently, a United Nations Population Division report (United Nations, 2000) explored the role that increased immigration could play in bolstering a country's future population size and changing its age distribution. This report initiated a lively discussion on the feasibility of "replacement migration" as a way of offsetting the impact of low fertility rates. One of the main findings was that if retirement ages remain essentially where they are today, increasing the size of the working-age population through international migration is the only short- to medium-term option to reduce declines in the support ratio. However, such a policy would not reverse the process of ageing. The UN Population Division report recognises three aspects of population dynamics to which immigration might contribute: (1) population growth, (2) working-age population growth and (3) changes in the support ratio. For example, for the EU the excess of immigrants over emigrants during the period 1990–1998 was sufficient to prevent a decrease in the size of the overall population. However, to prevent a decrease in the size of the working-age population, the EU would have needed approximately twice the annual number of immigrants of a working age that it actually received over this period. The levels of migration needed to offset population ageing (i.e. maintain potential support ratios) are extremely large, and in all cases they entail vastly more immigration than occurred at any given moment in history (Lesthaeghe et al., 1988; United Nations, 2000).

This last point has been explored by Lesthaeghe et al. (1998), in assessing the extent to which immigration can prevent an overall population decline. In their view the population structure will stabilise during the first half of the 21st century, but only if, year after year, record numbers of immigrants are allowed into the EU. The order of magnitude required is about 400,000 women per year - a figure equivalent to a 20 percent increase in fertility rates. This observation led Lesthaeghe and colleagues to conclude that the ageing of the total population, and decreases in the number of people of working age, cannot be stopped.

As the age structure of immigrants is believed generally to be younger than that of the host population, immigration can make the population younger, thus changing support ratios (as noted above; UNPD, 2000). However, Mitra (1990) and Le Bras (1991) show that the rejuvenating effect of immigration on the host populations had been fairly modest. Regardless of the age composition of immigrants, their age distribution stabilises within a time period not greater than the human lifespan (Mitra, 1990).

Uhlenberg (1992) also questions the effect of immigration upon age distribution. While the immediate effect of increasing the number of young adult immigrants is an addition to the size of the labour force and to the number of births, in the long run the immigrants and their children enter old age (Uhlenberg, 1992). Similarly, Colemann (1995) argues that the cumulative impact of migration on the age structure alone has been limited, since the number of people that are added to the population through immigration is small relative to the number of births. Espenshade (1994) confirms this finding for the US by showing that immigration has relatively little effect on the overall age composition of the population. Other studies for the US from Coale (1986, cited in United Nations, 2000) and Day (1996, cited in United Nations, 2000) also conclude that immigration might not be a realistic solution to demographic ageing.

Adams (1989) and Ulrich (1998) analysed the case of Germany. As with the studies previously described, Ulrich found that even with a relatively high level of immigration, the size of the country's population would begin to decrease in the near future. Therefore, immigration can only slow an inevitable decrease in size of the population of Germany. Adams claims that West Germany's use of guest workers did not supply the needed labour; neither did the permanent settlement of new ethnic minorities with temporarily higher birth rates provide a long-term compensating mechanism for the low German birth rate (Adams, 1989).

The effectiveness of migration as a strategy towards preventing population ageing and a decrease in the size of the population depends on the ability of national governments to implement suitable migration policies (Espenshade, 1994; McDonald and Kippen, 1999; Wattelar and Roumans, 1991). The extent to which immigrants are ready and able to integrate into the receiving population appears to be a crucial factor for the success of immigration strategies. Heer (1986) discusses this issue in terms of the "quality" of the population, a term used in a similar context as social cohesion. He argues that an increased portion of immigrants with low educational attainment would tend to reduce the quality of the population, although he fails to note that such immigration may be desirable in meeting demand for a shortage of unskilled workers.

In order to avoid such a development towards social exclusion, it has been argued that Western Europe would be better served by relatively small contingents of immigrants and a partial recovery of native fertility, than by continued extremely low native fertility that is offset by a very large immigration stream (Lesthaeghe et al., 1988). Meyerson (2001: 407) argues that besides permanent or long-term social and economic consequences, immigration also has an environmental impact and cannot be easily reversed without human rights violations. He argues that, given the complex and far-reaching effects that immigration has on the receiving country, it is almost assuredly not the preferred primary mechanism for addressing projected changes in support ratios. Furthermore, reductions in fertility and population growth rates seem to be global phenomena. Meyerson (2001: 408) regards immigration policy to be counterproductive, sending an ambiguous message to countries that have yet to complete or even begin the demographic transition, although there are number of (poor) countries that still have quite high rates of fertility and population growth and "bulges" of people of working age, or pre-working ages.

Family Support

In the literature a number of different types of family benefits are identified and assessed. The majority are financially based – such as family allowances, child tax benefits, etc. – but others include legislation to ensure maternity, paternity and parental leave and provision of childcare. Given the extensive literature in this area we have organised this section around different types of benefits.

Family Allowances. A system of family allowances originated in the late 19th century in response to proposals to relate worker wages to family responsibilities, and this system now exists in practically every European country. It generally takes the form of a monthly government cash payment to parents, based on the number of children in the family. Currently, 88 countries worldwide provide child or family allowances, which are sometimes integrated with, or replaced by, tax provisions (as discussed below) such as tax credits.[10]

In most countries, family allowances are granted independently of the family's income and aim to prevent deterioration in the family's welfare when an additional child is born (Kamerman and Kahn, 1978, 1988, cited in Pampel, 1993; McIntosh, 1983; Teitelbaum and Winter, 1985). At various times, many European countries not only had such egalitarian objectives but they also instituted such policies for pronatalist purposes. It was thought that by giving a family a monetary bonus for each additional child, couples would be motivated to have more children than they might otherwise have (Livi-Bacci, 1974). According to the economic theory of fertility (Becker, 1991; Cigno, 1994 cited in Gauthier and Hatzius, 1997; Willis, 1973), the demand for children is a function of individual preferences and the cost of children. Therefore, a governmental measure that is aimed at giving parents more income that could help cover the cost of children can be expected to have a positive effect on the number of children (Gauthier and Hatzius, 1997).

When measured as a percentage of gross national product (GNP), the Scandinavian countries – Denmark, Finland, and Sweden – devote over 4 percent to family allowances, while Mediterranean countries devote much less, ranging from 0.2 percent in Greece to 1.1 percent in Portugal. Most other countries devote between 2 and 3 percent of their GNPs (Levy, 1998). In Austria, Bulgaria, France, the former Czechoslovakia, Hungary, and Switzerland, financial allowances focus on birth orders two and three, offering 10–20 percent of an average salary for children of birth order three. In the literature, it is argued that this progressive form of benefit encourages further children (Barta et al., 1984; Ekert-Jaffé, 1986). In this context, it is worth noting that France is the only EU nation that is not providing aid for the first born, while seven countries (including France) provide more aid for families with three or more children (Levy, 1998).

France has perhaps the most generous programme of child allowances in Europe. When they were created in 1932, family allowances were intended for persons earning modest salaries (Doublet, 1948; Levy, 1985). The spread of family allowances was followed by a fertility increase, which was essentially limited to the sections of society that were most affected by the new measures (Festy, 1993). Measures in 1979 and 1980 ensured that a family of three children would receive a monthly income of at least FFr3,500 (i.e. €550).

Although family allowances have played a crucial role in family policy since the beginning of the 20th century, in the last decade they have lost significance compared with other provisions such as maternity leave and childcare (Gauthier, 1996b), as discussed below. As a result, the purchasing power of family allowances has deteriorated regularly, and many family allowances

[10] See http://www.childpolicyintl.org for more detail.

nowadays seem to be more dedicated to poverty alleviation than to compensation of family costs (Chesnais, 1996).[11]

Although Gauthier and Hatzius (1997) claim that few researchers have evaluated the impact of family policies on childbearing, we have identified several studies worth mentioning. For example, Ekert-Jaffé (1986) constructed a weighted index in order to group 28 countries according to their "pronatalism" and analysed the relation between fertility performance and the indices of family policy; they could not observe a direct relationship between total fertility rates and the indices of family allowance, although looking at a simple correlation across countries is a very crude way to attempt to assess the effects of policies. Similarly, Blanchet and Ekert-Jaffé (1994) evaluated the relationship between fertility and family allowances. They demonstrated that there is a moderate but not insignificant impact of family policy upon fertility. Zhang et al. (1994) estimated the fertility equation for Canada as a function of various economic variables, including family allowances. They found that family allowances have a significant positive effect on fertility and go on to predict that if the Canadian government were willing to implement a sevenfold increase in family allowances, from CAN$289 to CAN$1,982 per year (in 1988 prices), fertility rates would increase to replacement level. Although this would require a considerable increase in federal outlays in the family allowance benefit, it would be similar to benefits in certain European countries (e.g. France).

Gauthier and Hatzius (1997) also addressed the question of whether greater governmental support for families has a positive effect on fertility by encouraging parents to have more children. Their empirical analysis was based on the differences and similarities in levels of governmental support for families in 22 industrialised countries for the period 1970–1990. They identified a limited effect, of 0.07 children per woman, for benefits 25 percent higher than average.

The effects of improvements in family allowance in Romania in 1973 were analysed by Legge and Alford (1986), who found a small jump in birth rates at the beginning of 1974. However, they concluded that economic incentives do not have the power to change reproductive behaviour in the face of a forceful and restrictive abortion policy change that prevailed in Romania (discussed below). Nonetheless, the size of the allowance increase was small compared to the amount that other East European nations were already receiving (Legge and Alford, 1986). Schwarz (1992) describes the enactment of family allowance and parental leave measures in 1986 in the former West Germany and assesses the effect of this legislation on fertility rates, which have increased since that time. Unlike the GDR, West German benefits depend on the mother's insurance status. In 1975, West Germany began paying "Kindergeld" to migrants with children in their home countries, but at a lower rate, thereby encouraging migrants to bring their families to Germany. West Germany did receive a number of children, but there was no significant impact on the birth rate (Adams, 1989; Schwarz, 1992)

A few other studies report that family allowances have limited impact on fertility rates, with the magnitude of that impact remaining a contentious issue (Davis et al., 1986 as cited by Whittington et al., 1990). According to Lesthaeghe (2000), sustained policies offering sometimes large income transfers to families with children have not had any substantial effects. If any effects are visible, most authors merely suggest the existence of a temporary timing effect: higher family benefits would encourage early entry into motherhood, but not necessarily a larger family size (e.g. Ermisch, 1988, for UK; Zakharov and Ivanova, 1996, for Russia; and McIntosh, 1986, in reviewing the literature). Additionally, Messu (1994) mentions that a positive correlation between such family policies (in France) and birth is only an indication that this policy may serve as a catalyst in achieving a particular outcome; there was no evidence for a direct causal relation.

[11] See also http://www.childpolicyintl.org.

Nonetheless, others (e.g. Chesnais, 1985) have reported that a correlation between the magnitude of social transfers to the family and fertility levels does exist in several countries and, therefore, family allowance can be effective in raising fertility.

Child and Family Tax Benefits. Tax breaks for children were developed in the post-Second World War years, partially to compensate for the loss of income that was suffered by parents, both in the period around the birth of a child and while the child was heavily dependent on parental care (European Population Conference, 1982 cited in Demeny, 1986; Gauthier and Hatzius, 1997; McIntosh, 1981; Pampel, 1993).

Two types of tax benefits for the family exist: tax allowances (i.e. tax deductions) and tax credits. A tax deduction consists of an amount that is subtracted from the taxable income base before calculating tax liability. In Austria, Greece, and Italy, family-related expenses can be deducted from taxable income. Tax credits are reductions in tax liability after assessing tax obligations. The size of this benefit may be dependent on family size and composition or marital status. The tax credit may be refundable in order to benefit those families whose income is below the level of taxable income. For example in Austria, Belgium, and Greece, single-earner families with children are granted tax credits (see http://www.childpolicyintl.org). The Spain and Greece tax systems use family allocations, and France is unique in organising direct income taxation on the basis of the "family quotient" [12] (Levy, 1998).

Countries outside of Europe have had policies designed to affect fertility directly, or that may affect it indirectly. The US has a personal exemption scheme for dependents, which was not designed specifically to affect fertility decisions, but as a form of tax relief for low-income households and families. Espenshade and Minarik (1987, cited in Whittington, 1992) explore the impact of the exemption on fertility in their examination of the demographic implications of the United States Tax Reform Act of 1986. However, they note that even though the exemption lowers the relative price of a child by 8 percent, the increase in after-tax income created by the exemption will not offset the cost of an additional child, and they dismiss the importance of the price effect of the exemption. These findings are inconsistent with Whittington et al. (1990), who estimated the effect of a personal tax exemption on the aggregate fertility rate in the US. Fertility was modelled as a function of various economic and demographic factors, including the tax value of the personal exemption. The primary result was that the personal exemption has a positive and significant effect on the national birth rate, and this result is robust to a variety of specifications. Whittington further examined the relationship between the dependent exemption feature of US federal income tax (an unambiguous subsidy to dependents) and the fertility behaviour of married couples over the period 1979–1983. The exemption decreases the price of a child to a household, thus suggesting a direct relationship with the timing and/or number of children observed in a family. The results offer evidence that the exemption affects the number of children, and may also affect the timing of their births.

Specific Support for Single-Parent Families. Although the rationale for providing benefits to single-parent families can differ across countries, this can be put down to the mere fact that many of the socio-economic problems that are associated with lone-parent families are related to the loss of economies of scale that characterise a couple (Torremocha, 2002). Governments may

[12] Family quotient: the parameter in the French tax system (income tax) for persons that takes into account family situation and the number of persons considered as fiscally in their charge (spouse, children, , etc.), equal to the ratio of taxable income to the number of taxable persons.
See: http://www1.oecd.org/els/pdfs/socmwpdoca010.pdf

choose to provide social assistance to compensate for these losses of economies of scale or to enable single mothers to combine work and childrearing.

Austria, France, Norway, Portugal, and the UK provide various benefits for single-parent families. These generally take one of two forms:

1. a non-contributory benefit for families where there is no second parent; and
2. a means-tested and more generous alternative to the general social assistance benefit (Barnes et al. 1998).

When governments provide generous lone-parent provisions, this reduces the advantages of being a married rather than a single parent. The UK, for example, is a country well known for its longstanding individualism. Chesnais (1996) argued that "poor parents find living apart preferable to living together, given available benefits to single parents". However, anational government's individualist tendency to benefit single parents is not necessarily reflected in its fertility rates.

In the Netherlands, single parents do not have to be available for work while they have a child under the age of five. Until recently social assistance was provided at the level of 90 per cent of the minimum wage, and was largely financed by central government. It could be paid as a supplement to low earnings for up to two years. Around two-thirds of lone mothers in the Netherlands receive social assistance. In spite of the guaranteed public income of lone parents, the rates of single parenthood are fairly low; only 13 percent of all births are to unmarried mothers (Barnes et al., 1998).

Research on the impact of single-parent benefits on fertility finds inconsistent results. For example, in 1976 the GDR adopted a series of measures that were intended to increase rapidly falling birth rates. These measures included extending maternity leave, one-year parental leave, financial encouragements (birth grants and loans), and a policy of housing construction and refurbishment, some of which were only available to unmarried mothers. According to a policy impact study by Monnier (1990: 139–40), these single-parent measures cancelled out the effects of the other policies. The resulting decline in the popularity of marriage had created conditions that were less favourable for increasing family size. For this reason, the family policies adopted in 1976 had a limited long-term impact on the number of births.

Hantrais (1997: 341–4, 1999: 304) provides an overview of studies that assess the impact of support for lone-parents on decisions on marriage and cohabitation. She mentions the study by Ray et al. (1987) that indicates that single-parent benefits in France appear to dissuade some couples from living together. A study by Fragonard (1987; cited in Hantrais, 1999) claims that single mothers tend to have more children in order to prolong the period of benefit payment and to raise the amount of benefits. However, Chaupain (1996, cited in Hantrais, 1999) provides evidence that the level of lone-parent benefits does not affect the probability of a woman bringing up her children alone. Additionally, the evidence that Ermisch (1991) presents for the UK would appear to refute the claim that benefit systems for single parents are likely to affect family structure by prolonging lone parenthood. By contrast, in a study of Ireland, Flanagan and Richardson (1992, cited in Hantrais, 1999) have shown that the very low levels of lone-parent benefits may actually encourage parents to raise their children as a married couple.

Housing Benefits. Apart from financial incentives to improve the ability of families to cope with the expense of children, families with children may also be materially assisted in other ways. For example, better access to larger and more convenient housing may be provided at reasonable prices (Council of Europe, 1982 cited in Demeny, 1986; Höhn, 1990; McIntosh, 1981, 1986). Many studies have documented an inadequate supply of reasonably priced housing in large urban

centres. In practice, access to this stock is often more available to the middle classes than to families of lesser means.

High house prices are expected to have at least a timing effect on couples' decisions to have children. Ermisch (1988) claims that with higher house prices, women are more likely to postpone starting a family. Additionally, in the case of 20–24-year-old women, these high prices also deter them from having a second child. However, Ermisch found that higher house prices do not affect higher-order births. Assuming that the relationship between cost of housing and fertility holds, governments have an opportunity to influence fertility behaviour through housing policy (Chesnais, 2000). For example, some governments include rental or home ownership costs in budget calculations, which are often targeted at families with children. Possible arrangements include low-cost loans for purchasing or furnishing a home, or provision of subsidies for rental accommodation (McIntosh, 1986). By 1983, 12 percent of the family allowances in France went towards housing benefits, which were introduced in 1948 (Levy, 1985).

Whereas studies of the effect of financial benefits are relatively abundant, very limited research has been conducted on the impact of material benefits to the family on fertility. Few researchers have reported on these interactions, and the results tend to be fairly tentative. Nonetheless, based on elaborated studies on explicit family policies, Höhn (1988) inferred that social policies such as housing infrastructure affect childbearing as much, or more than, other forms of family benefits.

Other Support Mechanisms for the Family. Various other family policy measures have been implemented that may have a direct effect on the family formation process. For example, in Bavaria, the state government has offered low interest loans of up to DM5,000 each to young couples on the occasion of their marriage and at the birth of a first baby. Each loan must be completely repaid within seven years, with the provision that a portion is cancelled for each child born within those seven years (McIntosh, 1981). French family policy further includes a wide array of allocations in diverse fields, including reduced transportation charges (McIntosh, 1981).

As discussed above, financial incentives to promote family formation or cohabitation have been widely used in Europe. However, since marriage rates are positively correlated with fertility and divorce rates negatively correlated, some governments have also opted for unambiguous legal procedures to promote marriage or discourage divorce. In Romania, several measures were adopted in 1966 in order to raise fertility, including severe restriction of divorce (Höhn, 1988). Other European countries with a Catholic state philosophy, such as Ireland, Italy, and Spain, also prohibited divorce at different stages in their history.

The effectiveness of legislation for influencing the number of marriages has been analysed for Western Europe by Festy (1993). He found that variations in the number of divorces before and after the reforms were not correlated with the extent of the legal modification (Festy, 1993). The Council of Europe did report a sudden increase in the number of divorces in Belgium after the legalisation of divorce in 1995. However, the increased rates did not persist in subsequent years (Hantrais, 1999).

Reproductive Health Policy

Reproductive health policy often focuses on the prevention of unwanted births, whether through abortion, contraception, or sterilisation. Most of the literature for Europe focuses on the use of abortion policy in the former communist countries of Eastern Europe. Historically, in Western Europe, legislation concerning abortion has been a delicate subject. In Protestant countries such as Great Britain, the Netherlands, and Scandinavia, legislation has become relatively liberal compared with countries possessing a strong Catholic foundation, such as Spain, Ireland, and Portugal. In these latter countries, promotion of contraception was a criminal offence, while in

other European countries the right to plan and space births was recognised but not actively guaranteed by the state (Livi-Bacci, 1974).

Several countries have an interesting history of introducing and repealing reproductive health policies throughout the 20th century. The case of Romania, where pronatalist policy was largely based on abortion policy, deserves further elaboration. In September 1957, following the Soviet lead, a governmental decree made abortion on request available in Romania (Fialova et al., 1990). This policy was dramatically reversed in October 1966 when abortion (then the main instrument of fertility control) was restricted to very specific conditions. The authorities even had working women screened for pregnancy, in order to prevent abortion. In addition, other pronatalist policies were introduced, such as reducing income tax for families with three or more children, ceasing the official importation of contraceptives and prohibiting their sale, and making divorces for couples with children under 16 more difficult (David and Wright, 1971). Up until the December 1989 revolution, this was the "the most rigorously enforced pronatalist policy among all Communist countries of Central and Eastern Europe" (Serbanescu et al., 1995). However, the 1989 revolution saw a dramatic reversal when, on 26 December, abortion and contraception were legalised following public pressure on the interim government. Thus, Romania provides a unique case study for assessing the impact of introducing and repealing an abortion-focused pronatalist policy.

Following the October 1966 decree introducing a range of pronatalist measures to increase fertility rates, there was a rapid and unprecedented increase in crude birth rates, rising from 13 per 1,000 live births in November 1966 to 39 in September 1967. This experience led one commentator at the time to state that this was the "largest one-year fertility increase ever experienced by a human population" (Teitelbaum, 1972: 414). The increase in birth rates was uniform by birth order: women of all ages and all birth orders contributed to the fertility increase, but the highest increases were among women over the age of 30 at live birth orders three and four (David and Wright, 1971). However, as subsequent analyses showed, the magnitude of this increase was not sustained (Berelson, 1979). In 1966, the *annual* crude birth rate in Romania was 14.3 and this increased to 27.4 in 1967, then steadily declined to 20 in the early 1970s (Berelson, 1979).

In addition to the (unsustained) increase in fertility, and as David and Wright (1971) pointed out, there "appeared" to be:

- a decrease in the number of legally induced abortions;
- an increase in the number of illegal abortions;
- an increase in neonatal and infant mortality (matching the fertility trend of a sharp increase then a decline, but still above pre-1966 levels); and
- a decline in crude marriage rates (to avoid early first births).

On 26 December 1989, during the overthrow of the Ceausescu regime, abortion and contraception were legalised, thus removing the central instruments of Romania's pronatalist policy. The impact of this change was assessed using a national household survey of 4,861 women aged 15–44 conducted in 1993 (Serbanescu et al., 1995). The study showed that:

- after abortion became legal, total fertility rates dropped sharply to below replacement level, from 2.3 children per women for the 1987–1990 period to 1.5 for 1990–1993;
- the total abortion rate doubled from 1.7 to 3.4 abortions per women for the same period; and
- contraceptive prevalence increased by 20 percent, although 70 percent of that increase was the result of traditional methods.

Box 2.2
Defining Different Types of Leave

- Maternity leave is defined as the leave caused by the birth of a child. Nowadays, maternity leave is a part of the basic law of labour protection (Torremocha, 2002).
- Parental leave is the period following maternity leave, which also allows fathers to take longer periods of leave. This kind of leave stresses family needs, in particular that there are special needs in some periods of the family life-cycle which are not only after the birth of the child. As a general rule, and given the fact that it is a very recent provision, most countries provide it without any pay. And although both parents are entitled to leave, in most of the counties it is the women who take advantage of this provision, perhaps because men usually have higher salaries (Torremocha, 2002).
- Childcare leave is extended periods of leave for childcare, in the period after maternity or parental leave.

However, Romania is an extreme – if not unique – example, as abortion was the dominant instrument in the pronatalist policy. In contrast, in Hungary in 1974 abortion restrictions were mild (in comparison to Romania) and supplemented by strong economic incentives through increasing various family and child benefits (Legge and Alford, 1986). An econometric model examining the influence of abortion policy on fertility rates that used Hungarian data between 1950 and 1975, concluded that pronatalist incentive payments increased fertility and decreased abortions (Coelen and McIntyre, 1978). The relationship between abortion policy and fertility was also explored by Klerman (1999). Using US data, he showed that total fertility rates would increase if abortion were made illegal in the US or if Medicare funding for abortions were withdrawn.
As Henry David (1992) concluded in a historical review of abortion in Europe:

> as contraceptive practice improves with ready access to steady supply of modern methods, the incidence of abortion and repeat abortion can be expected to decline […] Policymakers, service providers and the public need to understand, however, that some women are more fecund than others, and that some contraceptive failures and human error are inevitable. Reproductive behaviour and fertility regulation are matters of cultural tradition and evolving perceptions; how to change behaviour, facilitate acceptance of modern contraceptives, and to assure adequate supplies are among the public health challenges of the 1990s.

The introduction of other forms of reproductive health policy – such as the availability of contraception – is widely recognised as one of the causes of a joint fertility decline in the Member States of the EU (Murphy, 1993). However, the historical example of Romania seems to suggest that changes in abortion policy (by legalisation or prohibition) also has an impact on fertility changes, although that effect may be temporary as individual couples readjust their behaviour in response to policy changes (Demeny, 1986). Or, as Livi-Bacci (1974: 197) put it: "If repressive legislation has been inspired by pronatalist objectives, the legislation may defeat its own end."

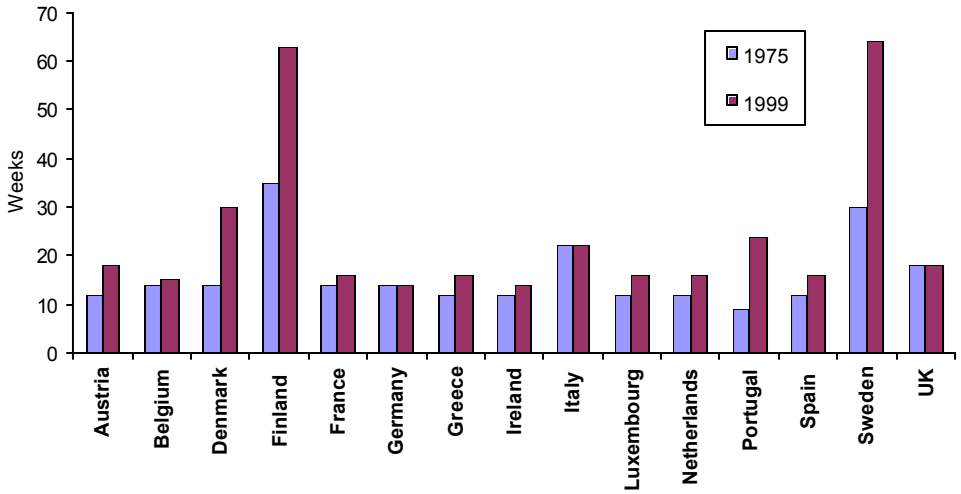
Family-Friendly Employment Policies

This policy domain entails all policies that are aimed at enabling families to combine economic activities and parenthood. In practice, most of these policies focus on combining work and

maternity. This section reviews the literature in three areas, namely: maternity, parental, and childcare leave; childcare provision; labour market policies (including flexible working hours).

Maternity, Parental, and Childcare Leave. In Box 2.2, we have defined what is meant by maternity, parental, and childcare leave. Maternity leave has a long history, dating back to the end of the 19th century, whereas parental and child leave have been introduced in recent times (Gauthier, 2000). With the increase in female labour participation since the 1960s, maternity and paternal leave became an important form of state support for families (Gauthier, 1996b). During recent decades, maternity and parental leave and benefits have increased considerably (Gauthier, 2000). With the partial exception of the US, all the OECD countries provide working women with maternity leave (OECD, 1990 cited in Torremocha, 2002). All European countries provide a period of statutory maternity leave that is a universal right for employed women, which allows a mother to rest in the later stages of pregnancy, recover from childbirth, establish breastfeeding, and form a bond with her child before returning to work (Torremocha, 2002). In countries such as Greece, Portugal, and Spain, parents have a statutory right to parental leave but without pay. Countries such as Austria, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, and Sweden provide this leave with pay. Across all 15 EU countries, the duration of maternity/parental leave has increased from 16 weeks in 1975 to 24 weeks in 1999 (see Figure 2.1 for data on the individual Member States). The largest increases occurred in Denmark, Finland, Portugal, and Sweden. Scandinavian EU members have a longstanding policy of granting extensive maternity leave (65 weeks in Sweden and 44 in Finland) with benefits covering 75–90 percent of earnings. At the tail of the distribution are the UK and Greece, where maternity leave only covers 45 and 50 percent of the monthly wages (Lesthaeghe, 2000).

Figure 2.1: Duration of Maternity/Parental Paid Leave: EU Countries, 1975 and 1999



SOURCE: Gauthier (2000)
MG206-2.1

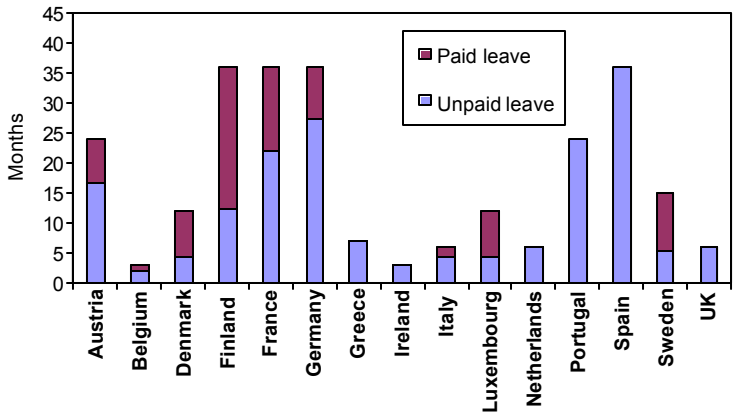
Provision for childcare leave has changed significantly since the 1980s. In the early 1970s, only Austria and Italy offered this leave. However, by 1999 all countries were offering an optional extended leave after the period that was covered by maternity/parental leave. In approximately

half of the EU countries the leave is unpaid, while in the others a combination of means- and non-means -tested benefits is paid. The duration of childcare leave varies considerably, from three (Belgium and Ireland) to 36 months (Finland, France, Germany, and Spain). In some countries, leave is restricted to the period immediately after maternity/parental leave; in other countries such as Sweden and Denmark it can be spread over time (Gauthier, 2000). Figure 2.2 shows the duration of childcare leave (in months) for each of the current EU Member States, and gives an indication of the percentage of childcare leave that is paid.

A study by Gauthier and Hatzius (1997) showed that the duration and benefits of maternity leave did not appear to be significantly related to fertility. Zhang et al. (1994) also did not find a significant effect of maternity leave on fertility rates in Canada. Büttner and Lutz (1990) conducted a study to estimate fertility responses to policy measures in the GDR. In this study, the effects of the 1976 population policy measures were estimated. These measures included: (1) prolongation of maternity leave from 18–26 weeks; and (2) introduction of paid leave for all working mothers with two or more children beyond the basic maternity leave up to the youngest child's first birthday. The study showed that the policy measures had a fertility-enhancing effect and the effect was greatest four years after implementation, but was still visible five to 10 years thereafter.

In Hungary, a childcare allowance scheme allowed economically active women to rear their children at home until the age of three years without definitely leaving their job. The traditional difference in fertility between dependent (non-working) and economically active women has changed, so that economically active women are now having the greater number of children. The allowance was a great burden to the state budget, although the mothers on the allowance received only 25–30 percent of the average monthly salary (Szabady, 1980).

Figure 2.2 : Childcare Leave Schemes, EU Countries, 1999



SOURCE: Gauthier (2000)

MG206-2.2

On the other hand, the Swedish experience implies a strong association between fertility behaviour and a family policy that is designed to reduce the dependence of work-related outcomes on gender and parental status. In 1996, it was concluded that over the past decade, age at first birth has increased and birth intervals have decreased, apparently in response to changes in family, wage and tax policies (Hoem, 1990; Rindfuss et al., 1996; Sundström et al., 1991). An analysis of family policies in 22 OECD countries between 1970 and 1986 suggested that maternity leave policies had a positive, albeit modest, impact on fertility, particularly in countries

with high levels of cash benefits and extensive provisions for state-sponsored pre-primary schools (Gauthier, 1991 as cited by Rindfuss and Brewster, 1996).

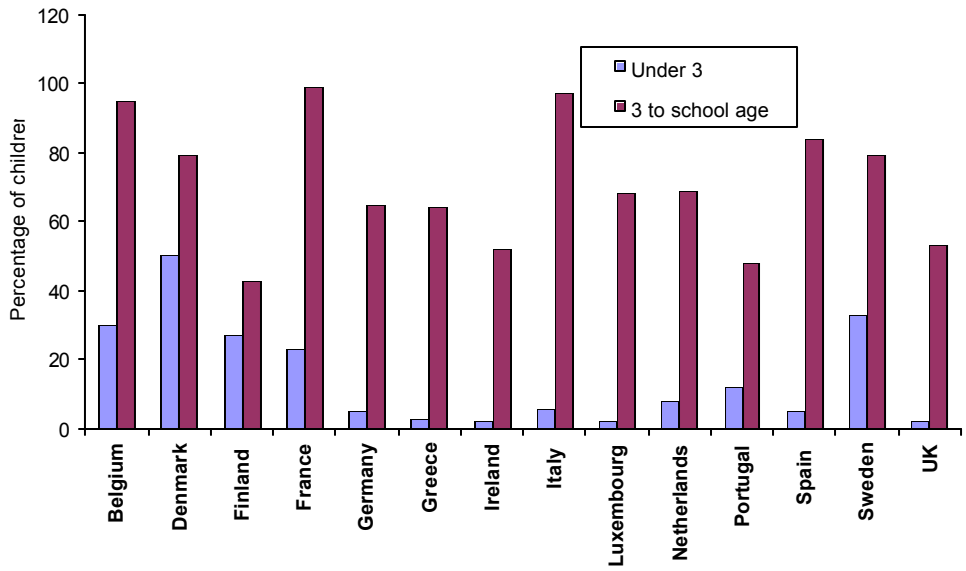
Childcare Provision. Rindfuss and Brewster (1996) remark that perhaps the most common strategy that women adopt in order to enable them to combine motherhood and employment is to relinquish responsibility for childcare during the hours that they are engaged in work. In Europe, women rely on a wide range of childcare providers. These include fathers, relatives, neighbours, and in-home help as well as organised day care centres, nursery schools, kindergartens, etc. The extent to which women rely on childcare provision depends on the availability, acceptability, quality, and cost of these provisions (Rindfuss and Brewster, 1996).

From the 1960s onwards, governments in most European countries have taken several steps to support the children of working parents, including childcare provision. To compare childcare provision among countries, Gauthier (1996b) uses an index that expresses the percentage of below-school-age children that are enrolled in publicly funded childcare institutions. No distinction between full-time and part-time attendance is made. Figure 2.3 gives an indication of inter-country differences with respect to public provision of childcare.

However, Gauthier (1996b) stresses that these differences might be misleading as the data cover a wide range of institutions. The differences between countries might be accounted for by several factors, including the level of female labour force participation and budget constraints. She goes on to state that the most important factor is the country's perception of who should provide childcare facilities. Public responsibility was recognised in high-provision countries, whereas low-provision countries emphasised private responsibility, although there is a need to understand the cause and effect of these relationships.

Despite the problems posed by the lack of data, a number of researchers have attempted to assess the impact of childcare provision on fertility. In one such study (Rindfuss and Brewster, 1996: 275) in the US it was concluded that "fertility is influenced less strongly by childcare constraints than female labour participation; however, it does provide support for the proposition that increasing women's access to childcare of all types would increase fertility".

Figure 2.3: Public Provision of Childcare and Education Institutions, EU Countries, 1993



SOURCE: Palomba (2003)

MG206-2.3

Labour Market Policies. Female labour force participation since the 1980s has increased everywhere in Western Europe, while it has gone down in the East. However, female labour force participation in the former socialist economies is still higher than in most western countries, with Scandinavia being the exception (Strohmeier, 2002).

In addition to maternity, parental, and childcare leave and childcare facilities, McIntosh (1981) identifies other policy measures that can be taken to reconcile work and family:

- Shorter and more flexible working hours for women with young children;
- Guaranteed right of re-employment in the same (or equivalent) job after post-maternity leave, with safeguarded rights to promotion, social security, and other benefits.

Very few studies have focused on the impact of labour market policies on fertility. Most studies focusing on female labour market participation study the relationship between labour force participation and fertility.

Social Security Reform

The above sections discussed policy measures which are aimed at directly or indirectly preventing (or lessening) further reduced growth and ageing of the European population. As in various other policy fields, measures that mitigate the symptoms rather than prevent the causes may be realistic alternative solutions. Although the benefits of such measures are generally limited, since the problem itself is not solved, their costs are often relatively low. Reform of the social security system is among the most common policy responses to the increasing costs of pensions and health care. The literature in this field is vast. Hence, this section is not exhaustive, but highlights some of the issues.

With an increasing portion of the population that receives social benefits and a decreasing portion that is responsible for bearing this financial burden, European countries are facing considerable pressure on the affordability of social security systems. These systems in contemporary Europe are based on a "pay-as-you-go" arrangement, meaning that benefits are financed by taxes from the current labour force. The economic consequences of population ageing for society are reflected in the old-age dependency ratio. If all other parameters remain equal, the tax rates required to support the social security system will have to increase twofold if the old-age dependency ratio doubles. For countries with an economic dependency ratio[13] well above the European average (EU 15) of 1.5 in 1997[14] (i.e. Spain, Italy, Greece, Belgium and Ireland), the elimination of all family allowances, public pensions, and fiscal advantages for savings in pension funds would be a solution. This scenario is very unlikely, but could conceivably arise if pension systems collapse under the pressure of demographic ageing (Hureaux, 1998). A less extreme and more feasible approach to reduce the cost pressure associated with population ageing, and to slow the rate of growth in demand on public pension systems, would be a reform of social security systems.

A first option to offset the impact of population ageing by means of social security reform is a gradual increase of the age at which workers become eligible for retirement benefits. Some countries have already implemented this measure. In Japan, 1994 legislation increased the age of eligibility for the nominal part of retirement benefits from 60 to 65 by 2013 for men and by 2018 for women. In 1999, the government announced its intention to institute a similar increase with respect to the earnings-related part of the pension system (Weaver, 1986; Zoubanov, 2000). Germany has also increased the age for full benefits from age 60–63 to age 65 (Teitelbaum, 2000;

[13] Economic dependency ratio: inactive and unoccupied population (unemployed) / active occupied persons. See http://www.undp.org.

[14] OECD, *Economic Outlook* No. 65, OLIS.

Zoubanov, 2000), and in the US the 1983 amendments to the Social Security Act raised the age of eligibility for full social security benefits from 65 to 67 by 2027 (Teitelbaum, 2000; Weaver, 1986).

A second option consists of an increase of the so-called "early retirement age" or the prohibition of compulsory retirements. Currently in the US a reduced annual pension is granted to people at the age of 62. For example, Teitelbaum (2000) suggests that the financial attractiveness of such early retirement could be reduced. In Germany and Italy, access to these early retirement benefits has already been restricted. Similarly, France has tightened eligibility requirements; the number of years of contributions that are required for full benefits is being increased from 37.5 to 40, which became fully effective in 2003 (Zoubanov, 2000). In Sweden, early retirement schemes were confined to people demonstrating their inability to work. During the 2003 coalition formation in the Netherlands, various disincentives for early retirement have been negotiated. Workers who wish to stop working before the age of 65 will no longer be financially supported by the national government (de Volkskrant, 2003). In Spain, a country with a rapidly ageing population, voluntary retirement before the age of 65 is penalised, despite a high level of youth unemployment, which might have provided an incentive for early retirement (Hantrais, 1999).

An alternative measure is legislation to prohibit compulsory retirement, which was enacted in the US in 1986 under the so-called Pepper Act. Numerous elderly participants in the labour force do not yet wish to end their careers, but do prefer a reduction in their working activities. This Act facilitates part-time retirement through public and private pensions (Teitelbaum, 2000). Prolonging retirement age has the advantage of compensating for labour shortages due to population decline (Kim, 2000).

A third option of social security reform is to reduce the size of benefits that are associated with retirement at the normal age. France and Italy have already increased the number of years over which earnings are averaged. Japan is planning to implement a 5 percent reduction of pension benefits. In the UK, where benefits were based on the 20 highest years of earnings, the state earnings-related scheme has begun to be based on lifetime earnings (Zoubanov, 2000). Finally, in Sweden pension schemes have also been under reform, and benefits levels have been considerably reduced. Countries may also increase the amount of revenue going into the pension system. Teitelbaum (2000) claims that these increases would have to be substantial to compensate for demographic age shifts underway in many countries. Nonetheless, Japan increased combined employer–employee rates and intends to increase them moderately in order to finance scheduled benefits. By increasing the budget subsidy for its pension programme, Germany has attempted to avoid an increase of the pension contribution (Zoubanov, 2000). In a 1983 amendment of the Social Security Act, the US also increased taxation rates on the working-age population to subsidise the retired population's pension benefits. Benefits became partially taxable under federal income tax, the cost-of-living adjustment was delayed, tax rates were increased, and coverage was expanded to certain government employees (US House of Representatives, 1983 cited in Weaver, 1986).

A final option involves revising the financial reliance on the "pay-as-you-go" system, and moving to a greater reliance on advance funding of pension schemes where people save for their own retirement. For example, Teitelbaum (2000: 11) proposes "invest[ing] part of the Social Security payment in market investments, which are expected to yield higher returns than current US government bonds, either collectively or via individual accounts, albeit carrying higher risks". Some countries (e.g. Germany, Japan and the UK) already shift a portion of the responsibility for managing pension arrangements from public to private enterprises (Zoubanov, 2000).

The desirability, feasibility, and effectiveness of these options are all subject to extensive debate. Höhn (2000) claims that a reformist policy of reducing the level of pensions and increasing contributions by the working population, together with an increase in the age at retirement,

should be perfectly viable, since existing social security systems are so generous and flexible. On the other hand, Chesnais (2000) states that the democratic legitimacy of pension system reform will become a crucial issue, and expects continuing generous retirement benefits, since in ageing societies elderly people form an increasing electoral majority whereas the child lobby is politically non-existent.

Labour Force Policy

The interaction between demographic developments such as population decline and demographic ageing and employment issues is complex. Declining fertility along with population ageing lead to a decline in the number of people of working age. However, Sircelj (2002) cites evidence that the productive capacity of older people can be substantially under-utilised. There are indeed a number of possible policies to increase the size of the labour force. The application and effectiveness of three types of policy measures are discussed in this section: lifelong learning, labour force policy for the elderly, and labour force policy for women and youth. This overview will often refer to Zoubanov (2000), who provided a comprehensive review of existing policy measures of these types.

Lifelong Learning. The productivity of the existing workforce can be retained or enhanced via investment in so-called "lifelong learning". Zoubanov (2000) states that governments and businesses can attempt to adjust to a labour market in which a young workforce is scarce and older workers must be replaced. By means of the introduction of lifelong learning policies, older employees can adapt to the increasing demands of the economy. More time would be devoted to learning at all ages, and workers would retire later. Hence, the pattern of working throughout the life-cycle would be modified. Additionally, Teitelbaum (2000) mentions that a continuous upgrading of skills and education of the workforce is becoming increasingly feasible with the growth of high-quality education and training, which can be delivered anytime and anywhere over the Internet. Some countries have already taken active steps in this direction. As an example of an already implemented policy of workforce education in Europe, Zoubanov illustrates the case of the UK, where the maximum age of access to its "Training for Work" programme has been raised from 59 to 63 years.

However, few studies have assessed the impact of workforce education policies on the labour supply of older workers. Uhlenberg (1992) claims that, so far, initiatives of lifelong education have reached mostly the college-educated and have little impact on extending work life. To illustrate this statement, he quotes Sandell (1988): "Government sponsored job training programs designed to upgrade skills needed in the labour market have attracted very few older persons by focusing upon their special needs and characteristics."

Labour Force Policy for the Elderly. Since social security policies (as discussed above) increasingly include disincentives for early retirement, these measures are closely related to policies which are designed explicitly to encourage the elderly to work longer rather than to choose early retirement. Workers over the age of 65 are healthier and more educated than 30 years ago and can make a valuable contribution to the economy. There are many people who do not want to retire but would prefer a more flexible organisation of work. However, Uhlenberg (1992) identifies existing obstacles to the employment of older workers, which include both age discriminatory personnel practices and inflexibility of work options. Sandell (1988 as cited by Uhlenberg, 1992) reported widespread discrimination against older workers and claimed that greater enforcement of policies was needed to reduce this obstacle to continued employment of older workers. Those nearing the end of their work life could benefit from alternative employment options, which could be encouraged by appropriate social policies (Morrison, 1986

as cited by Uhlenberg 1992), such as phased retirement or creating annuitant pools of a company's retirees for temporary, full, or part-time work assignments. A number of governments have plans to introduce greater flexibility and mobility and some have implemented programs already. Zoubanov (2000) provides several useful proposals, including a gradual transition to retirement (Germany), reduced working hours (France), and subsidies to encourage hiring older workers (France and Germany). Furthermore, in the UK the government has recently accepted a recommendation from the Cabinet Office (2000, as cited by Dunnell, 2000), which includes cultural changes to raise older people's expectations and to stop making judgements based on their age range rather than their true value and potential, encouragement of over-50s to stay in work, and facilitation of older people to make use of their skills and experience for the benefit of the wider community.

Labour Force Policy for Women and Youth. One strategy to offset the adverse consequences of population ageing is the labour participation of certain population groups that are as yet under-represented. The two main target groups consist of women and youth in the working age. Especially the involvement of women in labour participation may seem rather contradictory to some of the policy alternatives that have been discussed above. However, disregarding the potentially counterproductive effects on fertility, labour force policy for women may turn out to be very efficient in mitigating the socio-economic impact of population ageing. In Zoubanov's (2000) overview of existing policies to increase the labour force, he also reports on labour force policy for young people and women:

> Some countries, such as Italy, Germany and the Republic of Korea, are trying to get working-age people to work in greater numbers, especially young adults and women. The French Government in the last decade started to implement measures to provide temporary jobs and part-time jobs, and to encourage enterprises to employ young people at lower salaries. The Italian Government also intends to alleviate increasing ageing costs without changing the social security system through a number of measures to increase employment of youth. In the Republic of Korea, many highly educated women still become housewives instead of getting a job because of gender discrimination; the Government is working to create a more favourable working environment for women. […] in order to augment the labour supply, the Government is making efforts to further increase female participation in the labour force, especially in higher skilled and better paid jobs; and to support and complement private efforts to provide childcare facilities for female employees.

As noted above in the discussion on education policy, the relationship between youth unemployment, higher education, and family formation is an important one in the context of population ageing in Europe. Ekert-Jaffé and Solaz (2001) examine the impact of insecure professional status on union formation in France and show that, for both men and women, the first job generally comes before a union. Thus unemployed people will wait for a stable job before entering a stable union, having a delaying effect on the timing of family formation.

Health Care Policy

Inevitably, an increasingly older population will place considerable demands on the functioning of the health sector. By means of health care policy, two alternative ameliorative strategies might mitigate these consequences: (1) cost reductions through rationing of the health care system; and (2) reducing medical dependencies through health care improvement.

Rationing Healthcare. In the conceptual framework, mortality was deliberately excluded as a micro-level variable, since it would be unacceptable to actually increase mortality to manage

ageing populations. However, policies to ration healthcare to the elderly are debated in the literature, especially in the context of new medical technology (Uhlenberg, 1992). For example, Callahan (1987, as cited by Uhlenberg, 1992), proposes rationing government-financed health care to those who have outlived their "natural lifespan" of 80 years (his definition). Such suggestions are extremely controversial. Nonetheless, while the debate over rationing health care as a means to reduce the financial effects of ageing did receive thorough consideration (Davis, 1987; Smeeding, 1978; Strosberg et al., 1989), options to reform medical care deserve more serious attention as viable policy alternatives.

The costs of medical care have become a salient issue because of a rapidly-growing population in need and dramatically increasing health care costs for the impaired elderly (Kim, 2000; Ricardo-Cambell, 1986). More people are expected to live longer and at a greater cost to society, as people who would have died from some accidents and strokes 20 years ago are now living much longer. Additionally, there is little incentive for patients to seek less costly medical care. A significant policy issue is whether the supply of medical personnel and facilities, as well as expenditure on them, should be increased in order to fulfil rising demand, and to what extent the state should subsidise these costs. Or, as Teitelbaum (2000) suggests, is it necessary to find ways to contain the rapid escalation of health care costs?

Numerous measures to limit and control health care expenditures have been tried. Not long ago, in countries such as Germany and the Netherlands, all medical services were reimbursed. In the meantime, flat rates have to be paid for medicine or *per diem* in the hospital (Höhn, 2000).

Improving Health Care. Although not all health care programmes are intended to relieve the burden of the population's ageing, many governments have implemented policies to improve older people's health and well-being. These health and care initiatives, directed at the ageing population, focus on enhancing the quality of life.

Raised expectations and aspirations among new cohorts of elderly people, who have experienced improved living conditions during their lifetimes, may produce an increase in perceived health care needs (Milivoja, 2002). Changes in health care policies can play a major role in both slowing down and stimulating the demand for care. As the literature on health care improvement is vast, a comprehensive overview of policies for restructuring the health care system is unnecessary in the context of the current study. In his comprehensive survey, Zoubanov (2000) illustrated a wide range of health care policy measures to offset the consequences of population ageing.

Most industrialised countries are experimenting with home health benefits. The Italian government attempts to improve both home care and hospital day care, so as to prevent institutionalisation of older persons, in particular those with physical or mental impairments. Some governments use incentives to encourage elderly people to take responsibility for becoming the principal promoters of their own health. An important government effort in many countries is the encouragement of community involvement in health care and social services for the ageing. The role of the family in the responsibility for informal care is often emphasised; in Germany, this role is even encoded in laws. Some Western European countries have established care insurance schemes, compensating caregivers for the work that they do. For example, Finland, France, and Sweden regard informal health care as employment, and are willing to pay for this. Although most countries are reluctant to provide cash benefits to relatives that are caring for disabled or old people, Germany is one of the few countries to introduce a long-term care insurance programme intended for these population categories in need of health care. It provides medical and custodial care for eligible persons, either at home or in recognised institutions. Nevertheless, it is worth noting that in the future there will be fewer potential caregivers (i.e. adult children of the elderly) because of declines in fertility.

Pro-elderly Policy

An ageing population has inevitable consequences for the eldest members of society: retirees are increasingly dependent on younger generations; health care facilities per capita deteriorate, since the part of the population that is dependent on health care is growing; and elderly people encounter increasing pressure from the pension system to remain working. Several authors have suggested policy measures that address this increasing social stress on the oldest part of the population. Some options, which are aimed at mitigating these adverse socio-economic consequences of demographic ageing, are discussed below.

Uhlenberg (1992) introduced a policy proposal to alter the ageing of the population in a most direct manner: changing the chronological age at which a person is officially regarded as old. Currently, 65 is widely used by statisticians and demographers as a threshold value to mark entrance into old age as well as the usual age of retirement, at which workers terminate their labour force participation. Uhlenberg (1992) argues that with an increasing longevity and changing characteristics of cohorts approaching later life, the logic of maintaining age 65 as a beginning of old age can be questioned: "Changing the age for entitlement to old age benefits might not affect biological ageing, but it could alter the future economic burden of supporting a growing dependent older population." An increase of the age eligible for pension rewards was discussed above as part of social security reform. In fact, Germany and the US have already implemented such a gradual increase in "old age". However, Ulhenberg (1992) expects that an unambiguous change of the definition of old age without making parallel improvements in the other parts of the social context, would increase the vulnerability of the near-old population. Therefore, such policy should be introduced in coordination with a broad range of measures that are directed towards enhancing the social status of this part of the population. Austria is an example of a country that has introduced a "new old age policy" (Zoubanov, 2000). This policy aims at an integrated approach to strengthen and extend intergenerational solidarity.

Rather than regarding ageing as an inevitable and unchangeable process, Uhlenberg (1992) suggests a set of interventions that are aimed at decreasing the level of dependency in later life. If a government encourages the population to adjust behaviours concerned with exercise, diet, alcohol, drugs, etc., then disabilities considered to be part of normal ageing (Manton, 1989 as cited by Uhlenberg, 1992; Rowe and Kahn, 1987) may be reduced or prevented. Uhlenberg claims that policies focusing on improvements in the quality of later life might have positive side-effects on the future dependency of older persons by reducing the probability that these persons will require long-term health care for diseases or disabilities.

Concluding Comments

Throughout history, the governments of European and other industrialised countries have attempted to influence the age structure of the population, with varying degrees of success. Indirect preventive measures have a limited research literature. Governments have hardly attempted to control macro-level developments in order to have an influence on family decisions. The impact of such measures on decisions concerning marriage, cohabitation, or fertility has not been established. Some scholars have found a negative correlation between modernisation as a consequence of education and emancipation on the one hand, and fertility on the other. Accordingly, with the exception of some examples of awareness campaigns to emphasise the role of the family as the cornerstone of society (which have been largely ineffective), and with the exception of the Nordic countries, education and gender policies have remained mostly absent on the political agenda of family affairs.

Direct preventive policy measures are supposed to influence directly decisions concerning marriage, cohabitation, and fertility. With the exception of abortion campaigns (e.g. Romania),

or generous family allowances (e.g. France), governments of industrialised countries have been reluctant to formulate policies with the explicit intention of intervening in family life or population structure. Many efforts stem from the provision of family allowances, childcare policy, etc. But the key objectives of such measures have been defined as poverty alleviation or child welfare, rather than increasing fertility. The underlying intentions of the implicit policies that were introduced in these countries have remained ambiguous. This has made it extremely difficult to assess the extent to which policy efforts have an actual impact on family behaviour. Despite these complexities, this literature review has attempted to provide insight into past and current efforts and their proven or potential impact in offsetting the causes and consequences of population ageing.

In contrast with indirect policies, the effects of these direct measures on fertility have been assessed rather extensively, despite their ambiguous policy objectives. The correlation between financial incentives (e.g. family allowance and tax exemptions) and fertility has remained a subject of lively, although undecided, debate. Authors seem to agree that a correlation does exist, albeit of limited effect. Studies from Romania and France show an increase in fertility immediately after the introduction of these incentives, whereas the higher fertility rates do not seem to be sustained in the long run. The impact of policy on actual decisions at micro-level remains unknown.

According to most of the literature, policies focusing on the compatibility of maternity and work have the advantage of accomplishing two distinct outcomes: maintaining or increasing fertility rates, and increasing the size of the labour force. Most European countries have introduced some arrangements for maternity leave and childcare, which have a significant, although modest, impact on fertility. The Swedish example shows that a significant increase in fertility rates was not attributable to policies that directly targeted family size, but rather due to measures that enabled women to combine employment and family.

In contrast with other direct policies, some authors regard immigration as the only effective strategy to prevent population ageing. However, there is considerable disagreement in the literature on the sustainability of replacement migration as a solution for population ageing. With regard to the three stages in population dynamics to which migration might contribute (i.e. population growth, working-age population growth, changes in support ratio), most authors agree that migration may effectively offset the significant decline in population growth. However, the accomplishment of a sustainable replacement level in order to prevent a society from ageing and maintaining a substantial support ratio is not commonly regarded as feasible scenario. Most publications about the impact of migration on demographic developments conclude that too large quantities of immigrants will need to enter the European Union in order to compensate for declining support ratios.

Finally, research on policy efforts, such as pension reform or rationing health care, conclude that ameliorative efforts are effective in mitigating the adverse socio-economic consequences of population ageing. These measures are relatively straightforward, their costs are comparatively low and the impact is significant and visible in the short term. Hence, recently, ameliorative measures have become popular instruments of European governments in order to mitigate the impact of population ageing on the affordability of the social security system, although there is little research on the sustainability of these measures.

On balance, the literature suggests that that the impacts that fertility and immigration policy have on population ageing are different. For fertility and family formation, the issue is whether and what policy can be effective in raising it as, if it is effective, it will unambiguously reduce population ageing. For migration, the issue is whether and how it can be used to reduce population ageing. As there is little question about whether changes in immigration policy can increase immigration, in the subsequent case studies we have focused our attention on the effectiveness of fertility and family formation policy in preventing population ageing.

CHAPTER THREE

What the Data Show – Population Structure and Underlying Demographic Trends

Introduction

This chapter presents a data review of the population structure and underlying demographic trends of Member States and Applicant Countries. It provides quantitative insights into the causes and consequences of low fertility and population ageing, as discussed in Chapter 2. We examine some of the key elements within the central two boxes of the conceptual framework (the micro-level decisions and population structure boxes in Figure 1.1). The first section focuses on the population structure of Member States and Applicant Countries. The next section reviews the underlying demographic trends in family formation and international migration. The final section draws together the demographic trends and identifies existing knowledge lacunae.

The population and social conditions theme of the Eurostat NewCronos database (2002) is the main source of the data review presented in this chapter. Within this theme, the most important domains for the purposes of this review are those relating to demography, fertility, education, income, living conditions, employment, and migration. The population and social conditions theme in this database contains more than 44 million statistical data points covering every Member State, and in many cases, Applicant Countries and others. The data are available, depending on the variable or country selected, from 1960 to 2002.

A focused selection of data analysis is presented in this report, in order to illuminate the specific research questions that are addressed, the purpose of which is to show the variations among countries and the trends over time. We show separate graphs for two groups of Member States and two groups of Applicant Countries so that the number of countries shown in each graph is not too large. The graphs for Member States and Applicant Countries are grouped alphabetically with Member States split by A–G and I–Z, and Applicant Countries split by A–La and Li–Z. The graphs presented here reflect the Eurostat NewCronos database (2002), where some data are missing for some years and for some countries.

Population Structure

Population structure and dynamics are the most easily measurable aspects of demography. The indicators considered for discussion here include population growth rate, age and sex structure, and dependency ratios.

Total population growth rate is dependent on the natural growth rate (difference between birth rate and death rate) and net migration rate (difference between the immigration rate and emigration rate). The crude rate of total population growth gives a measure of the annual change in population size per 1,000 people, allowing for comparison across countries with different absolute populations.

Natural Population Growth

The crude rate (per 1,000 population) of natural population growth for Member States and Applicant Countries from 1970 to 2001 is given in Figure 3.1 and Figure 3.2. The crude rate of natural population growth has fallen across Member States and Applicant Countries since 1970, as the number of births has declined increasingly in relation to the number of deaths. The average of the crude rates of Member States' natural population growth has fallen from 5.7 per 1000 in 1970 to 1.7 in 2001, while for Applicant Countries it has fallen from 6.7 in 1970 to –1.6 in 2001 – that is, the number of deaths now exceeds the number of births. Among the Member States, Ireland has had the largest crude rate of natural population growth since the mid-1970s with 7.3 per 1,000 in 2001. In 2001, other Member States with a high crude rate of natural population growth include France, Luxembourg, and the Netherlands, at around 4 per 1,000 population.

A further examination of the countries by regions reveals similarities among groups in the level and direction of natural population growth rates. The Baltic states (Estonia, Latvia, and Lithuania) have experienced natural population loss continually since the early to mid-1990s. Similarly, the Central and Eastern European countries are either edging into natural population decline (in the case of Poland and Slovakia), or have recently experienced a continued decline in the natural rate of population growth. For example, Hungary's natural population rate has been in decline since the early 1980s to –3.4 in 2002, and Bulgaria's rate has fallen from 1990 to –5.5 in 2001. The Mediterranean countries of Greece, Italy, Portugal, and Spain have experienced also a sharp fall in the natural population growth rate; the average of the crude rates for these four countries in 1970 was 9.2 falling to 0.5 in 2001, with the lowest point in 1998 of –0.1 per 1,000 population.

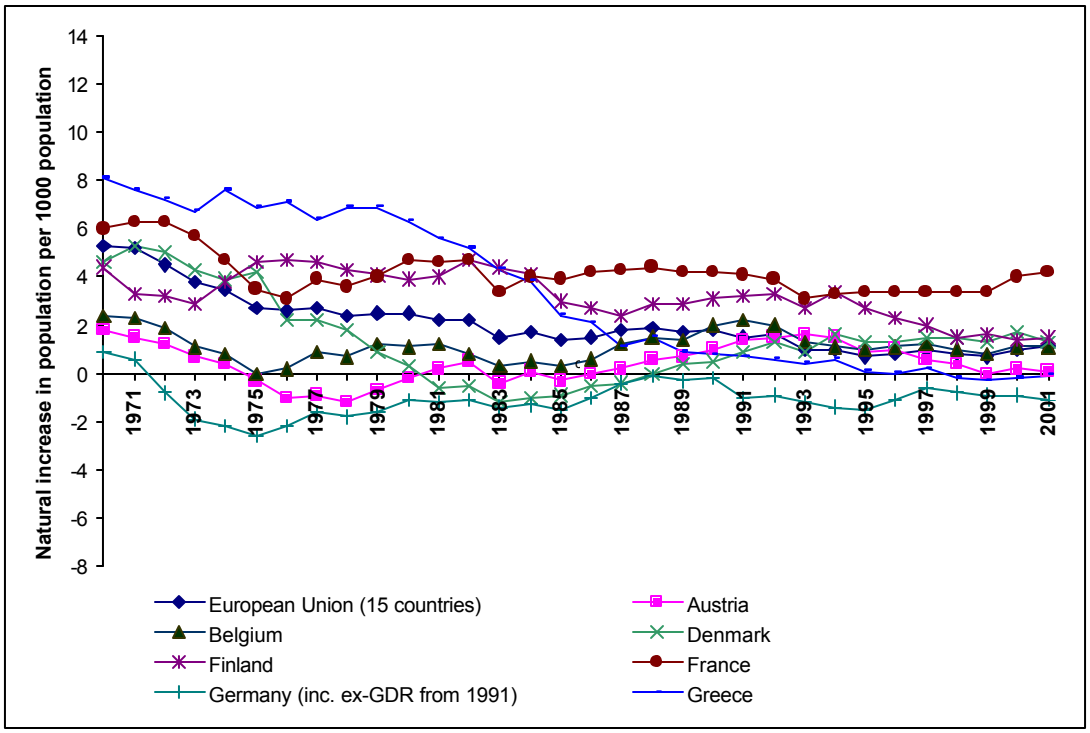
Net Immigration

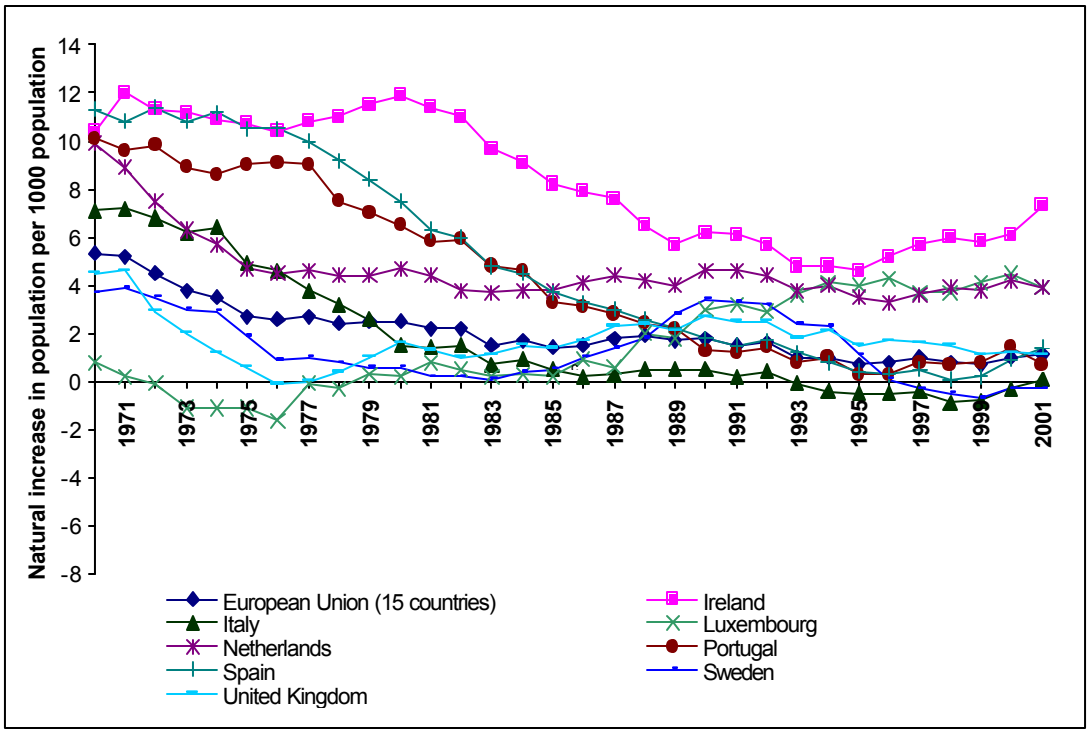
Trends in the crude rate of net migration are less clear-cut, as migration patterns across countries can be interdependent (inflow into one country being the outflow from another country) and mass migratory movements can be driven at different periods by war and civil or political unrest. The crude rate of net immigration for Member States and Applicant Countries from 1970 to 2001 is given in Figure 3.3 and Figure 3.4. Overall, all the Member States have experienced annual increases in population in the 1990s due to positive net immigration, as immigration into the Member States exceeded emigration out of them. In 2001, Ireland, Luxembourg, Portugal, and Spain recorded the highest crude rates of net immigration, of over 5 per 1,000 population. On the other hand, in the 1990s Applicant Countries experienced population decline due to net outwards migration; this was particularly marked for the Central and East European countries and Baltic states. For example, in the early 1990s, Bulgaria, Estonia, Latvia, and Romania experienced a net emigration (i.e. outflow) of over 17 per 1,000 population.

Total Population Growth

Aggregating the crude rates of natural growth rate and net migration rate gives the crude rate of total population increase, as shown in Figures 3.5 and 3.6. Overall, in the 1990s, Member States have experienced a positive crude rate of total population growth, where falling natural growth rates have been offset by positive net immigration into Member States. The highest crude rate in the Member States for 2001 is over 11 per 1,000 population for both Ireland and Luxembourg, which have seen an increase in crude birth rates building upon increases in net immigration over the late 1990s. On the other hand, in the 1990s, the majority of Applicant Countries have experienced negative crude rates of total population growth, where falling natural growth rates have added to negative net migration, as in the case of many of the Central and Eastern European countries and Baltic states.

Figure 3.1: Crude Rate of Natural Population Increase, Member States 1970–2001

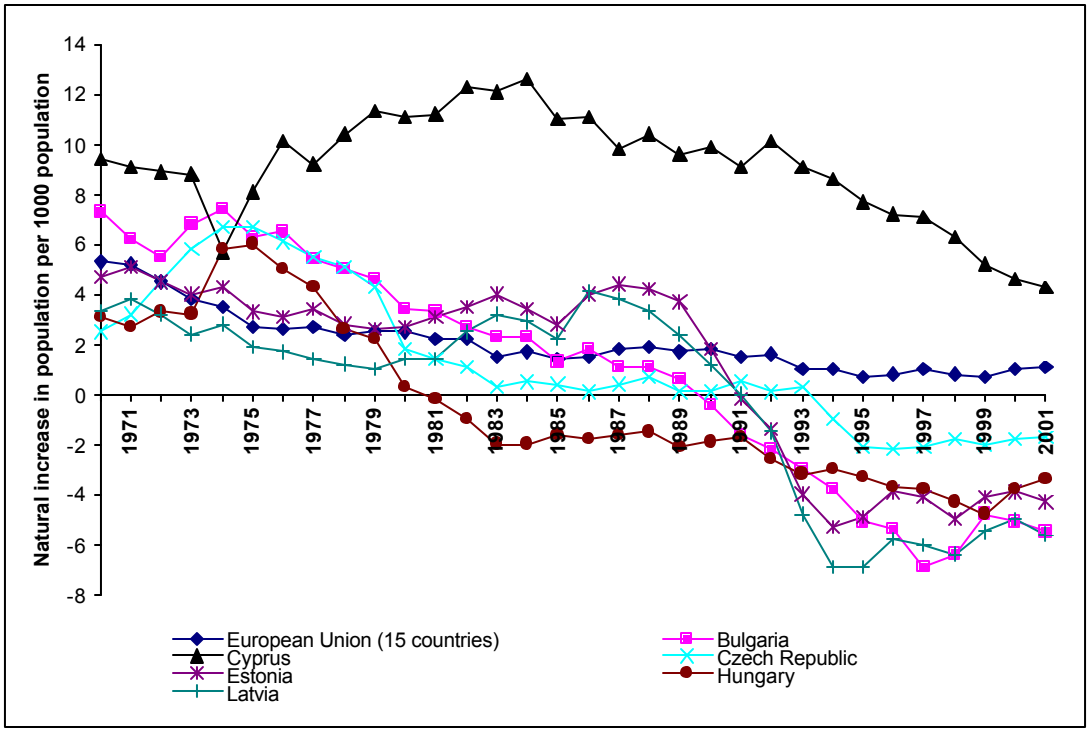


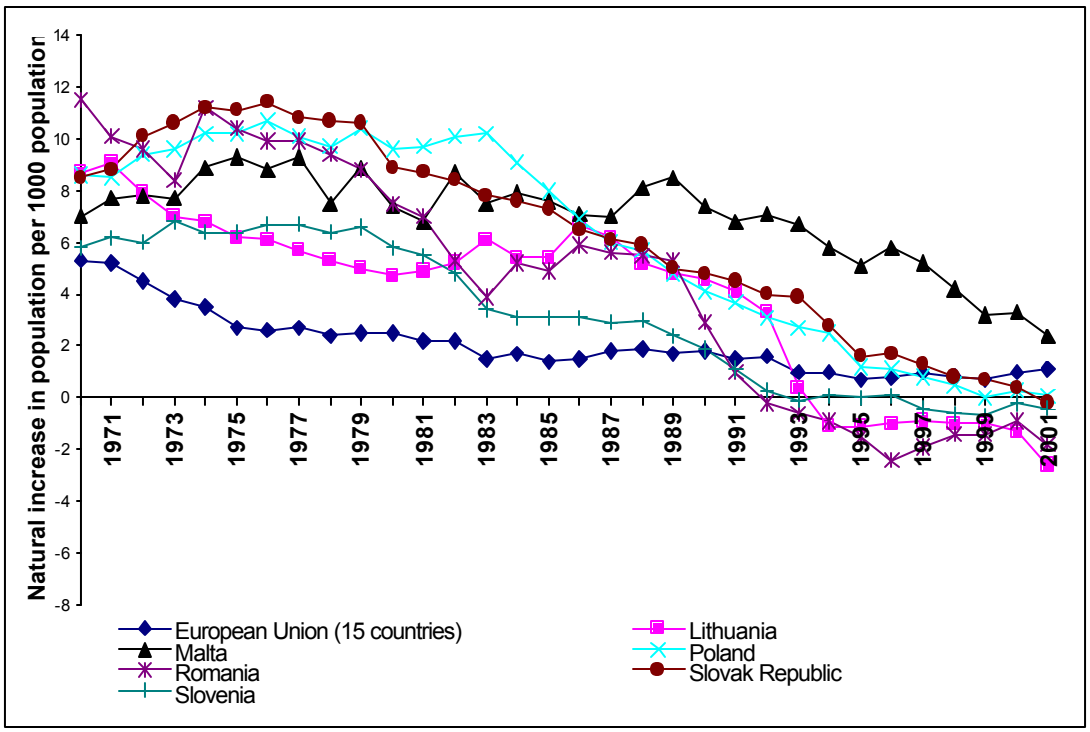


SOURCE: Eurostat NewCronos database (2002)

MG206-3.1

Figure 3.2: Crude Rate of Natural Population Increase, Applicant Countries 1970–2001

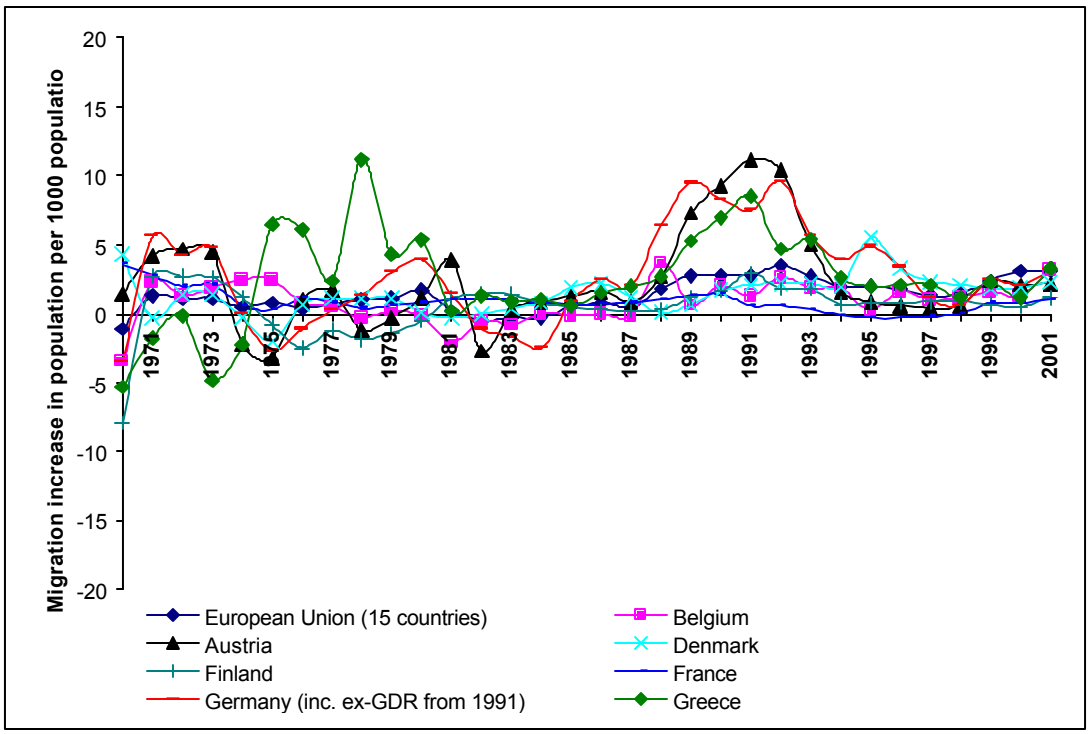


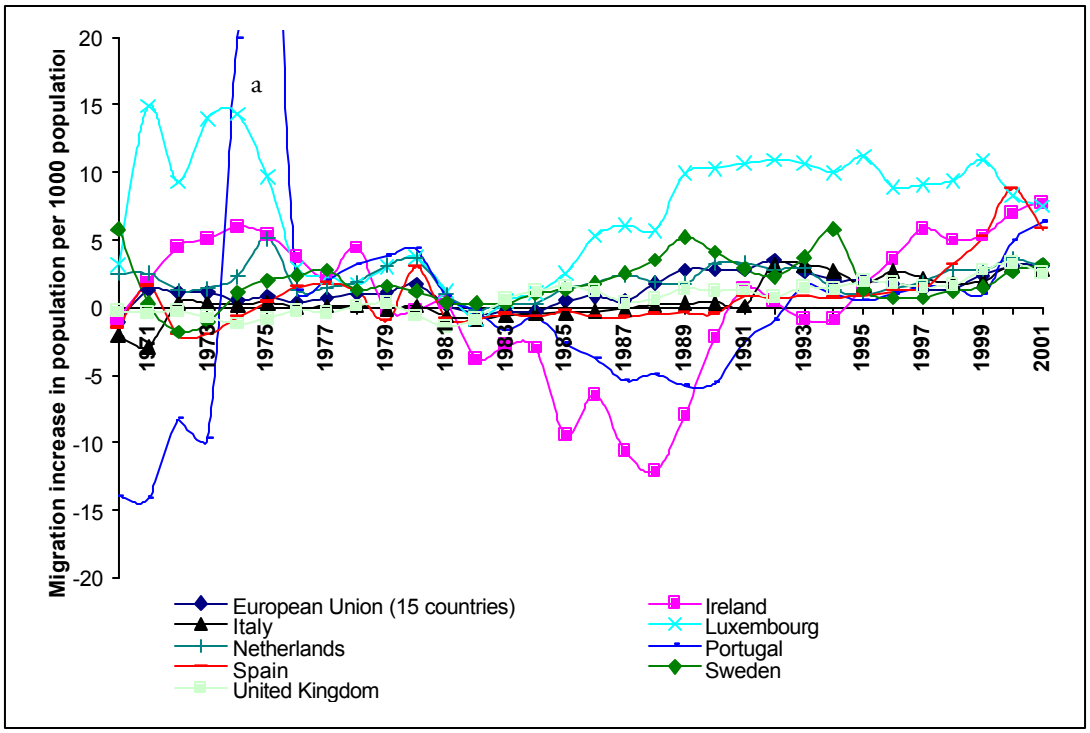


SOURCE: Eurostat NewCronos database (2002)

MG206-3.2

Figure 3.3: Crude Rate of Net Immigration, Member States 1970–2001



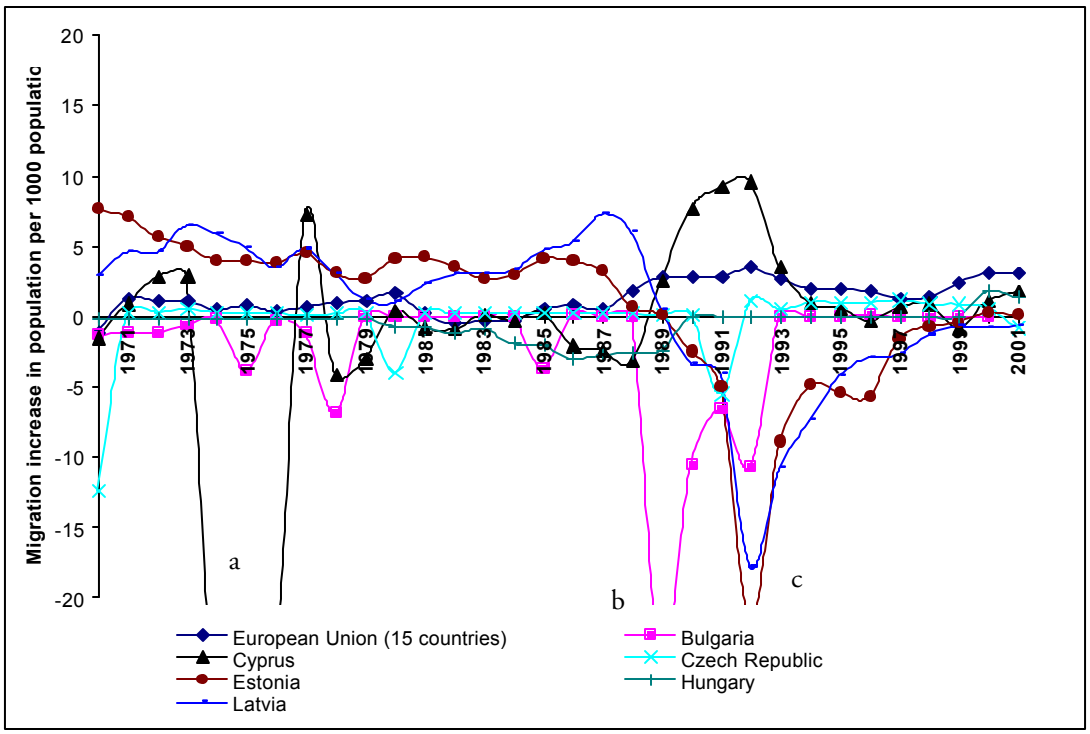


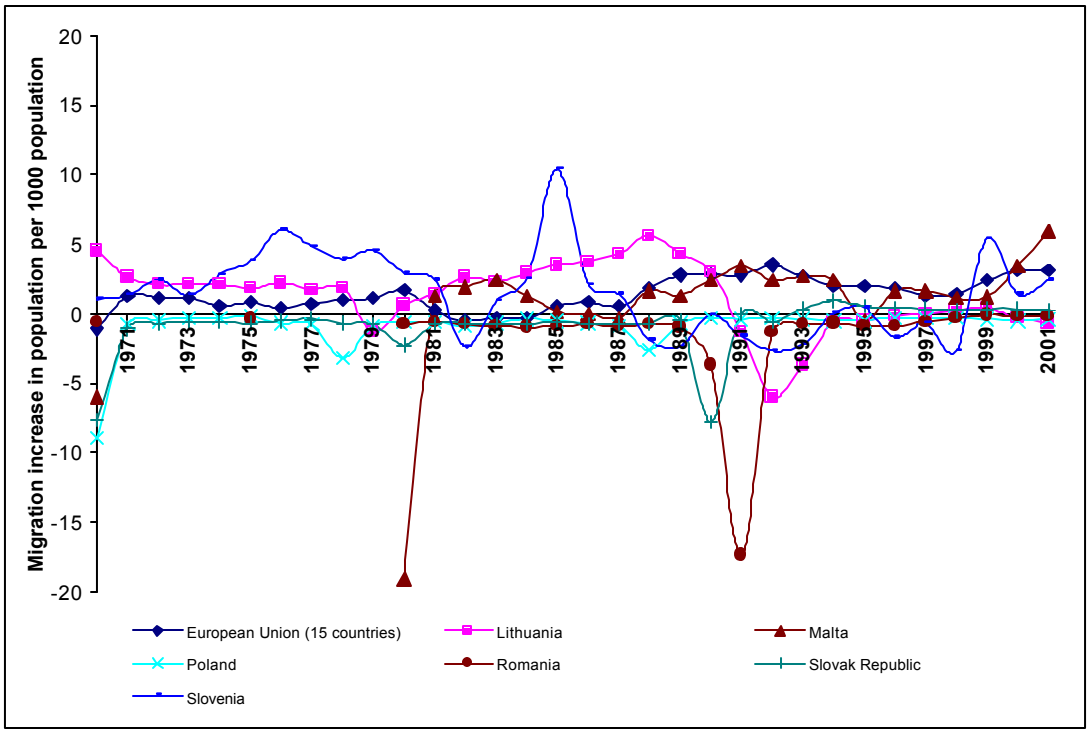
a: Portugal, 1975, 38.2

SOURCE: Eurostat NewCronos database (2002)

MG206-3.3

Figure 3.4: Crude Rate of Net Immigration, Applicant Countries 1970–2001



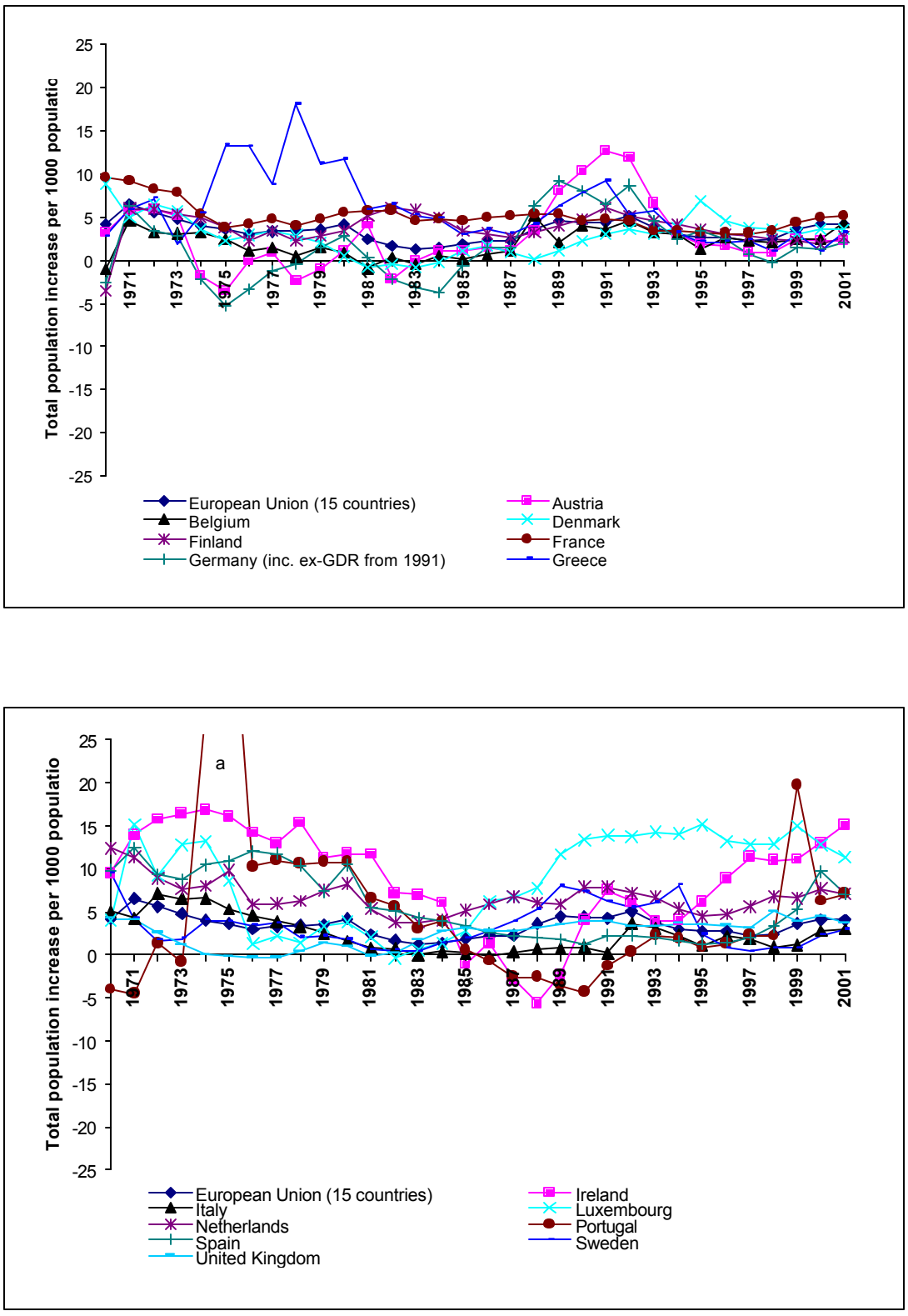


a: Cyprus, 1975, –45.3; b: Bulgaria, 1989, –25; c: Estonia, 1992, –21.7

SOURCE: Eurostat NewCronos database (2002)

MG206-3.4

Figure 3.5: Crude Rate of Total Population Increase, Member States 1970–2001

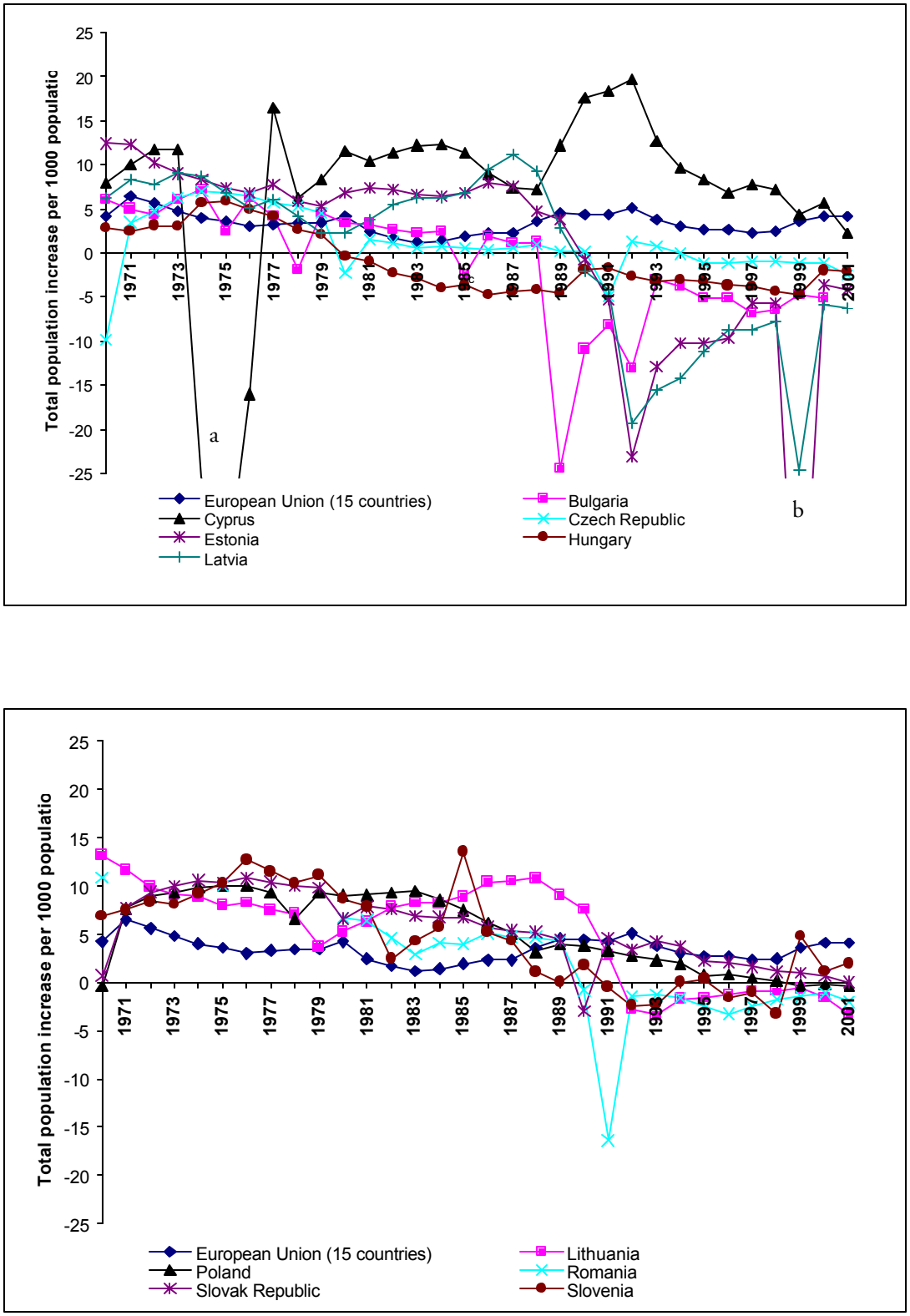


a: Portugal, 1975, 47.1

SOURCE: Eurostat NewCronos database (2002)

MG206-3.5

Figure 3.6: Crude Rate of Total Population Increase, Applicant Countries 1970–2001



a: Cyprus, 1975, –37.2; b: Estonia, 1999, –52.3

SOURCE: Eurostat NewCronos database (2002)

MG206-3.6

Age and Sex Structure

The structure of the population can be analysed in terms of its age and sex composition, which can be presented in the form of population pyramids. A two-way relationship exists between the structure of a population and the number of births, deaths and moves that occur within it. The age and sex composition of a population is not only entirely determined by past levels of fertility (births), mortality (deaths), and migration (moves), but is also a powerful influence on future levels of fertility, mortality, and migration.

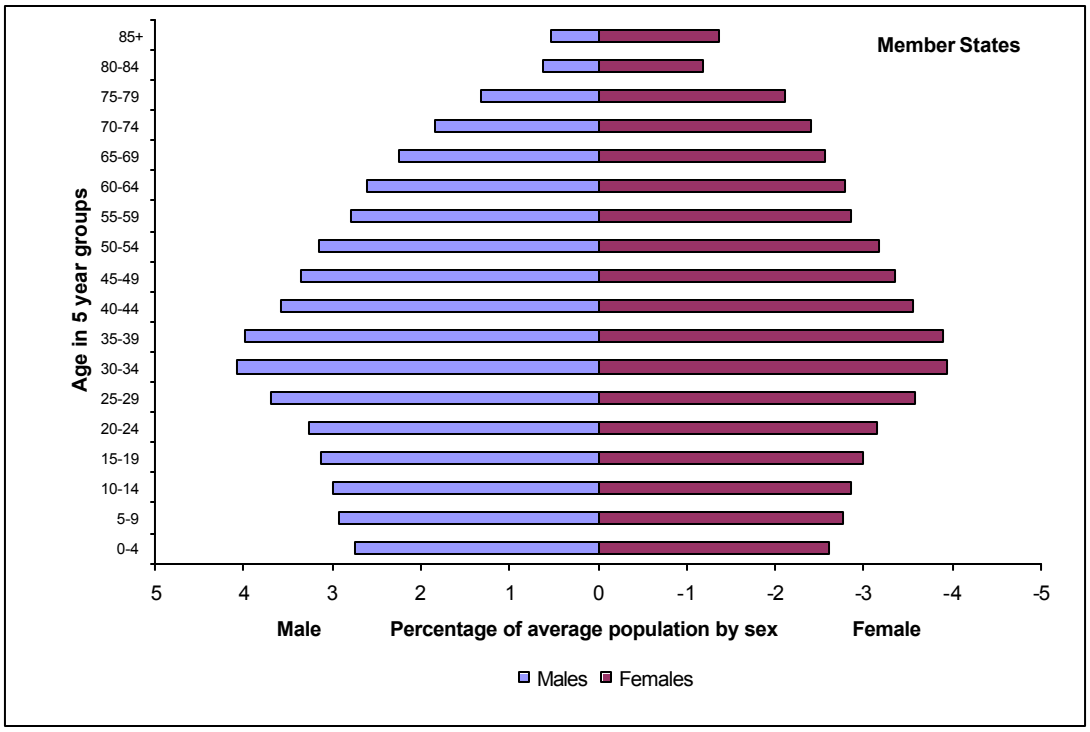
Population Pyramids. The population pyramids for the 15 Member States and all Applicant Countries (excluding Turkey) are given in Figure 3.7. There are four main points to draw out. First, the influence of declining fertility rates is seen in Figure 3.7 as the bases of both of the pyramids narrow. Second, for Member States the larger percentages of men between ages 25 and 39 (in comparison to women) is most likely an indication of net immigration, as immigrants tend to be men of working age.[15] Third, for Member States, the relatively higher percentage of women between the childbearing ages of 25 and 44 in 1999 has the potential to lead to higher birth rates when compared with Applicant Countries. Finally, the current population structure can drive future population structure, to the extent that as the small percentage of 0–9 year olds in 1999 move into childbearing ages by 2020, they are likely to yield yet fewer children.

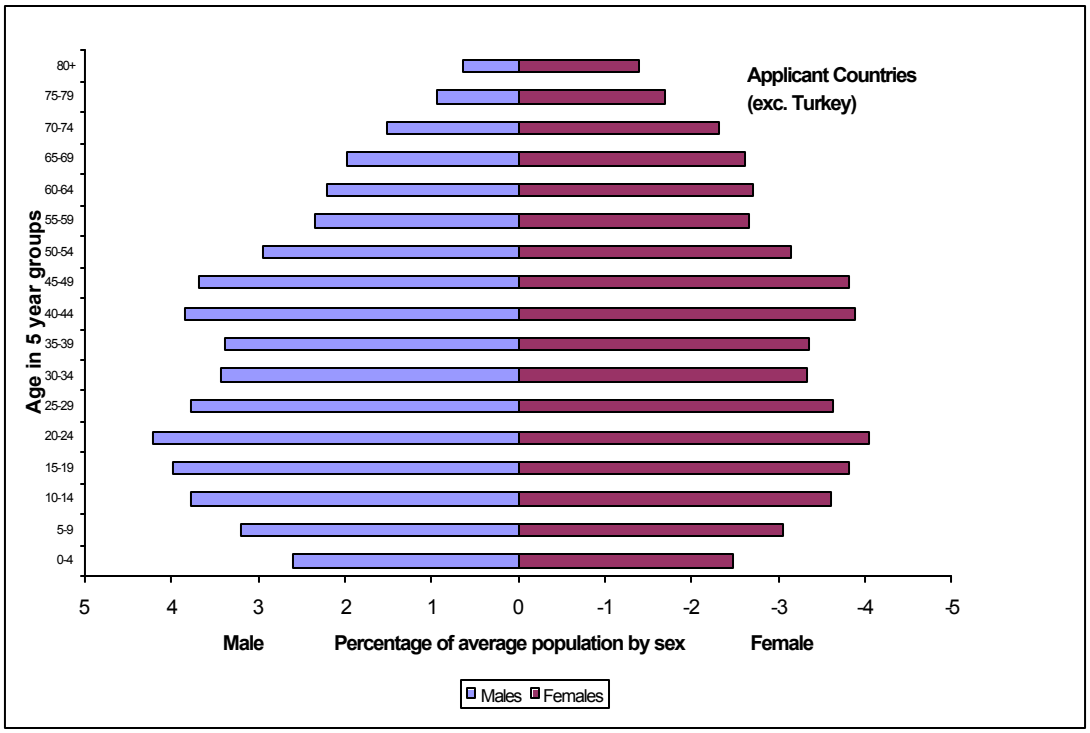
Old-age Dependency Ratio. Normally, the age distribution of a population is determined largely by fertility but modified by migration and mortality. As younger age groups continue to make up a shrinking percentage of the population, this has implications for the whole population. The major concern is whether a sufficient working-age population is available to support an increasingly older population. The old-age dependency ratio of economically-inactive older people (over 65 years) to economically active (15 to 64 years) across the Member States and Applicant Countries from 1970 to 2001 is given in Figures 3.8 and 3.9.

The general trend for the dependency ratios has been to rise during the 1970s, with a marked downturn in the early 1980s, which then took a steep upward reversal in the mid-1980s. The increase in old-age dependency ratios since the mid-1980s is a reflection of the fact that the population structure is moving towards including an increasing proportion of older people in relation to the economically-active population. For example, for Italy in 2001 every 100 economically-active people supported approximately 27 old people, compared with only 19 old people in 1985. The exceptions to the recent rise in old-age dependency ratio in the Member States include: Ireland (which saw a fall over the 1990s), Sweden (which has had the largest old-age dependency ratio over the period between 1977 and 2000), Austria, Denmark, and the UK (which have seen a levelling-off of dependency ratios since the mid-1980s).

[15] A more detailed analysis of population structure by citizenship/country of birth is presented for the case study countries in Chapter 4.

Figure 3.7: Population Pyramids, Member States Average and Applicant Countries' Average (Excluding Turkey), 1999

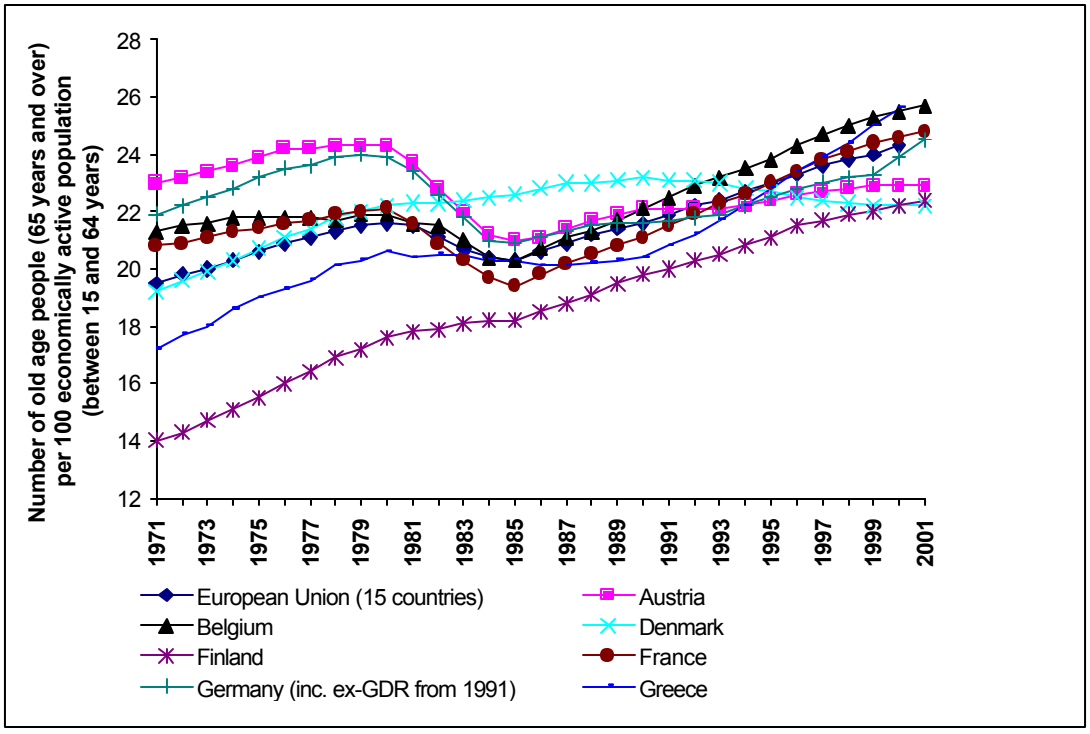


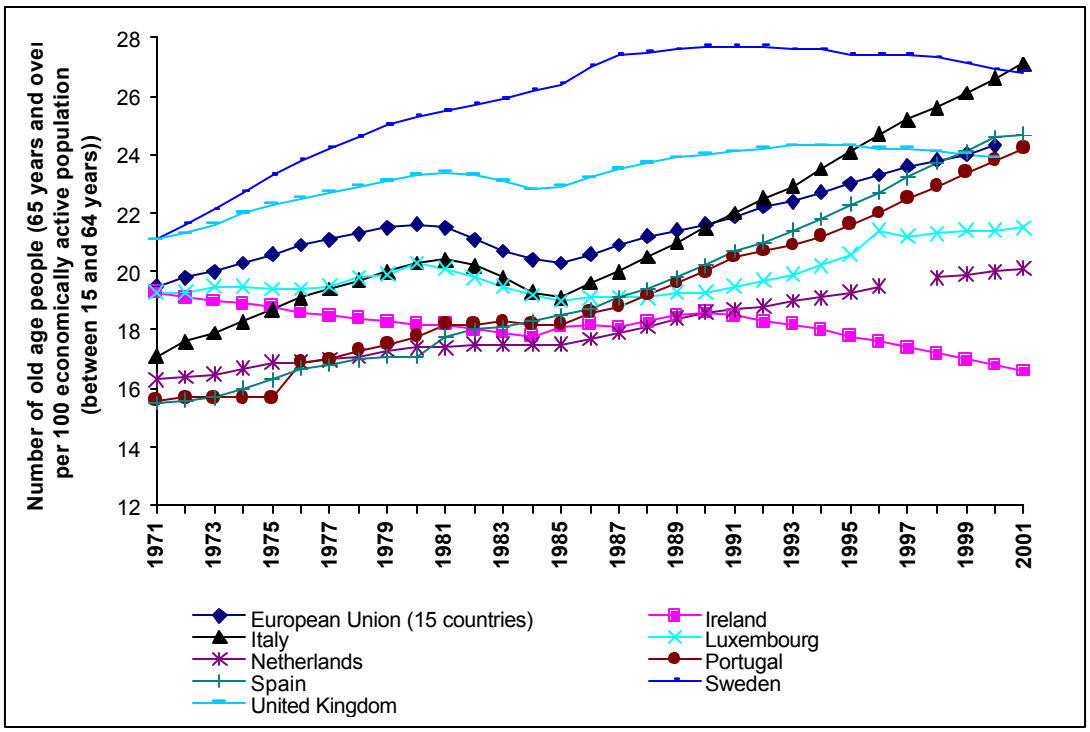


SOURCE: Eurostat NewCronos database (2002)

MG206-3.7

Figure 3.8: Old-Age Dependency Ratio, Member States 1970-2001

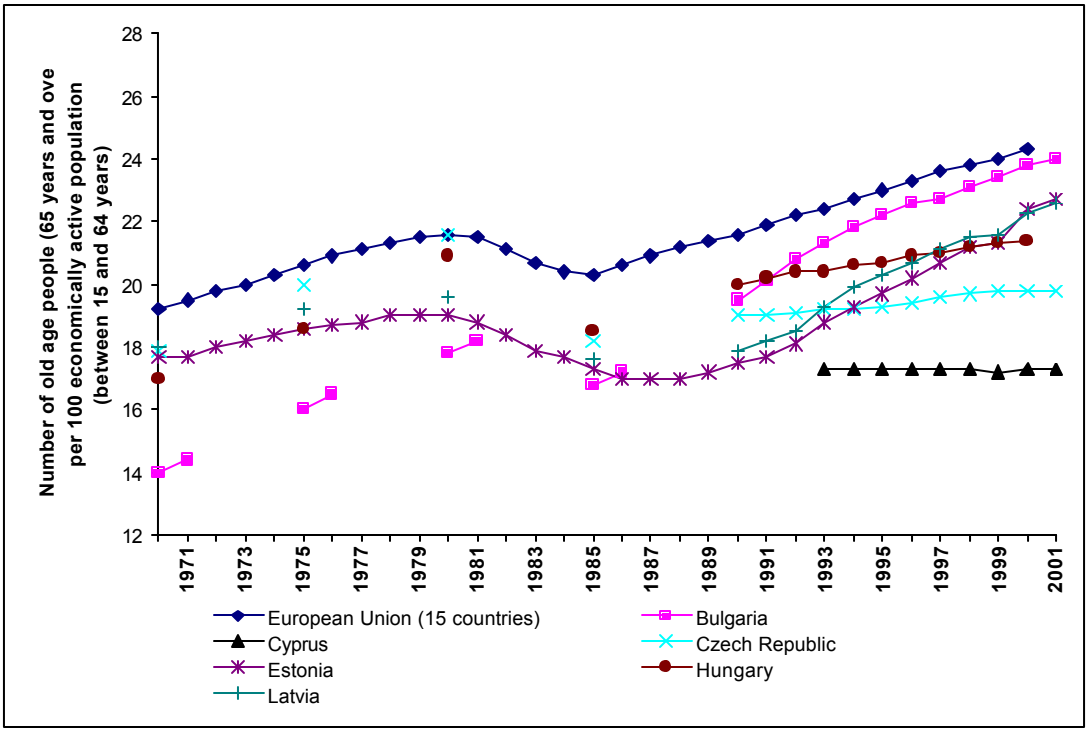


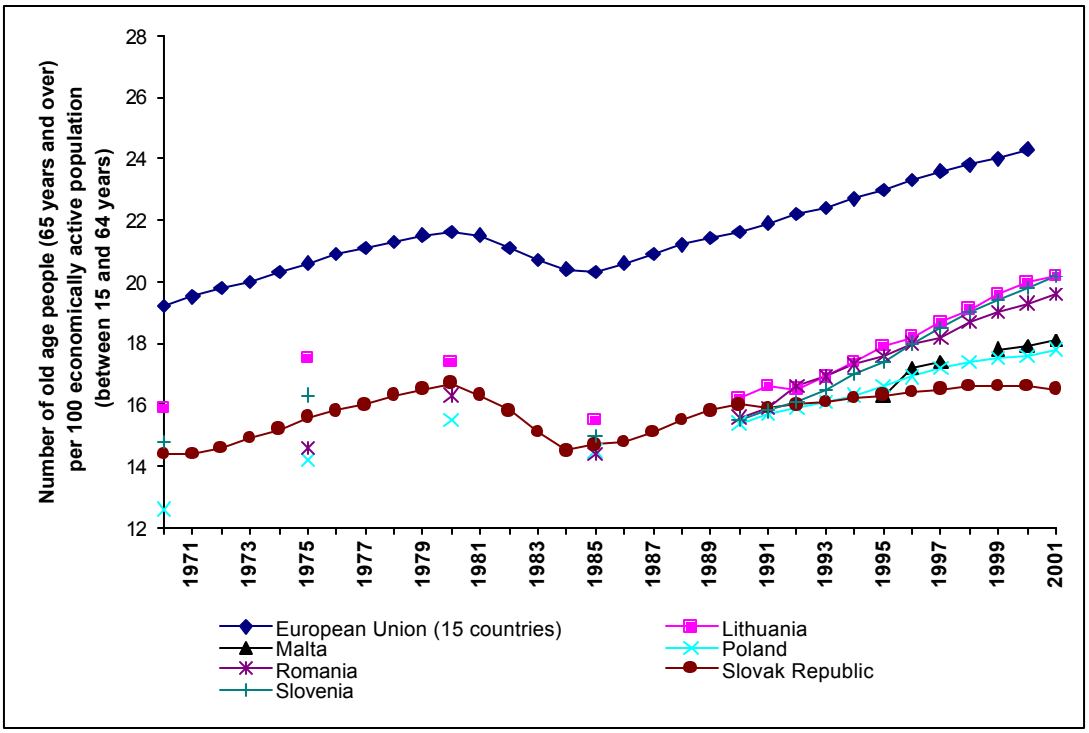


SOURCE: Eurostat NewCronos database (2002)

MG206-3.8

Figure 3.9: Old-Age Dependency Ratio, Applicant Countries 1970-2001





SOURCE: Eurostat NewCronos database (2002)

MG206-3.9

Underlying Demographic Trends

The structure and dynamics of a population result from the choices that are made by its individuals and households. These underlying demographic trends relate typically to fertility and international migration. Fertility levels are influenced by social decisions to marry, divorce, and cohabit, and by economic factors such as financial stability, as well as women's level of education and labour participation. If more women pursue higher education and decide to work, this leads to delay and reduces time for having and rearing children, which then may decrease the overall fertility rate of a country. International migration levels are influenced largely by economic and social conditions in both sending and receiving countries, and population movement has an impact on the population structure of both countries. This section reviews some trends that influence population structure and dynamics in terms of fertility rates (including trends in women's age at first marriage and birth of first child) and migration.

Fertility

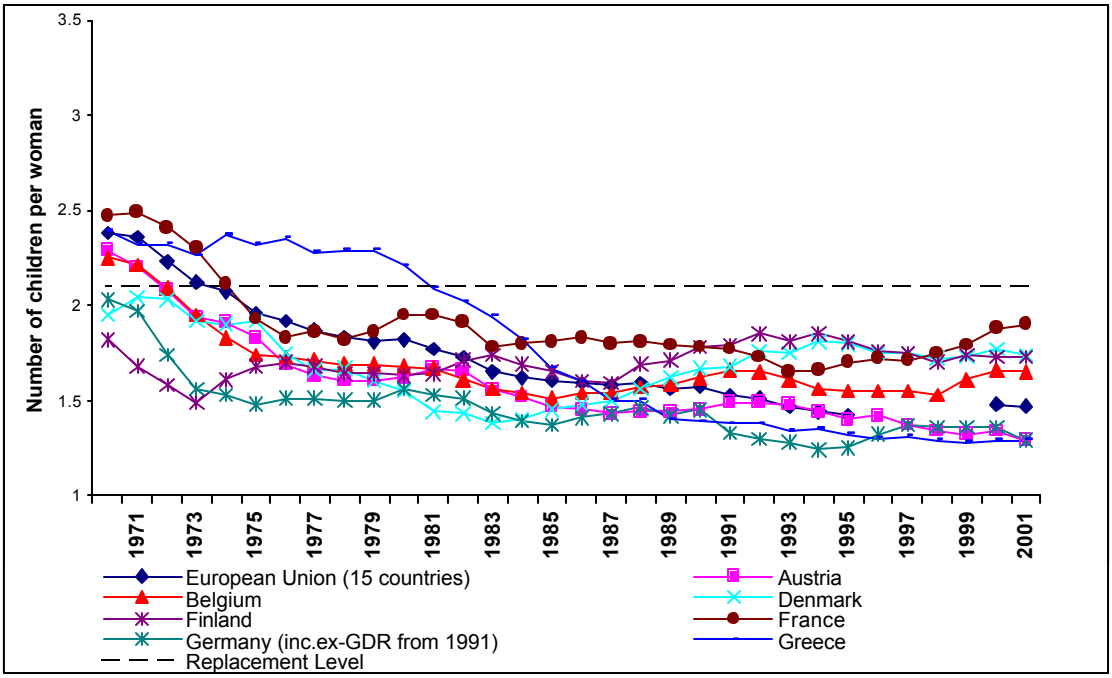
The total fertility rate (TFR) for a given year is a measure of the number of children that a woman would have over her childbearing years if, at each age, she experienced the age-specific fertility rate of that year; this measure gives a further indication of population structure and dynamics. The TFR can be used for international comparisons, as it takes into account differences in reproductive age structures. The TFRs for Member States and Applicant Countries are given in Figure 3.10 and Figure 3.11.

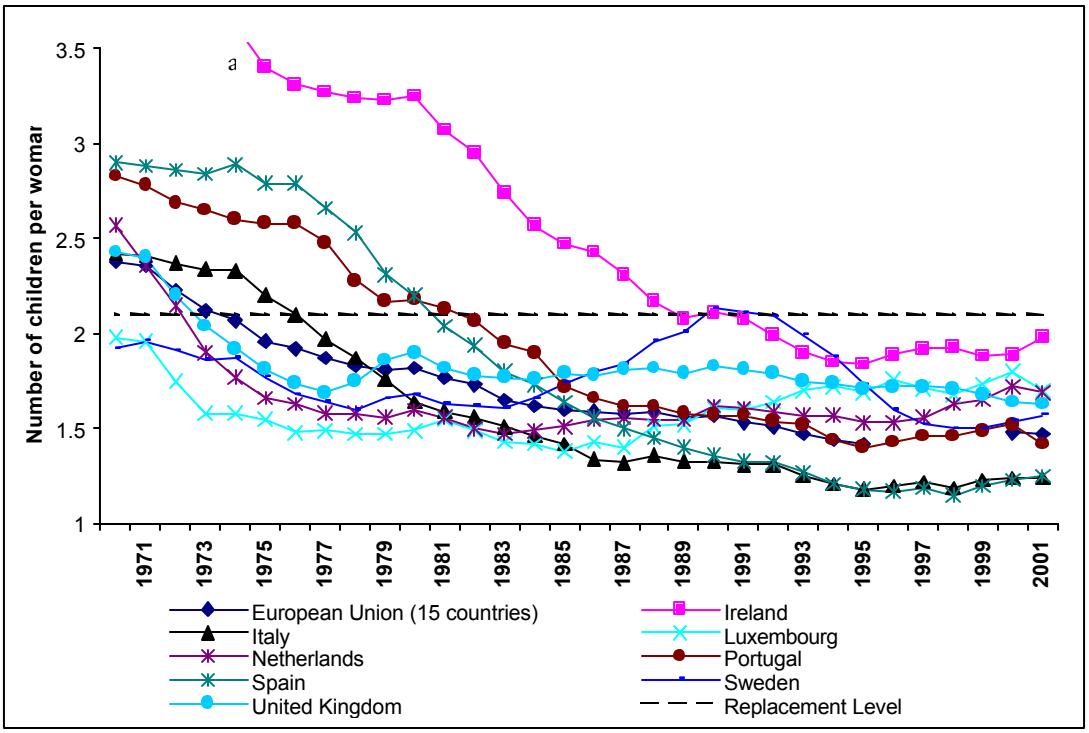
As often cited, the data shows that TFRs have fallen and are now below replacement level[16] in all Member States and Applicant Countries; however, this decline has moderated since the mid-1990s. This trend inevitably contributes to natural population decline, particularly among the younger age groups. In the 20-year period since 1982, all Member State countries except Ireland and Sweden, and the Applicant Countries of Bulgaria, the Czech Republic and Slovenia, have had TFRs continuously below replacement level. Furthermore, in the 10-year period since 1992, a number of countries, including Austria, Germany, Greece, Italy, and Slovenia, have experienced a TFR continually below 1.5 children per woman.

With regard to the Applicant Countries, these had all experienced TFRs above the EU 15 countries' average until the early 1990s, after which every Applicant Country saw a sharp downward turn, with all except Cyprus and Malta, falling below the EU 15 countries' average by the late 1990s.

[16] 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.

Figure 3.10: Total Fertility Rate, Member States 1970–2001



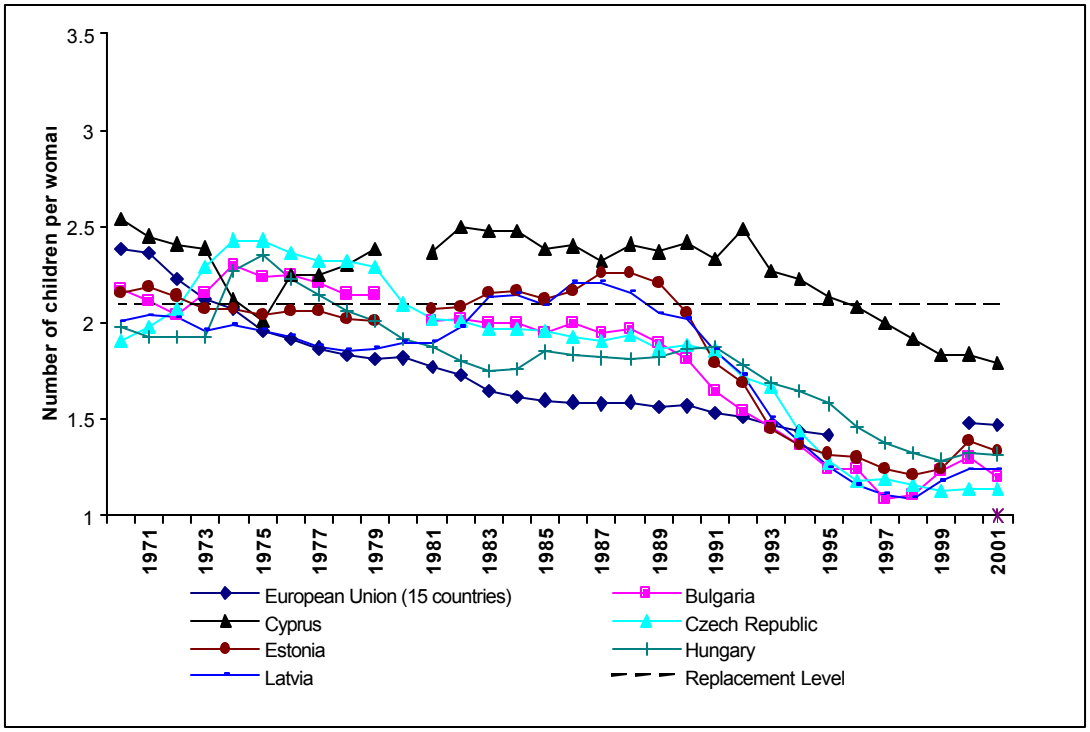


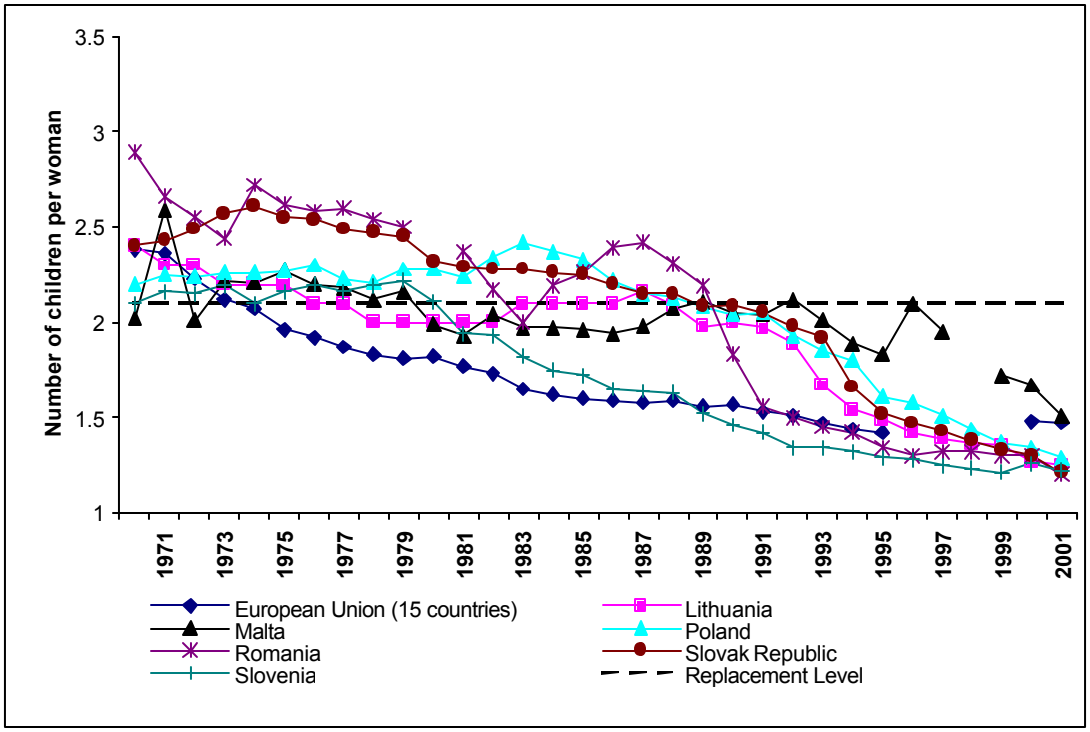
a: Ireland, 1971, maximum value of 3.99

SOURCE: Eurostat NewCronos database (2002)

MG206-3.10

Figure 3.11: Total Fertility Rate, Applicant Countries 1970–2001





SOURCE: Eurostat NewCronos database (2002)

MG206-3.11

There are several micro-level factors that appear to have led to low fertility rates across Member States and Applicant Countries. These include:

- decisions about marriage and cohabitation;
- decisions about childbearing;
- women's choices to pursue higher education;
- women's increased level of participation in labour markets and corresponding income; and
- desired living standards and family structures.

These first two of the above trends are reviewed next.

Mean Age of First Marriage. Marriage is one component to consider in examining fertility patterns. Before commenting on these trends it is important to note that in many countries, patterns of family formation are becoming less dependent on marriage and are being driven instead by broader social change in cohabitation and divorce. That said, trends in mean female age at first marriage[17] from 1960 to 2001 for Member States and Applicant Countries are given in Figures 3.12 and 3.13.

The mean female age at first marriage has been increasing steeply since the early 1980s in most of the Member States, where the mean female age of first marriage for the 15 EU countries in 1995 was 26 years, up from 23 years in 1980. Particularly notable is the increase across the Scandinavian countries, with mean female age of marriage in 2001 for Sweden at 30 years, Denmark at 29 years and Finland towards 28 years. However, this must be considered in the light that cohabitation is increasingly viewed as an alternative to marriage.

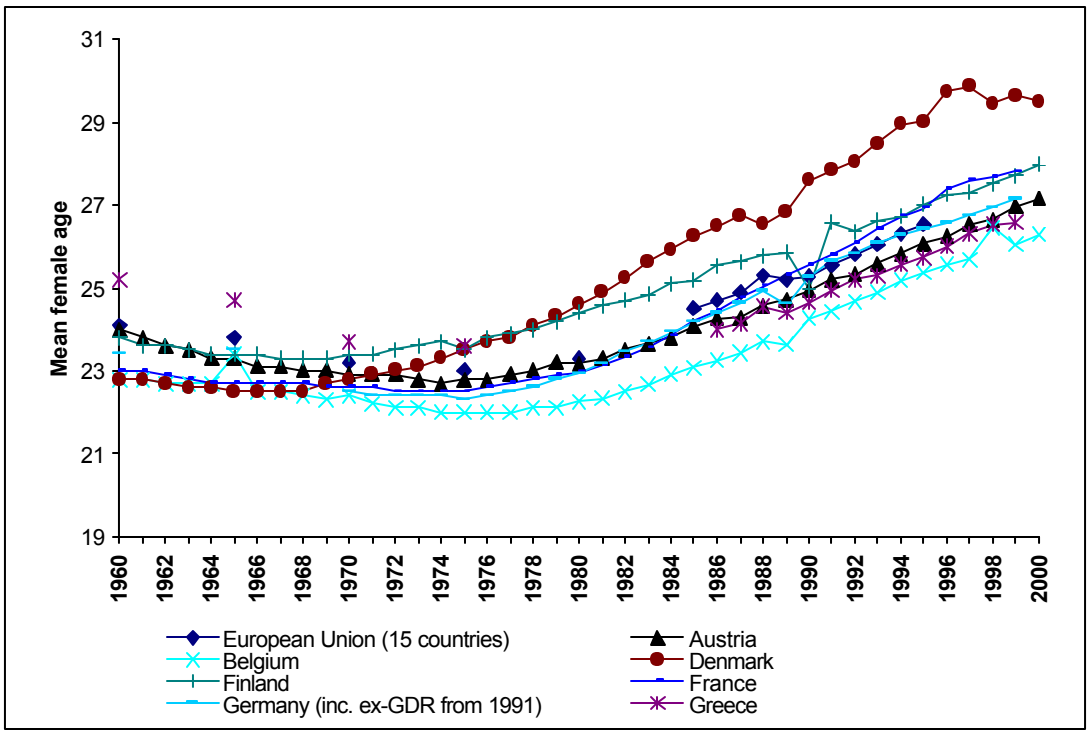
The Applicant Countries have also experienced an increase in the mean age of female marriage since the early 1990s, with the trend following, but remaining below, the EU 15 countries average. The mean age of first female marriage in 2001, as an average across the Applicant Countries (excluding Malta and Turkey), tended towards 25 years as compared with around 23 in the 1980s.

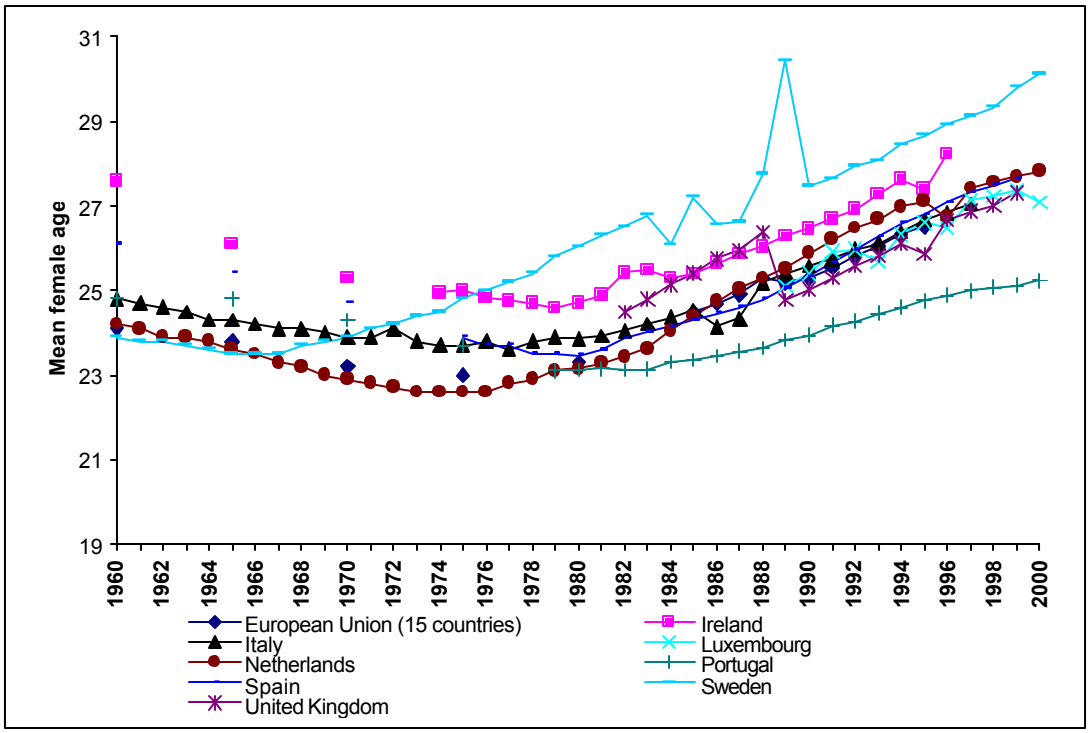
One of the factors that contributes to women delaying marriage is their choice to participate in higher education. For all Member States in 2000, over 69 percent of total graduates in tertiary education and training fields were female, with an EU 15 country average of 75 percent of graduates in tertiary education being female (Eurostat NewCronos, 2002). There are similarly high percentages of female graduates in tertiary education in 2000 across many of the Applicant Countries, with the exception of Romania.

Having received tertiary education, women are more likely to participate subsequently in the labour market. Given that women work, their rate of pay is an indication of the opportunity cost that they incur in leaving the labour market for childbearing and rearing. (More detailed levels of analysis are presented for the case study countries in Chapter 4.)

[17] In a given year, the average of the ages of women that marry for the first time.

Figure 3.12: Mean Age at First Marriage, Member States 1960–2000

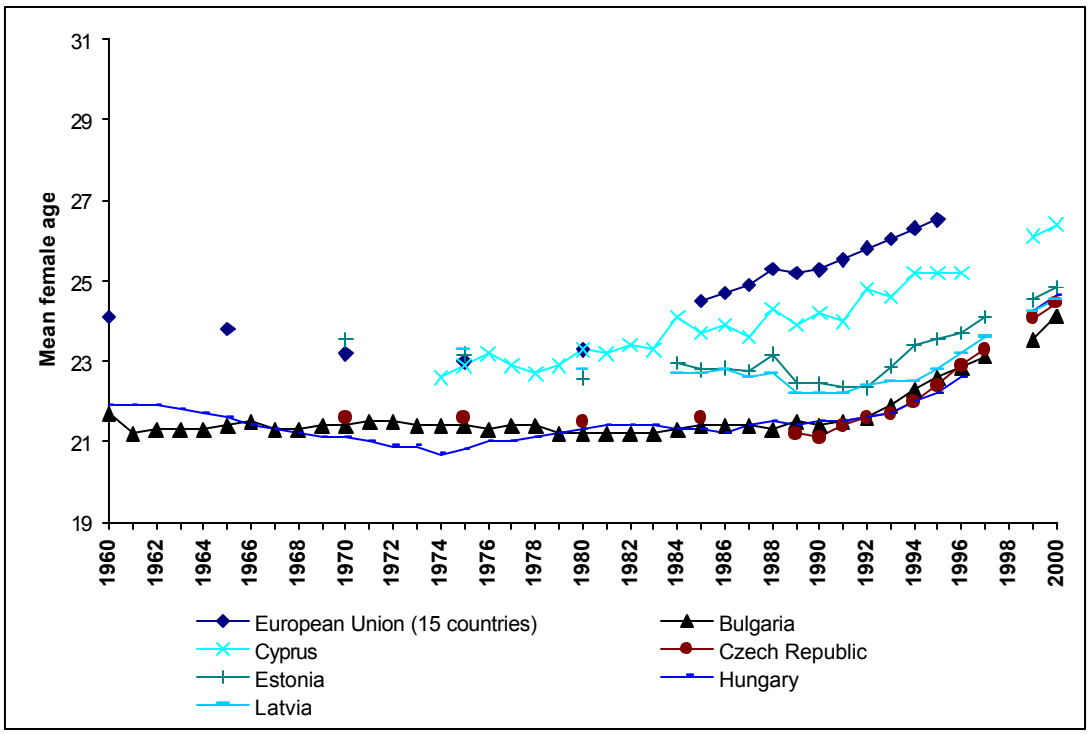


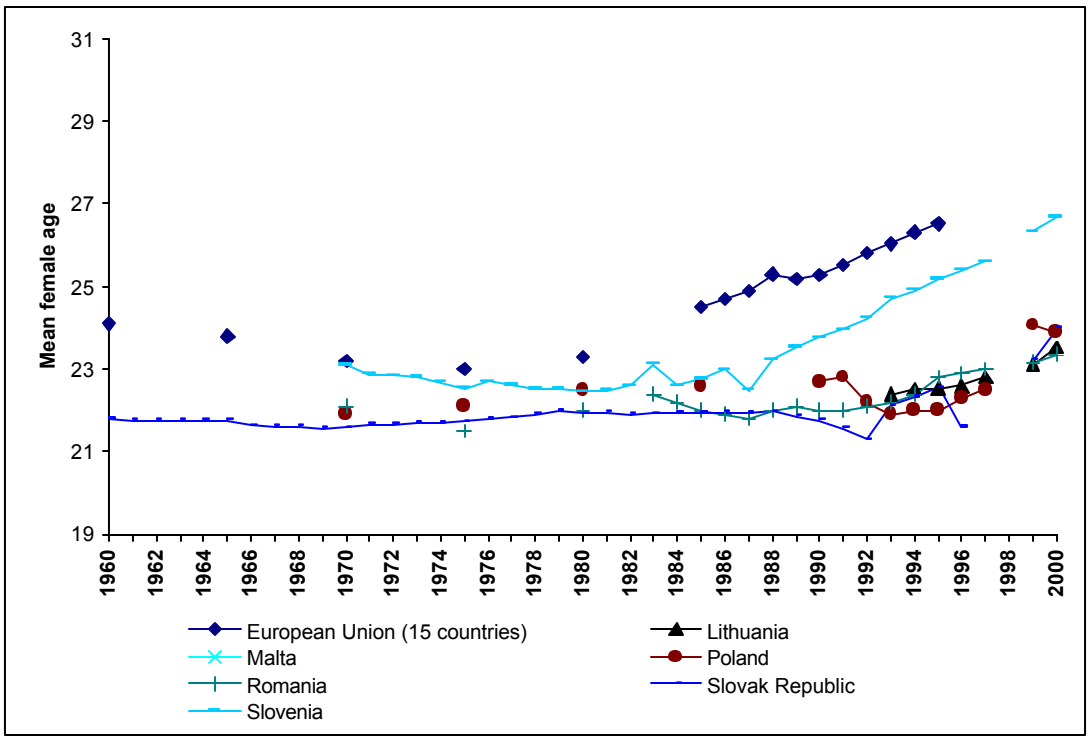


SOURCE: Eurostat NewCronos database (2002)

MG206-3.12

Figure 3.13: Mean Age at First Marriage, Applicant Countries 1960–2000





SOURCE: Eurostat NewCronos database (2002)

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Woman's Age at First Birth. The women's age at first birth is influenced by the age at which women marry or cohabit; their choice to pursue higher education their increased level of participation in labour markets and corresponding income as well as couples' desired living standards and family structures. Given these and other drivers, the mean female age at first birth for Member States and Applicant Countries is given in Figures 3.14 and 3.15.

The trends in the mean female age at first birth are similar to the trends seen in the mean age at first marriage (Figures 12 and 13). The mean female age at first birth has been increasing steeply since the turn of the 1980s for most of the Member States, from around 25 years to around 27 in 2000. The Applicant Countries have also experienced an increase in the mean female age at first birth since the early 1990s, from 23 years to nearly 25 years in 2000.

Migration

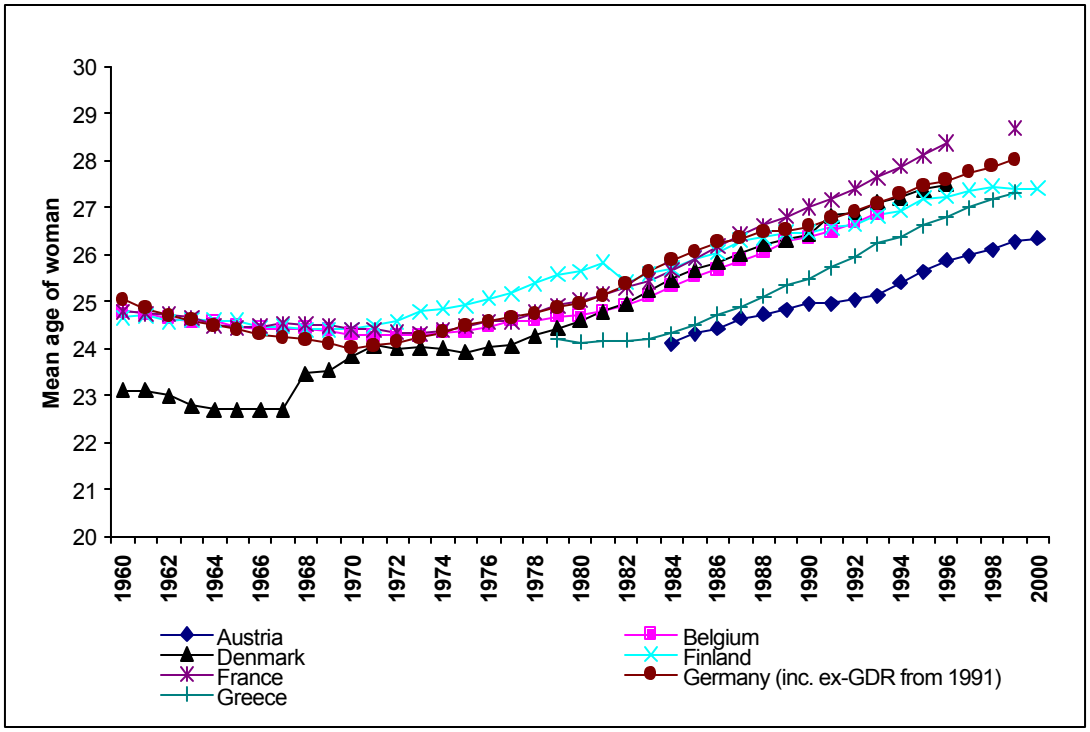
Underlying demographic trends in migration resulting from micro-level decisions about the international movement made by individuals and households also influence population structure and dynamics. Immigration into a country adds to its population, and emigration reduces it. Net migration is positive where the inflow of immigrants exceeds the outflow of emigrants, and it is negative where the reverse is true. Migration can be considered in terms of flows and stocks: measures of stock give total counts at any one point in time; and measures of flows, which are dynamic in nature, record the number of events occurring during a particular time interval (such as a year). However, it is important to understand that behind these simple concepts of migration lie more complex issues regarding the definition of migrants and measurement of migration.

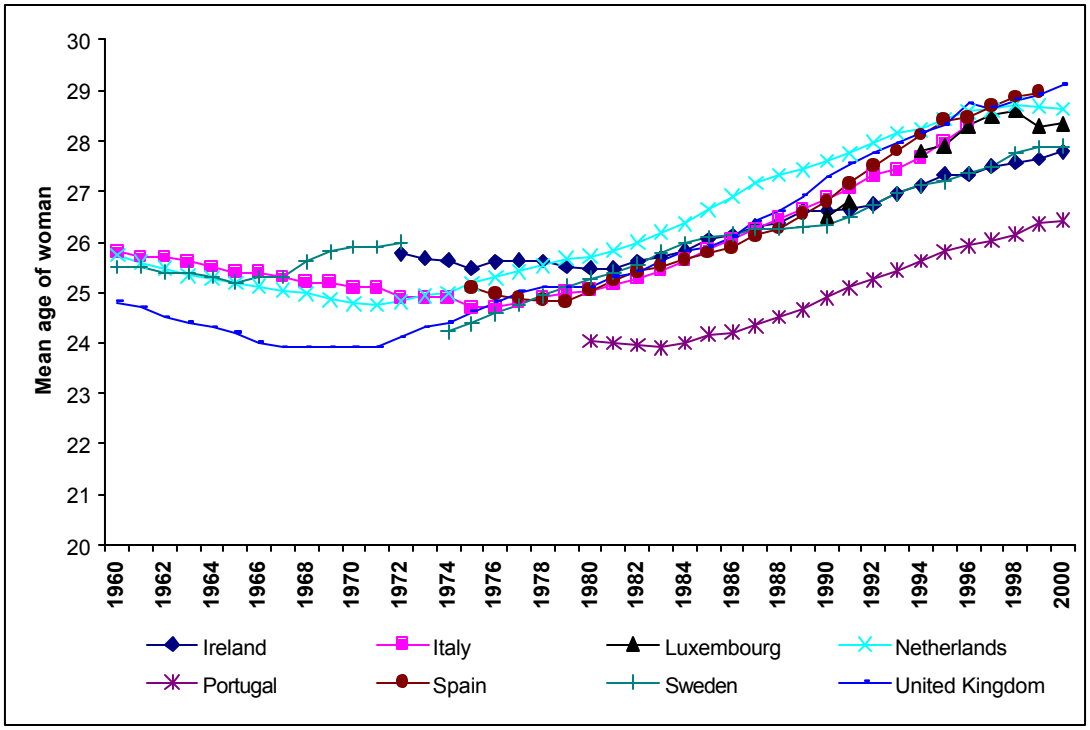
Figure 3.16 gives the components of the average annual crude rate (flow) of population growth in 2000 by natural increase and net migration. Within the Member States, population growth in 2000 occurred in Germany, Greece, Italy, and Sweden only because of immigration, given natural decreases. Furthermore, of the given Member States, Finland, France, and the Netherlands were the minority cases where natural increase was more significant than immigration in determining population change. For all Applicant Countries, only Cyprus, Malta, the Slovak Republic and Slovenia saw population growth in 2000. Of these countries, only Malta and Slovenia saw a greater increase due to immigration than natural increase. Latvia, Lithuania, and Romania experienced population decline in 2000 due to the combined effects of emigration and natural decreases.

Figure 3.17 gives an indication of the immigrant stock in 1999 – the percentage of non-citizens per total population.[18] Analysis of Figure 3.17 by gender shows that with the exception of Ireland, Sweden, and the UK, there are more male non-citizens than female ones resident in the populations. This reflects the general migration pattern that men are more likely to migrate in search of work, for example. Of the countries shown in Figure 3.17, Austria, Belgium, Germany, and Sweden have the highest levels of non-citizens in 1999, exceeding 5 percent of the total population.

[18] Another measure of immigrant stock is that of "foreign-born", which excludes non-citizens born in the host country.

Figure 3.14: Mean Age at First Birth, Member States 1960–2000

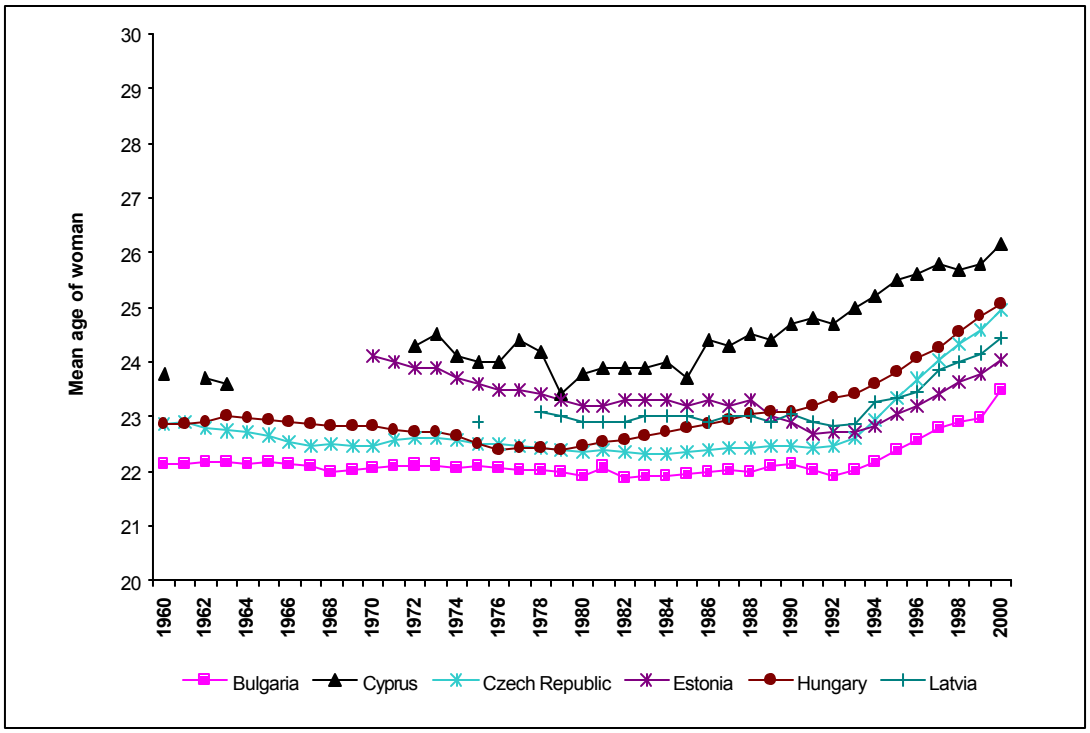


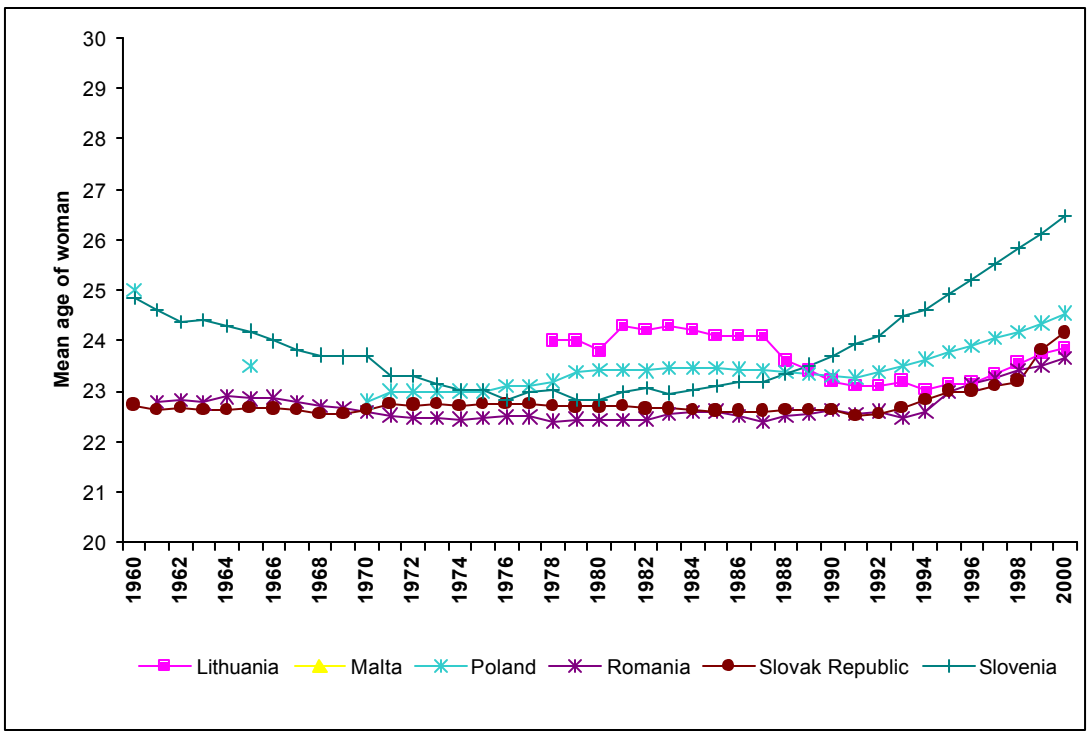


SOURCE: Eurostat NewCronos database (2002)

MG206-3.14

Figure 3.15: Mean Age at First Birth, Applicant Countries 1960–2000





SOURCE: Eurostat NewCronos database (2002)

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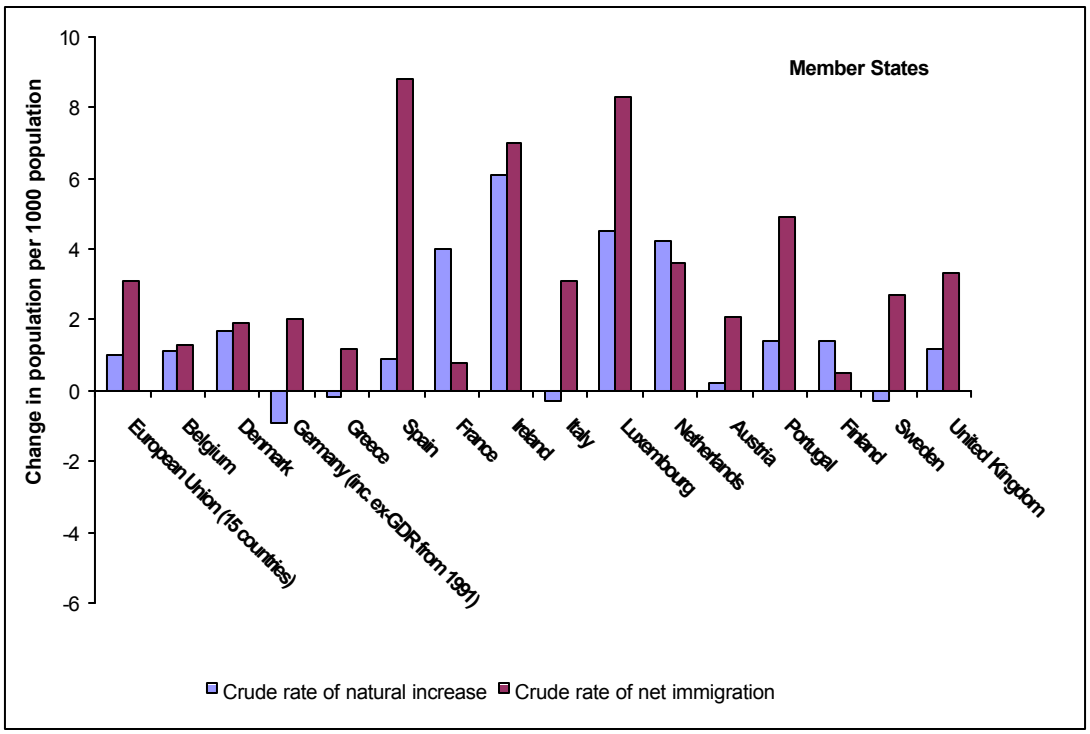
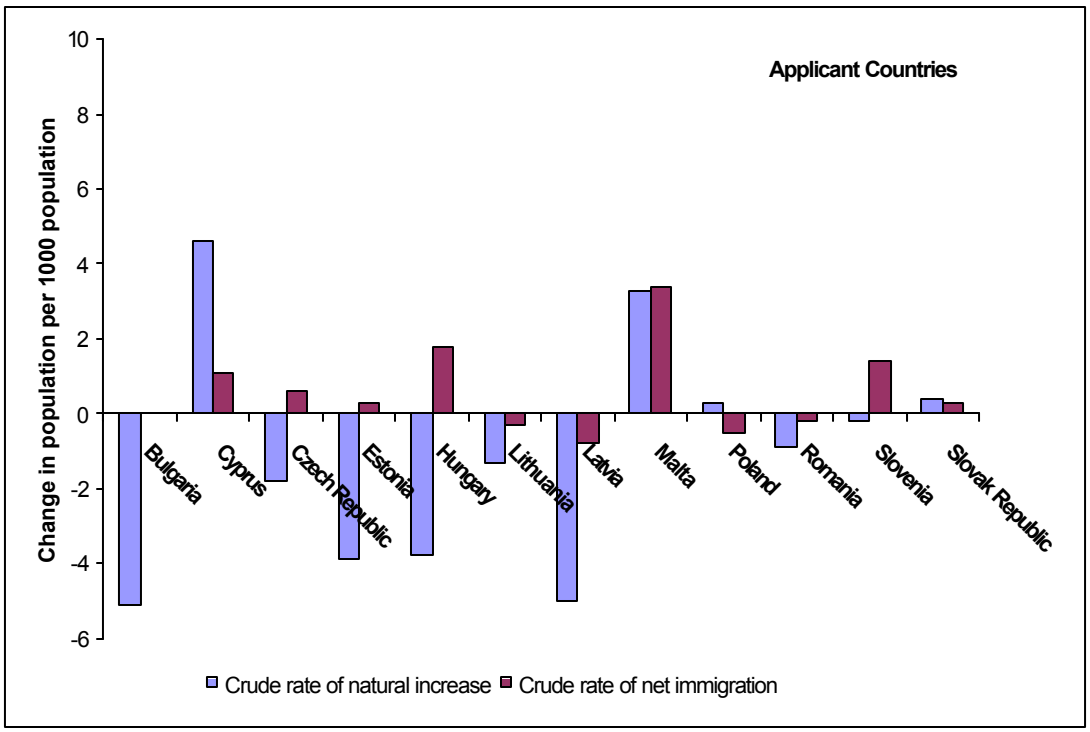
Figure 3.16: Average Annual Crude Rate of Population Growth by Component, 2000





SOURCE: Eurostat NewCronos database (2002)

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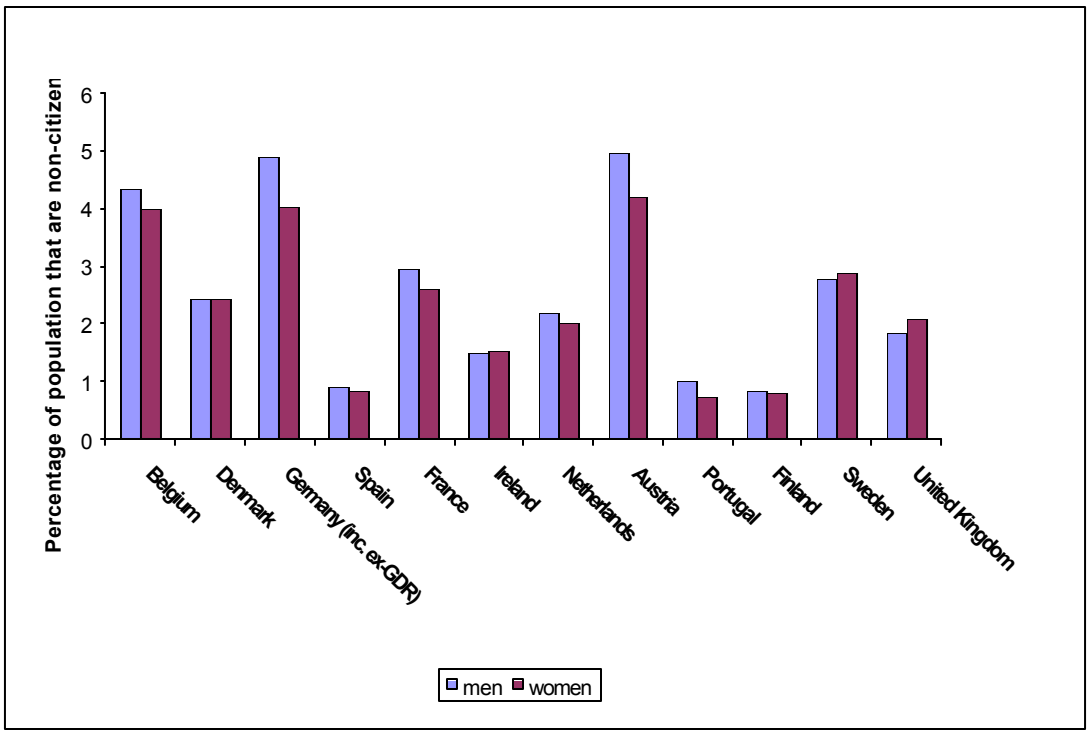
Figure 3.17: Percentage Stock of Non-Citizens by Gender, European Countries 1999



SOURCE: Eurostat NewCronos database (2002)

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Concluding Comments

In this chapter, we have given an overview of demographic developments that have taken place in the past 30 years in the EU Member States and Applicant Countries. The conceptual framework presented in Figure 1.1 was used to identify the data that were required to answer our research questions. Very often these data were available from the Eurostat NewCronos database (2002). However, in some instances relevant data for comparison were incomplete or missing. Therefore, the conclusions below relate to both demographic developments (where data were available) and lacunae in knowledge (where data were not available).

Demographic Developments

As explained above, changes in the composition and size of a country's population result from changes in the natural growth rate (birth rate vs. death rate) and the net migration rate (immigration rate vs. emigration rate). We discuss the conclusions regarding each of these demographic developments below.

As regards natural growth rate, the trends in all the countries studied are similar. Although differences in the degree of change occur, in all countries the trend is towards a declining natural population increase or even a natural population decrease. There are a number of underlying demographic developments that explain the fall in natural population growth. Generally, the micro-level trends underlying these developments are also similar for all studied countries, although differences in the degree and timing of the changes occur:

- age at first marriage has been rising since 1980 in all EU Member States and since 1990 in all Applicant Countries;
- age at birth of the first child has been rising since 1980 in all EU Member States and has steeply increased in all Applicant Countries since 1990;
- fertility rates have fallen and are now below replacement levels in all the studied countries; and
- old age dependency has been increasing since the mid-1980s and is now greater than ever.

Thus it can be concluded that, despite the apparently large cultural, social, political, and economic differences among European countries, the demographic trends are rather similar (although in absolute terms, differences in fertility rates, old-age dependency, etc. do exist). As change in the natural growth rate occurs slowly, it is relatively easy to project what the future population will look like, and where potential problems may arise. However, for the same reason it is difficult to influence these developments through policymaking.

In terms of international migration, the picture is more complicated. Generally, the net immigration is low in most countries, but there have been periodic large outflows or inflows in some countries. In addition, Figure 3.3 and 3.4 illustrate that ad hoc changes in net migration rates might occur, implying that it is hard to forecast these changes. One of the factors that might cause an abrupt change in migration trends is the enlargement of the EU, which is expected in 2004. Future trends in migration and their consequences for the population structure are thus more difficult to forecast, but it is likely that these can be influenced more easily by policymaking.

Knowledge Lacunae

Demographic data concerning trends in population structure have been collected for a long time and in many countries. However, as the conceptual framework indicates, information on macro factors, such as changes in lifestyle (e.g. individualisation), is needed to explain the reasons behind these trends. Here, it is more difficult to find relevant data. In addition, we were also interested in understanding the consequences of demographic developments for the socio-economic situation in general, and social cohesion in particular. However, there is also a lack of longitudinal and cross-national data on socio-economic outcomes. Therefore it is difficult, if not impossible, to draw any hard conclusions on the relationship between demographic developments and social cohesion.

CHAPTER FOUR

Five Case Studies of Demographic Change – France, Germany, Poland, Spain, and Sweden

Introduction

In addition to the review of literature and data, we conducted five cases studies in order to gain more insight into the policies that countries formulate and implement to affect fertility and subsequent impacts on population structure, and to gain more insight into the effectiveness of those policy options. Each of the five case studies focused on one European country that was selected based on defined criteria: France, Germany, Poland, Spain, and Sweden. Using the five case study countries, we developed and attempted to answer five specific research questions, one for each country.

1. Can the relatively high fertility rate in France in the period 1975–now be explained by French family policy, and if not, which factors might contribute to it?
2. Can the divergent trends of fertility levels between the GDR and the FRG be explained by the different family policies in those two countries?
3. How have changes in family and social policy related to changes in fertility during the last 50 years in Poland? In particular, given Poland's relatively recent transition to a free market economy, what policies and other factors may have contributed to its dramatic drop in fertility during the 1990s?
4. Can the relatively low fertility rate in Spain in the period 1975–now be explained by the lack of family policy, and if not, which other factors might contribute to it?
5. Is it possible to explain the rollercoaster nature of fertility in Sweden since the 1970s by specific policy measures and/or contextual factors?

In the following, first we describe the criteria that were used for the selection of case study countries. In the next sections we discuss each of the case study countries. In the final section we discuss the conclusions that can be drawn from the case studies.

Selection of Case Study Countries

In the selection of case studies, we have used two different sets of criteria. The first set was used to cluster the case study countries, based on data that are crucial for answering the research questions of this project. The second set was more pragmatic and was used to pick specific countries from the clusters resulting from the first selection round. The two sets of criteria are named "data generated criteria" and "pragmatic criteria" respectively.

Data Generated Criteria. As the conceptual framework in Chapter 1 indicates, there are three demographic indicators that are crucial for the composition of a country's population and potential changes therein, namely international migration, fertility, and mortality. As we also

indicated, our project does not focus on policies that are aimed at intervening in mortality rates; thus, we focus primarily on fertility and, to a lesser extent, migration. Therefore, we have characterised European countries based on their fertility rates, migration rates, and whether they are Member States or Applicant Countries.

- Fertility Rate
  We have distinguished European countries with an extremely low (also called "low low") fertility rate from other European countries. Low low fertility was defined as a total fertility rate below replacement (i.e. below 2.1) in all of the last 20 years and below 1.5 for at least one of those years.
- Migration Rate
  In terms of migration rate, we have distinguished high and low migration. High immigration was defined as a sum of the crude net immigration rate over the last 10 years, higher than 20. That is an average annual rate of greater than 2.0 per 1,000.
- Member States vs. Applicant Countries
  This criterion was considered to be important due to the fundamentally different histories and policies of these countries, and the resulting differences in the way that these countries approached issues related to their population structure.

Clustering on the basis of the key criteria resulted in the six clusters of countries shown in Table 4.1.

Pragmatic Criteria

In addition to data-generated criteria, we have used pragmatic criteria to make a final selection of case study countries. In the selection process, the following pragmatic criteria were employed:

- Availability of Literature and Data
  In order to conduct a thorough analysis of a case study, it is important that literature and data on the case study country are available. This does not mean that we selected only countries for which sufficient literature is available. However, it does mean that wherever we had to choose between two countries, we usually selected the country for which most information was available. From the literature review, we knew that there is relatively extensive information available on France, Germany, Sweden, the Netherlands and the UK, and relatively little information on, for example, Estonia, Italy, and Spain.
- Analytical Capacity at RAND Europe
  A second pragmatic criterion was the presence of expertise on a specific country, and the availability of RAND Europe project team members who possess the necessary language skills to study the literature on a specific country. The former was important because in-country expertise would make it easier to interpret results and to "sanity check" our findings. The latter was important because we expected that some of the relevant information would not be available in English.
- Representation of European Regions
  Finally, we decided, in consultation with the European Commission, to use geographic spread as a final criterion for the selection. It was considered to be important to cover the major regions in Europe.

Our initial aim was to undertake five case studies. The clustering process resulted in six clusters. To arrive at five case studies, we decided to reject Cluster F because of the unique character of the situation in Malta. Based on the pragmatic criteria, we selected the following five countries from

Table 4.1
Clustering of Selected European Countries on the Basis of the Key Criteria

Cluster	Fertility	Immigration	EU status	Country
Cluster A	low low	high	Member	Austria, Denmark, Greece, ***Germany***, Luxembourg, Netherlands, ***Spain***
Cluster B	low low	low	Applicant	Bulgaria, Czech Republic, Hungary, Slovenia
Cluster C	other	low	Applicant	Cyprus, Estonia, Latvia, Lithuania, ***Poland***, Romania, Slovakia
Cluster D	other	low	Member	Belgium, Finland, ***France***, Portugal, United Kingdom
Cluster E	other	high	Member	Ireland, ***Sweden***
Cluster F	other	high	Applicant	Malta

the five clusters: France, Germany, Hungary, Poland, Sweden. However, it was then realised that the third criterion of geographic spread was not met, as no southern European country was included. Therefore, on the advice of the European Commission, we decided to replace Hungary with Spain.
Thus, the five case study countries are: France, Germany, Poland, Spain, and Sweden. For each of these countries, we studied the available literature, defined a research question that reflects some of the unique characteristics of that country, and attempt to answer that question by discussing the following issues.

- Demographic trends and figures: what is the past, current, and projected future demographic situation?
- History of policy efforts: what is the current policy and how did it evolve?
- Policy impacts: what is the effectiveness of the policy efforts?
- Overview: what can be learned from the case study?

In the remainder of this chapter we report on our case study findings, by alphabetical order of country: France, France, Germany, Poland, Spain, and Sweden. However, in selecting these five case studies countries and in identifying the research questions above, we do note that there are policy and social economic environments that we have not addressed. Most notable are the more laissez-faire economics of the UK.

Case Study: France

In the case study on France, which is an example of a low migration Member State (Table 4.1), we explore whether there is a relationship between two of the most outstanding characteristics of demographic development in France, namely (1) the relatively high fertility level and (2) its old and strong tradition of family policy.

- Relatively High Fertility Rate
  In recent years, France has maintained a relatively high level of fertility in comparison with other European countries. In 2001, the total fertility rate of 1.9 children per woman in France was the second highest (behind Ireland) of all EU Member States and Applicant Countries.

- Strong Tradition of Family Policy
  The population debate has particular relevance in the case of France, where early decline in fertility has prompted a deep and ongoing concern and has led to population policies in order to encourage immigration and higher fertility (Tapinos, 2000). Thus, the oldest tradition of family policy is found in France, where the need for such a policy was first discussed in the 19th century and led to the drafting of the Family Code in 1939.

In a recent article on fertility and family policies in France, Letablier (2003) introduces the term "fertility paradox" to describe the demographic situation in France. She defines this as "the combination of a 'not so bad' fertility rate compared to other European countries, with a high level of economic activity for mothers". More specifically this means that, based on the current literature on the relationship between employment status and fertility, we would expect a low fertility rate in France. However, in practice, the fertility rate is relatively high compared with other European countries. In this case study, we focus on the following research question:

> *Can the relatively high fertility rate in France since 1975 be explained by French family policy, and if not, which other factors might contribute to it?*

In the first section of this case study, we discuss the demographic trends that have taken place in France during the last few decades, and we briefly discuss population projections for the next decades. In discussing demographic trends, we pay most attention to fertility, as this plays a crucial role in answering our research question. In the second section, we focus on policies designed to influence demographic developments. We discuss which policies have been introduced in the past century, and we describe those that are currently in place. In this section we focus on family policy, as it is key to our research question. In the third section, we discuss what is known about the relationship between policy and demographic developments in France. We look at both the relationship between family policy and fertility and alternative explanations for the relatively high fertility in France. In the final section, we summarise what can be learned from the case study on France.

Demographic Trends and Figures

In order to answer the research question, it is important to have an understanding of the characteristics of the current French population and of the demographic developments that have led to this situation. Table 4.2 gives an overview of demographic and socio-economic data that describe the French population. Below the table, we discuss the trends and figures that are crucial to answering the research question, namely population growth rates and related trends in fertility rates, marriage rates and household composition. Finally, we describe the population projections for France.

Population Size and Growth

France is experiencing positive population growth, both because of positive natural increase (more births than deaths) and positive net immigration. In 2002, there were 796,000 births and 550,000 deaths, leading to a natural growth of 246,000 persons, and on net the country gained 67,000 persons through immigration. The total surplus, i.e. the sum of natural and migratory balance, amounted to 313,000 persons, which was above the figure of 300,000 for the third year running. The amount of natural population growth was lower in 2002 than in 2001, due to the fact that between 2001 and 2002 the number of births in France fell and the number of deaths increased, but the net number of immigrants increased between the two years.

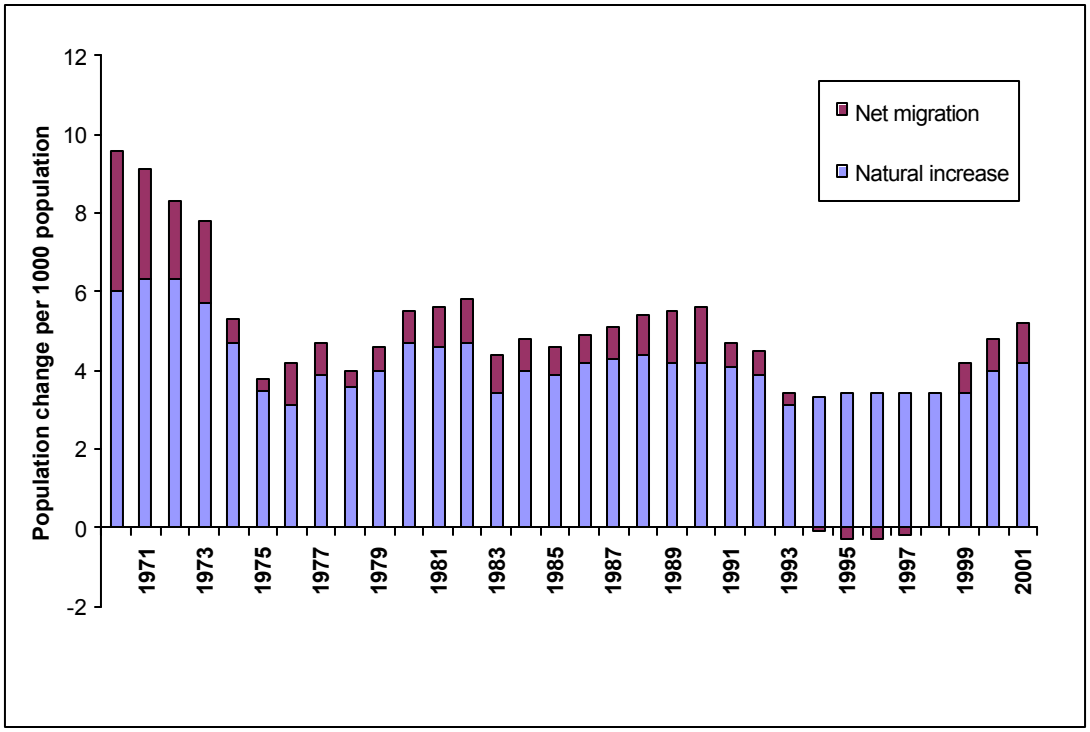
Table 4.2
General Population Characteristics: France

Population Size and Growth			Source	Year
Total population	59,037,225	people	Eurostat	2001
Crude rate of population growth rate	5.2	growth/1,000 population	Eurostat	2001
Crude birth rate	13.1	births/1,000 population	Eurostat	2001
Crude death rate	8.9	deaths/1,000 population	Eurostat	2001
Rate of natural increase	4.2	natural increase/1,000 population	Eurostat	2001
Net immigration rate	1.0	net immigrants/1,000 population	Eurostat	2001
Family formation				
Total fertility rate	1.90	children/ woman	Eurostat	2001
Mean age at first birth	28.7	years	Eurostat	1999
Percent of births outside of marriage	42.6	%	Eurostat	2000
Marriage rate	5.1	marriages/1,000 population	Eurostat	2001
Mean age at marriage	27.8	years	Eurostat	2000
Divorce rate	2.0	divorces/1,000 population	Eurostat	1999
Life expectancy at birth – male	75.5	years	Eurostat	2001
Life expectancy at birth – female	83.0	years	Eurostat	2001
Population composition				
Ethnic composition	Celtic and Latin with Teutonic, Slavic, North African, Indochinese, Basque minorities		CIA	2003
Religion	Roman Catholic 83–88%, Muslim 5–10%, Protestant 2%, Jewish 1%, unaffiliated 4 %		CIA	2003
Sex ratio (total population)	0.95	male/ female	CIA	2003
Age distribution: 0–14 years old	18.8	%	Eurostat	2001
Age distribution: 15 – 64 years old	65.1	%	Eurostat	2001
Age distribution: 65 and over	16.1	%	Eurostat	2001
Dependency ratio (age 0 – 14 and 65 + to 15–64)	53.7	%	Eurostat	2001
Economy and human capital				
GDP per capita	25,700	purchasing power parity $ US	CIA	2002
GDP – real growth rate	1.0	%/year	CIA	2002
Unemployment rate	8.5	%	Eurostat	2001
Female activity rate	62.3	% of 15–64 years old	Eurostat	2001
Women per 100 men graduating from tertiary education	124.3	women/100 men	Eurostat	2000

SOURCE: Eurostat NewCronos database (2002) and Central Intelligence Agency (CIA) (2003) http://www.cia.gov/ cia/publications/factbook/index.html).

Figure 4.1 shows the annual rates of population change between 1970 and 2002, and the contributions of natural increase and net immigration to those rates. The population growth rate is positive, and at least 0.33 percent (but never exceeding 1 percent), during this period. In all the years over these three decades, natural increase was the main factor contributing to the overall growth rate. Over the three decades shown in Figure 4.1, population growth rates were highest in the early 1970s due to both the highest rates of natural increase and net immigration over this period. The rate of population growth has not changed much since then, varying between about 4 and 6 per 1,000. Net immigration was generally positive over the three-decade period shown, with the exception of 1995–1998, when there were small net outflows. Net immigration has been positive since 2000 and is about the same level that it had been between the mid-1970s and early 1990s.

Figure 4.1: Crude Rate of Population Change by Component: France, 1970–2001



SOURCE: Eurostat NewCronos database (2002)

MG206-4.1

Migration plays a minor part in population growth in France: only one-fifth of total growth is attributable to this, the other four-fifths being accounted for by the surplus of births over deaths. France differs in this respect from the majority of its European partners whose populations are on the increase, because their increases are mainly due to immigration. The migration balance rose from 62,000 in 2001 to 67,000 in 2002 mostly due to the increase in migration to the country for family reunification.

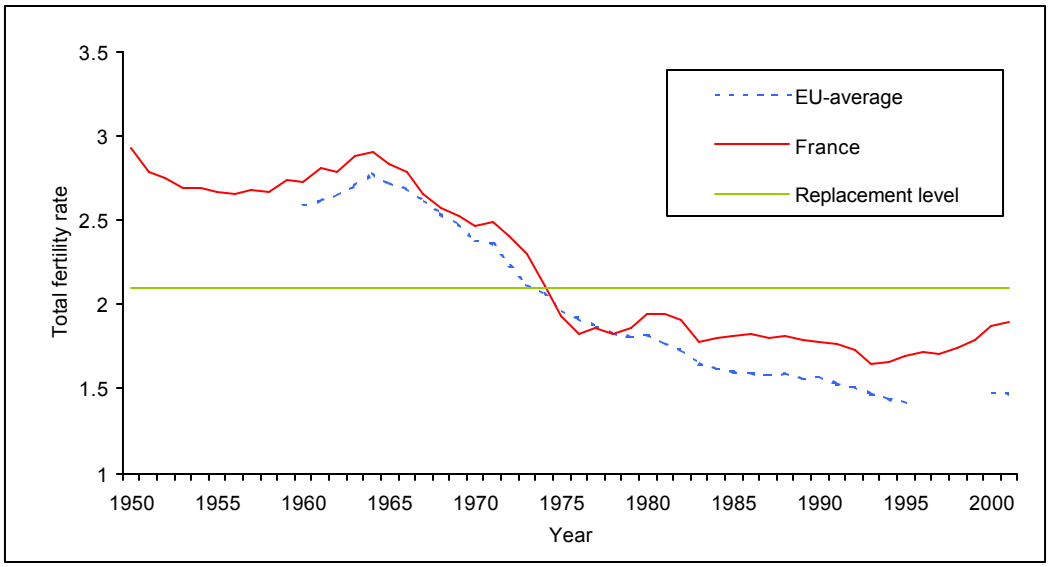
Fertility and Family Formation

Within the EU, French women (1.90 children per woman in 2001), lag behind Irish women (1.98 children per woman) who are the most fertile in the EU, but they are well ahead of the average for European women (1.47 children per woman in 2001). Trends in the total fertility rate (TFR) of women in France as compared with the EU average are given in Figure 4.2.

Generally, the TFR in France has been decreasing since the early 1960s, with the largest decrease between 1964 and 1976 when it fell by over one child per woman (from 2.91 to 1.83). The fertility rate has not changed much since then, varying between 1.65 and 1.90 over this period. In fact, the rate reached its low of 1.65 in 1993 and has increased since then. Nonetheless, the fertility rate in France has been below replacement levels for three decades. With the exception of a few years in the early 1970s, the fertility rate in France has been higher than the average for the EU as a whole, with the difference being greatest in recent years (0.4 children in 2001).

The absolute number of births has been decreasing in France from 858,000 in 1950 to 796,000 in 2002; this is due to a decrease in the number of women of childbearing age in the population. Increasingly, women aged between 20 and 40 – who account for 96 percent of all births – are becoming fewer in France. Women who were born in the late 1950s and the early 1960s, i.e. during the baby boom, are giving way gradually to the smaller cohorts that were born during the late 1970s and early 1980s. However, women had on average as many children in 2002 as in each of the two previous years, and more than in any of the years between 1990 and 1999.

Figure 4.2: Trend in the Total Fertility Rate: France, 1950–2000



SOURCE: Eurostat NewCronos database (2002)

MG206-4.2

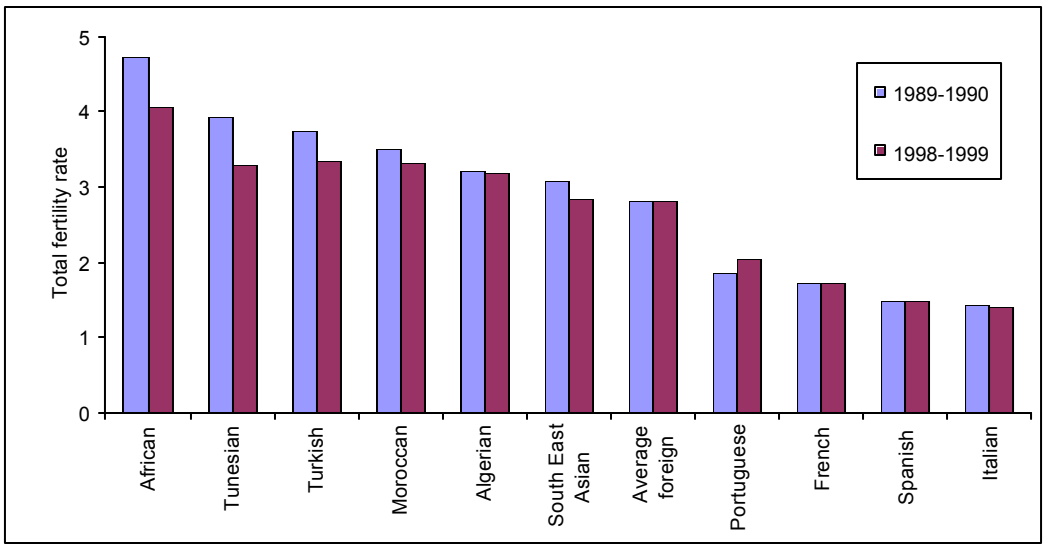
A significant phenomenon in 2000 and 2001 was the increase in the fertility rate among young women. However, this came to a halt in 2002. The fertility rate among women aged under 30 fell by 1.7 percent, while that among women aged 30 or over continued to rise (up 1.5 percent). Hence, the mean age at childbirth (which had been stable for several years) increased again. In 2002, the average age of women giving birth was 29.4, compared with 29.3 from 1998–2001.

The fertility rate of native French women (1.72 in 1999) differs from that of immigrants. As indicated in Figure 4.3, fertility rates are highest among African women living in France (4.07 in 1999) and lowest among Italian women (1.41 in 1999). As the TFR in 1999 in France was 1.79, the data show that the fertility rates of foreign women raise the French fertility rate by 0.07.

The marriage rate fell from 6.2 marriages per 1,000 population in 1980 to 4.9 in 1997. The age at first marriage has increased by about five years over the past 20 years, mostly due to the fact that couples are increasingly likely to spend several years cohabiting prior to legal marriage. Accompanying this has been a substantial increase in the number of unmarried couples. In the period 1975–1994, cohabitation among unmarried couples spread very quickly, from 4.7 percent

of women between the ages of 20–44 in 1975 to 20 percent in 1994. As a result of these trends, the number of births outside marriage rose, from 11.4 percent in 1980 to 37.6 percent in 1996. The last 20 years also showed a growing number of divorces and separations: the divorce rate was 22.5 percent in 1980 compared with 38.3 percent in 1998 (i.e. 38.3 of every 100 marriages result in a divorce). Compared to other European countries, the mean age at first marriage and the number of live births outside marriage are relatively high in France. The divorce rate is slightly above the average of the 15 EU Member States.

Figure 4.3: Total Fertility Rates of Foreign Women Living in France, 1989–1990 and 1998–1999



SOURCE: Legros (2003)

MG206-4.3

As a result of the abovementioned trends in marriage, divorce, cohabitation, and out-of-wedlock childbearing, there has been an increase in the number of single-parent families and reconstituted families (i.e. households formed by a couple, at least one of whom has been married in the past and is responsible for the child or children from that marriage). The number of single-parent families has increased significantly since 1968, from 720,000 then to 1.1 million in 1990. In 2000, there were approximately 1.4 million single parents in France, which represents 16 percent of families with children aged under 25. These single parent families are in the vast majority of households headed by women. [19]

Population Composition

Currently, 18.7 percent of the French population is 0–14 years, 60.7 percent is 15–59 years, and 20.5 percent is over 60 years of age. The following population pyramid (Figure 4.4) does not show a triangular shape; this is owing to the post-war baby boom which has widened it in the middle, between the ages of 25 and 55 (Toulemon, 2001: 2). Figure 4.5 and Table 4.3 show the population projects for France in 2020 and 2050 respectively. It is projected that by the year 2010, people aged 65 and over will outnumber people aged 0–14. In spite of the peculiarity of French history in the field of population ageing (due to the early fertility decline), the ratio of youth (0–14 years) to elders (65 years and over) was 2.5 in 1950. As the number of elderly

[19] See http://www.info-france-usa.org/atoz/fam_pol. asp.

explodes and the number of youths shrinks, this ratio will continue to diminish from approximately 1.0 by the year 2010 to 0.6–0.7 by the year 2030, and finally 0.4–0.7 by the year 2050. This will take place in the context of a declining total population size: if the fertility rate remains low, population numbers will decline progressively. With fertility below replacement, in the most extreme case, a TFR of 1.5 and no immigration, the population would begin to decline between 2010 and 2015, and immigration would postpone the turning point by approximately 10 years. Assuming a TFR of 1.8, the population continues to grow till 2040 (Tapinos, 2000: 9). However, it needs to be realised that population projections are uncertain; small differences in assumptions about fertility rates can lead to large differences in the size and age structure of the population in the long run (50 years) (Chesnais, 2000).

Table 4.3
Population Projections: France , 2050

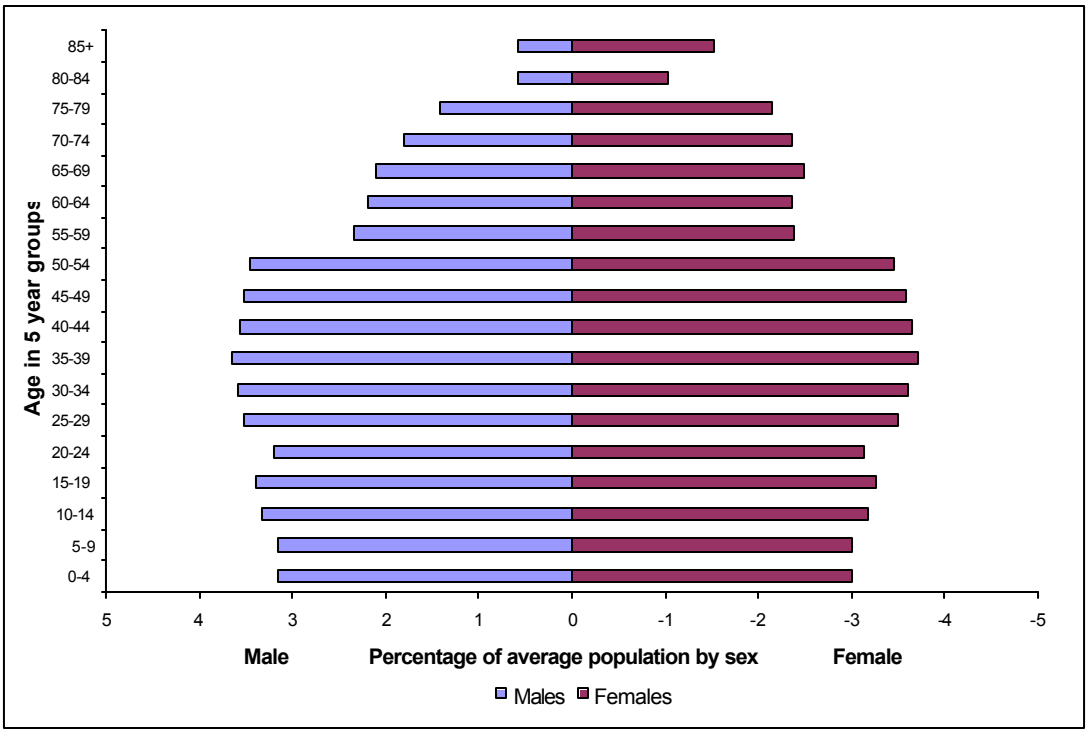
Projections for 2050	INSEE[a](1992)			UN (1998)		
	Low	**Central**	**High**	**Low**	**Medium**	**High**
Total fertility rate (per woman	1.5	1.8	2.1	1.56	1.96	2.36
Life expectancy males (years)	77.9	77.9	77.9	78.9	78.9	78.9
Life expectancy females (years)	86.4	86.4	86.4	86	86	86
Net migration per year (thousands)	50	50	50	[b]	[b]	[b]
Population in 2050 (thousands)	56804	65098	73602	58020	59883	67413
Percent 20 years or younger	16.7	20.7	24.3	[c]	[c]	[c]
Percent 20 –59 years	44.8	45.6	45.8	[c]	[c]	[c]
Percent 60 or older	38.7	33.7	29.8	36.4	31.4	27.9
Percent 65 or older	19.7	17.2	15.2	29.6	25.5	22.7

a INSEE (Institut National de la Statistique et des Études Économiques), the French National Institute for Statistics and Economic Studies
b Net migration is assumed to decline from 30,000 per year between 1995 –2000 to 0 in 2020 and thereafter
c Data not available
SOURCE: Tapinos (2000: 4–5)

History of Policy Efforts

The history of French population change is atypical; secular fertility decline began one century before the rest of the West. As a consequence, France had the oldest population in the world over the entire period of 1850–1950. The baby boom after the Second World War created a temporary increase in the number of births, but thereafter the fertility decline resumed. With current below-replacement fertility and increased life expectancy, population ageing is expected to reach new heights (Chesnais, 2000). In this section, we describe the policies that have been introduced in order to deal with the threat of population ageing.

Figure 4.4: Population Pyramid: France, 2000



SOURCE: Eurostat NewCronos database (2002)

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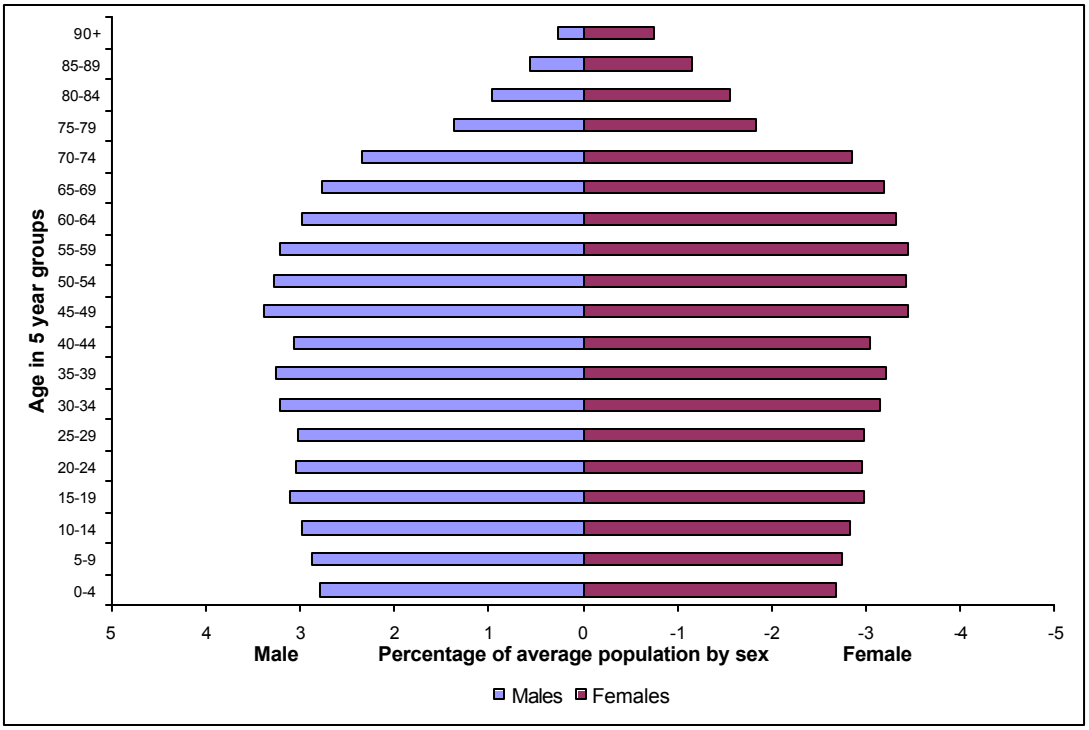
Figure 4.5: Population Projection: France, 2020



SOURCE: Eurostat NewCronos database (2002)

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Period 1830–1950

The oldest tradition of family policy is found in France, where two central motives for family policy had crystallised in the 19th century (Kaufmann, 2002).

- The Familial-Institutional Motive
  A movement that was organised around family issues within French social capitalism arose, which provided a platform for public debate until very recently. The movement's aim was to strengthen the family.
- The Population-related (Natalist) Motive
  France was the first European country to experience a falling birth rate. Around 1830, trends in the birth rate had already begun to stagnate, and in the 19th century birth control became widespread among the working classes. In considering the continued population growth in other European countries, nationalistically-motivated concern about the falling birth rate increased. In 1896 the Alliance Nationale contre la Dépopulation was founded, which called for political support of families in order to increase the number of births.

Both movements contributed to the state's gradual development of a family policy in France. By 1920, the French announced a declaration of family rights, which through its key position augured the Code de la Famille that was passed by the National Congress in 1939. This set the foundation for an expansion of family policy in the post-Second World War years, which became a central feature of social policy development in France. This is evidenced by the fact that the Family Allowances Fund – which today is consolidated nationally into 199 regional subsidiary offices – has become a central structural feature of French social services administration (Kaufmann, 2002).

Period 1950–2003

Since 1950, several policies that were intended to affect demographic developments have been introduced, some of which were subsequently abolished or modified in later years. First, we give a brief overview of the important decisions that were made; second, we give an overview of the family policies that currently are in place:

- 1967: law against free sale of contraceptives abolished (Höhn, 1988: 461–3);
- 1975: abortion liberalised (Höhn, 1988: 461–3);
- 1977: legislation passed entitling parents to an unpaid leave of 24 months with a guarantee of re-employment (Gauthier, 2001: 14);
- 1978: five separate benefits for special groups combined and made available to all low-income families with either three children or one child under three years of age; additional assistance given to single-income families (McIntosh, 1981: 189–90);
- 1979–1980: in two steps, family allowances increased at a rate ensuring that a family of three will receive a monthly income of at least €533; further measures were introduced in 1980, including doubling the annual increase in the purchasing power of family allowances, and doubling the grant payable at the birth of a third or subsequent child (McIntosh, 1981: 189–90);
- 1980: large families given priority in the allocation of more spacious housing (McIntosh, 1983: 130);
- 1985: flat rate benefit (APE – Allocation Parentale d'Education) introduced for women with three or more children (Gauthier, 2001: 14);

- 1987: duration of parental leave extended until the child's third birthday (Gauthier, 2001: 14);
- 1994: APE extended to the parents of two children who want to reduce working hours or interrupt their careers to take care of their children (Gauthier, 2001: 14);
- 1996: means test imposed on the APJE (Allocation Parentale pour Jeunes Enfants) (Gauthier, 2000: 3);
- 1997–1998: maternity benefit limited so that it may only be paid up to a social security ceiling; this may not mean 100 percent of earnings (Gauthier, 2001: 14);
- 1998: extension of most social legislation from married to unmarried couples (Le Goff, 2002: 601); and
- 1999: working time regulations redefined, as the 1,600 hours-a-year law (essentially 35 hours per week) is established; its main objective was to create employment; however, the French adoption of a 35-hour working week was also part of the search for a better work–life balance (Fagnani, 2003: 17).

Current Family Policy in France. To gain an insight into current family policy in France, it is important to understand the role of the state in the demographic debate. Therefore, we discuss the role of the state briefly before looking at the current policies in the field of maternity and parental leave, child benefits and family allowances, maternity benefits, and childcare. Thereafter, we pay close attention to two characteristics of French family policy that distinguish that policy from family policies in many other European countries, namely the focus on the third child and on balancing employment and motherhood.

- Role of the State
  France is one of the EU Member States that has gone furthest in using demographic data in the political debate, and in recognising the state as a policy actor in demographic matters. For a long time, declining fertility has been considered as a threat to the nation's economic future, thus demanding and justifying government intervention (Rydell, 2002: 21). The French have an intense and well-informed debate in the political elite, among scholars and the people about future population needs (Baker, 1986: 426). However, a study by McIntosh showed that, despite their convictions that low fertility would have serious consequences for society, policymakers who were interviewed in 1978 were doubtful of the possibility of intervening successfully to reverse the then-downward trend in fertility (McIntosh, 1983: 124). Nevertheless, a wide range of family policies has been introduced since then.
- Maternity Leave and Parental Leave
  France offers all women workers a paid, job-protected maternity leave six weeks before and 10 weeks after the births of the first two children, eight weeks before and 18 weeks after the birth of the third child, 34 weeks (12 prenatally) for twins and 42 weeks (24 prenatally) for triplets or more. Maternity leave, pre- and postnatally, is mandatory.[20] At the end of maternity leave, the mother (or father) can take parental leave until the child reaches the age of three, with entitlement to re-integration into the previous or a similar job. Parents receive a parental leave allowance if they interrupt their employment, totally

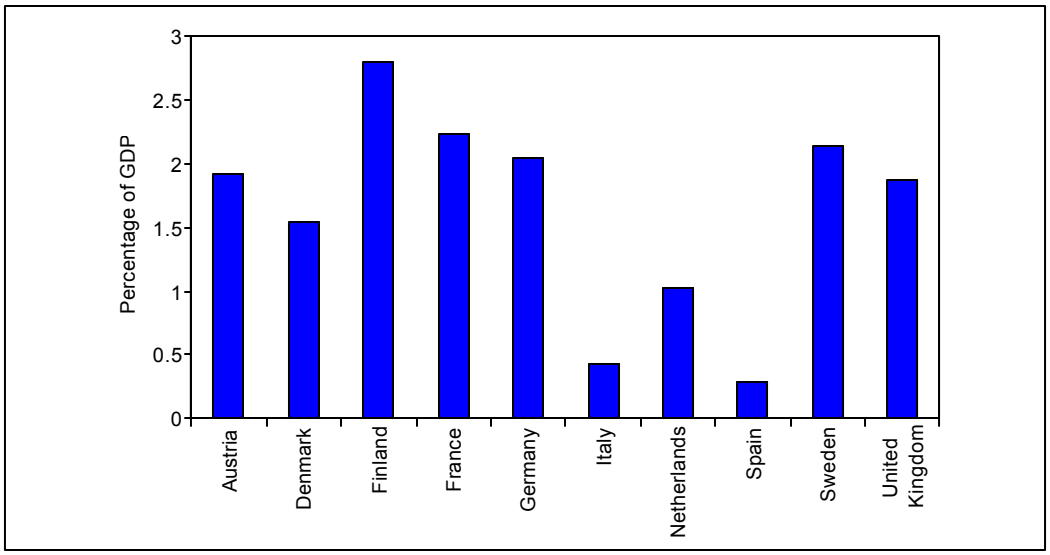
[20] Http://www.contemporaryfamilies.org.

or partially, to care for a child under three years and are having to care for at least two children.[21]

- Child Benefits/Family Allowances
  All families with at least two children under 18 are granted family allowances. In 1999 the allowances for two children were €80 per month, for three children €183, for four children €286, for five children €390, for six children €493, and for each subsequent child, €103. The value of French child benefits for a couple with two children was equal to approximately 9.5 percent of the average 1992 male wage, which is relatively high compared to most other European countries.[22] Furthermore, the following additional means-tested benefits are available:[23]

  - family supplement – for families with at least three children over three years of age;
  - single parent allowance;
  - adoption allowance – this allowance is paid only for 21 months;
  - parental education allowance;
  - special education allowance – additionally, depending on the level of the child's handicap, a further sum of FFr515 to 5,726 (€78 to 873) is available;
  - annual school allowance – for children aged 6–18; and
  - housing allowance – this is calculated taking into account expenses for rent and the family's situation.

Figure 4.6: Expenditure on Family Benefits as Percentage of GDP, 1995–1998



SOURCE: http://www.reformmonitor.org/fm_1

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As shown in Figure 4.6, expenditure on family benefits as a percent of GDP is relatively high in France, surpassed only by Finland.

[21] Http://Europa.Eu.Int/Comm/Employment_Social/missoc2001/f_part9_en.htm.
[22] Http://www. contemporaryfamilies.org.
[23] Http://europa.eu.int/comm/employment_social/missoc2001/f_part9_en.htm.

- Maternity Benefits
  A means-tested, young child allowance is available from the fourth month of pregnancy until a child is 3-years-old. Maternity benefit, i.e. the benefit paid during the maternity leave, equals the net salary up to a certain threshold. Maternity benefits for insured mothers amount to 80 percent of earnings for up to 16 weeks for the first and second child, 26 weeks for subsequent children, and 46 weeks for multiple birth (a number of collective agreements allow for an additional 20 percent payment during the same period).[24]
- Childcare Provisions
  Younger children are entitled to places in full-day childcare centres (crèches) and sometimes family day care. Beginning at age 2 or 3, children are served in all-day pre-school programmes, the *écoles maternelles*, for which families pay on a sliding scale. Lower-income families usually pay nothing and better-off families pay no more than 10–15 percent of their income for this service. Nearly all children enrol in écoles maternelles, even if they have a parent at home, because the French believe that these nursery schools are important in preparing the vocabulary and communication skills of young children for the social and academic rigours of the first grade. France also offers allowances to defray the costs of hiring childcare, at home or in registered facilities, for children under three.[25]
- Third-Child Policy
  One of the distinguishing characteristics of the French family policy is its systematic focus on supporting the arrival of the third child. Successive French governments have focused their policies on achieving larger families for pronatalist reasons, considering population renewal and growth to be dependent on couples who want to produce more children (Hantrais, 1997: 365). In France, the amount paid for the third child and subsequent children is greater, and no allowance is paid for the first child; the economic justification for this might be the increased costs that are involved in raising larger families. The third child may incur higher cost because women are less likely to be able to continue in employment, and it may become necessary for the family to move to a larger house or flat (Hantrais, 1997: 364).
- Balancing Employment and the Family
  French family policy shows a more comprehensive commitment to offering choices to all working mothers than many other European countries. The French have never set out, in the way that other countries have, to restore the place of women in the home: the first paid maternity leave was introduced in 1913, and public childcare is more affordable and widely available than in many other countries. In addition, France offers generous family allowances and parental leave benefits that were conceived as a replacement for foregone wages rather than as wages for motherhood, as is the case in Germany. A relatively high proportion of French women work full-time, especially single mothers, in large part because they have access to high-quality, state-run, subsidised childcare. In France, 25 percent of children aged 2 or younger, and 95 percent of 3–5-year-olds, are in public childcare. In 1995, nearly 80 percent of women between 25 and 39 (those most likely to be in their childbearing years) were employed.[26]

[24] Http://www.contemporaryfamilies.org.
[25] Http://www. contemporaryfamilies.org.
[26] Http://www.contemporaryfamilies.org.

Trends in French Family Policy. The objectives of family policy in France have shifted: whereas compensation for the direct cost of having children remains a key issue, state support has shifted towards compensating indirect costs in different ways. Emphasis has been placed on measures that facilitate the reconciliation of work and family life, in response to the rising number of women in the labour market. Encouraging fertility is no longer linked to withdrawing women from the labour market, but rather to keeping them in employment by giving support for childcare (Letablier, 2003: 13).

In recent years, means-testing of benefits has been promoted. This emphasis on vertical redistribution (as opposed to horizontal, which has been typically a guiding principle of French family policy) may encourage lower-income women in particular to stay at home, especially when these women also receive pronatalist benefits that pay more and give longer leave for third births. Means-tested allowances have benefited single wage earners more than working wives, due to the fact that single-mothers' income is likely to be lower, so they are more likely to qualify for additional benefits. Recently, the number of lone mothers receiving the means-tested lone-parent allowance increased, as did those benefiting from the means-tested housing allowance.[27]

Future of French Family Policy. The French government recently presented a reform which proposes to replace all previous allowances, including APE and APJE. The reforms concern only children born after 1 January 2004. The allowances will be replaced by a single allowance called PAJE (Prestation d'Accueil du Jeune Enfant), which has four elements (European Observatory on the Social Situation, Demography and Family, 2003):

- a birth bonus of €800 before the birth of a child;
- a flat rate, means-tested allowance with a ceiling revenue of €4,120 distributed up to the third year of a child's life;
- a complementary offer for those who wish their child to be cared for by a registered childminder or in a crèche and to stay on the labour market, which depends on the income of the household and the type of carer; and
- a complementary offer for parents who decide to stop their professional activity to care for their child: paid parental leave, which is €340 per month. This allowance may be paid to families with two children up to the third year of age of the youngest child, with a condition of professional activity (at least two years in the last four years). It can also be paid for the first child, but only during the first six months after maternity leave, and provided the mother has been working during the past two years.

In addition, the government proposes a fiscal incentive to invite enterprises to develop private childcare solutions, and a budget of €200 million to create 20,000 crèche places.

Policy Impacts

While there are a large number of studies that describe the range of tools available to the policymaker concerned with low fertility, there are very few studies that have evaluated the effectiveness of policies. Some exceptions are Büttner and Lutz (1990), Höhn (1987), Oláh (1999), and Sundstrom and Stafford (1992). These studies all suggest some level of success for particular policy initiatives in particular places at particular times. However, no detailed studies on the effectiveness of French family policy are available. Below, we discuss what different authors have concluded regarding the impact of policy on fertility.

[27] Http://www. contemporaryfamilies.org.

Impact of Family Policy. Calot and Hecht (1978) estimated that approximately 10 percent of French fertility in the late 1940s and 1950s could be attributed to pronatalist family legislation. Chesnais (1985) has also argued, on the basis of correlations between the magnitude of social transfers to the family and fertility levels in several countries (including France), that family policy can be effective in raising fertility.

Kaufmann (2002) concludes that the demographic effects of the long tradition of family policy and population control are clear: France had the lowest birth rates in the world between 1830 and 1950, but showed a substantial increase after a comprehensive family policy had become effective. Although fertility has fallen again since the 1960s, the French birth rate is still above the European average. The author concludes that France can be considered a model example of an explicit family policy, which succeeded to a large extent in reconciling the modernisation of family relations with the economic, social, and demographic needs of the country.

Letablier (2003) concludes that family policy in France seems to have been successful in creating an environment that is favourable to children and family life (although childcare facilities still remain inadequate to cover demand). By shifting its objectives from supporting the direct cost of having children to reconciliation of work and family life, family policy has helped undoubtedly to keep the fertility rate at an acceptable level. According to Letablier, a rise in the fertility rate can be achieved by policies established in partnership with companies in order to push the work and family balance issue to the top of the political agenda; this also implies a sustained shift in values, reinforcing the view that children are to be considered not only as a cost to the family but also as an investment for society as a whole. However, no hard evidence is provided to support this conclusion.

Impact of Other Policies. McIntosh (1983: 88–90) states that: "One reason often advanced by pronatalists in France for the decline of fertility is the legalisation of abortion that was introduced for a provisional five-year period in November 1975 and enacted permanently into law in December 1979." The author indicates that this argument appears to be fallacious for two reasons:

> (1).Fertility was already approaching its lowest point before the abortion law was liberalised; and
> (2) In-depth analysis of abortion trends after the act suggests that the legalisation simply enabled a switch from clandestine to open abortions, without a significant increase in the number of abortions obtained.

Impact of Changing Family Behaviour. Even though the period fertility rate is currently below replacement level, at around 1.9 births per woman, natural increase is still high because of the large number of women of childbearing age. Since 1975, three major changes have occurred (Toulemon, 2001):

1. reliable contraceptive methods are available and widely used (75.1 percent of French women of reproductive age use contraceptives, of which 36.9 percent use the pill, 19.6 percent intra-uterine devices, 5.2 percent condoms, 0.3 percent male sterilisation, 4.6 percent female sterilisation, 1.1 percent other modern methods, and 7.5 percent traditional methods) (http://www.infoplease.com/ipa/A0193123. html);
2. the mean age at childbirth has dramatically increased; and
3. the proportion of births out-of-wedlock has dramatically increased.

A recent study by Kojima and Rallu (2003: 342) concluded:

> [I]n France, the growth of unmarried cohabitation and divorce has challenged the traditional family model more seriously. However, this has resulted in a rise in extra-marital fertility that, together with a shift to later childbearing, has kept childlessness at a rather low level. France is also characterised by a relative stability of the two-child family model, while the proportion of families with three children or more remains substantial. It is this combination that has kept fertility close to replacement level.

Conclusion

Although we did not identify any studies that attempted to evaluate the effectiveness of particular individual policies or policy packages in this case study, some of the studies that we considered indicate that the effectiveness of policies or policy packages depends on the broader setting. They suggest that it is not so much the individual policies that matter but the nature of society as a whole, including attitudes towards work, large families, etc. Family policy can support families in realising their economic, social, and demographic desires, and it has the potential to indirectly contribute to higher (but not necessarily as high as replacement-level) fertility rates. Thus, we conclude in the context of France, that the relatively high fertility rates since 1975 can be explained, at least in part, by the French family policy.

Case Study: Germany

Germany is our case study example of a low low fertility, high migration Member State. With a stable and strong economy and being the most populous Member State with 82.3 million inhabitants, Germany holds an influential position within the EU. It is a federal republic consisting of 16 states, *Länder*, each with its own government and a substantial degree of autonomy. However, since 1989, when the former East Germany (GDR) and West Germany (FRG) reunified after almost 50 years of separation, the economic situation has stagnated in the reunited Germany. The separation of two populations with identical cultural and historical backgrounds and their subsequent reunification has provided researchers with a unique opportunity to study the reproductive and family behaviour of two demographically similar populations. During their separation, the trends of total fertility rates in the GDR and FRG showed striking similarities with several remarkable exceptions. During this period, both countries implemented family policies. Therefore, this case study will examine the following research question:

> *Can the divergent trends of fertility levels between the former GDR and the FRG be explained by the different family policies in those two countries?*

After unification, fertility trends in the former East and West demonstrate deviations once again, despite a joined administration. This case study will also shortly attempt to identify the factors underlying this demographic development.

Demographic Trends and Figures

Table 4.3. summarises the population characteristics of Germany. Many scholars (e.g. Becker, 1991; Cigno, 1991; Gauthier and Hatzius, 1997) identify a negative correlation between a country's economic development and its fertility rate; in a classical rational choice model, the decision to have a child or to marry is assumed to be dependent on the economic cost and

benefits of children, subject to income constraint. For Germany, this hypothesis appears to be valid: while its economy is among the most advanced in the world and its social security system has secured a substantial level of welfare for the German population over the years, fertility rates are extremely low. In 2002 the TFR in Germany was 1.39 children per woman, about which the German federal government has expressed concern (Höhn, 2000). Only Spain and Italy had lower fertility rates in the EU.[28]

Despite the fact that the exchange of information, goods, or people between the two countries was virtually non-existent, both East and West Germany had remarkably similar fertility levels and trends during their separate histories. The trends in the TFR in the two countries are displayed in Figure 4.7. After a considerable increase in fertility in East Germany immediately after separation, the two countries show almost identical total fertility levels and trends for nearly 20 years. After steadily increasing between 1955 and 1965, the TFR of both populations began to decrease simultaneously after 1965. The following decade marked a period of consistent TFR decrease in both East and West Germany.

Despite the notable similarities, striking divergences occurred in the decade before reunification. Whereas in the FRG fertility has continued to decline until today, the GDR showed a significant increase at the beginning of 1976. During most of the 1980s, fertility in East Germany was consistently higher than in West Germany by 0.4 to 0.5 live births per woman. This deviation of fertility in the GDR from levels in the FRG might be attributed to the introduction of a series of pronatalist measures in the GDR in 1976. The question of whether the correlation between policy and fertility impact is quantitatively significant has been addressed in a few research papers, which will be discussed below.

Since unification in 1989, the changes were different from those during the cold war, and the fertility levels of he former East Germans have changed drastically. The average number of children per woman decreased from approximately 1.5 to 0.9 over the period of only a year (1990–1991), a fertility decline of roughly 40 percent (Witte and Wagner, 1995). During subsequent months the TFR further decreased to nearly half the level of 1990, after which levels stabilised once again at around 0.8. Witte and Wagner (1995) suggest that this noticeable fertility decline after unification is largely attributable to reduced numbers of first births among young women and of second and third births among slightly older women. Despite the drastic political changes, fertility in the former FRG remained nearly unchanged.

German demography reveals a history of declining fertility for nearly the past 40 years. As in many European countries, this low fertility resulted in a negative natural population growth in the early 1970s, since the crude death rate (10.36 deaths per 1,000 people in 2002) has exceeded the crude birth rate (8.99 births per 1,000 people in 2002). However, this has not yet resulted in a decrease in population, since traditionally, net immigration rates have been relatively high in Germany. Rates were especially high during the early 1990s, when large numbers of refugees from the former Yugoslavia entered the country. Currently, the net immigration rate (3.99 migrants per 1,000 capita in 2002) is more than sufficient to prevent the population from decreasing. During the early 1990s the net migration rate peaked at around 9.5 migrants per 1,000 capita, while during several periods in the past decades (e.g. the early 1980s, mid-1970s, and late 1960s) emigrants outnumbered immigrants. Figure 4.8 shows the development of the crude rate of population change broken down by component, indicating substantial immigration rates. As a result of these large streams of foreigners entering Germany over the past decades, 8.5 percent of the population in Germany in 2002 was non-German.

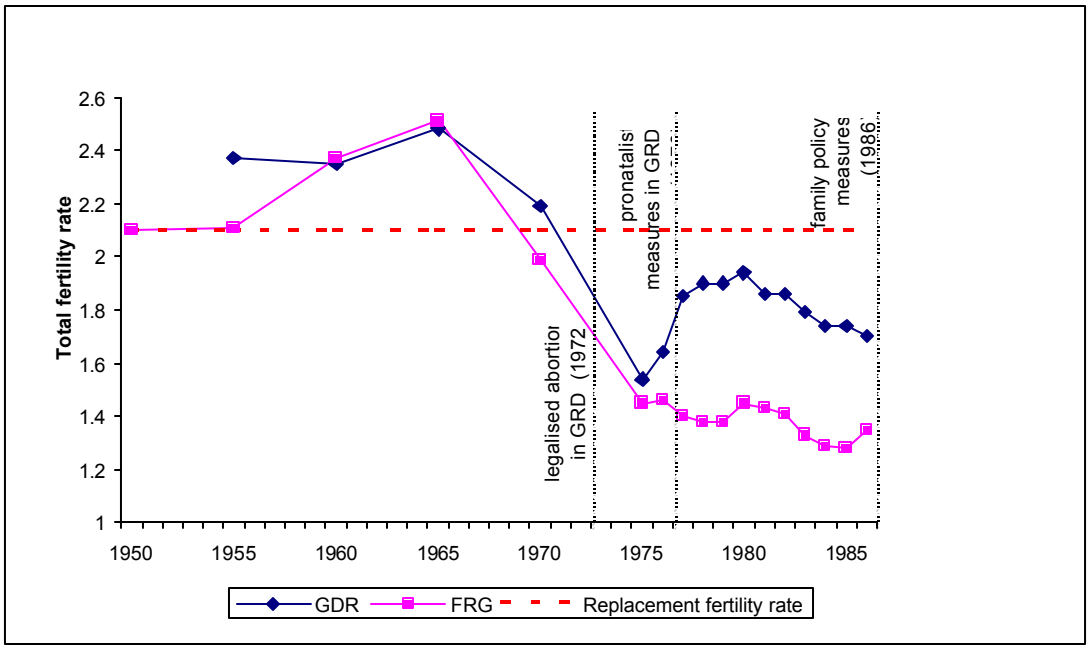
[28] The TFRs in many Applicant Countries are comparably low, including Poland.

Table 4.4
General Population Characteristics: Germany

Population Size and Growth			Source	Year
Total population	82,259,540	people	Eurostat	2001
Crude rate of population growth rate	2.1	growth/1,000 population	Eurostat	2001
Crude birth rate	8.9	births/1,000 population	Eurostat	2001
Crude death rate	10.0	deaths/1,000 population	Eurostat	2001
Rate of natural increase	-1.1	natural increase/1,000 population	Eurostat	2001
Net immigration rate	3.2	net immigrants/1,000 population	Eurostat	2001
Family formation				
Total fertility rate	1.29	children/ woman	Eurostat	2001
Mean age at first birth	28.0	years	Eurostat	1999
Percent of births outside of marriage	23.6	%	Eurostat	2001
Marriage rate	4.7	marriages/1,000 population	Eurostat	2001
Mean age at marriage	27.1	years	Eurostat	2000
Divorce rate	2.4	divorces/1,000 population	Eurostat	2000
Life expectancy at birth – male	74.7	years	Eurostat	1999
Life expectancy at birth – female	80.7	years	Eurostat	1999
Population composition				
Ethnic composition	German 91.5 %, Turkish 2.4%, other 6.1 %		CIA	2003
Religion	Protestant 34%, Catholic 34%, Muslim 3.7 %, other 28.3 %		CIA	2003
Sex ratio (total population)	0.96	male/ female	CIA	2003
Age distribution: 0–14 years old	15.5	%	Eurostat	2001
Age distribution: 15 – 64 years old	67.9	%	Eurostat	2001
Age distribution: 65 and over	16.6	%	Eurostat	2001
Dependency ratio (age 0 – 14 and 65 + to 15–64)	47.4	%	Eurostat	2001
Economy and human capital				
GDP per capita	26,600	purchasing power parity $ US	CIA	2002
GDP – real growth rate	0.4	%/year	CIA	2002
Unemployment rate	7.7	%	Eurostat	2001
Female activity rate	63.2	% of 15–64 years old	Eurostat	2001
Women per 100 men graduating from tertiary education	101.4	women/100 men	Eurostat	2000

SOURCE: Eurostat NewCronos database (2002) and Central Intelligence Agency (CIA) (http://www.cia.gov/cia/ publications/factbook/index.html).

Figure 4.7: Trend in the Period Total Fertility Rate: GDR and FRG, 1947–1987



SOURCE: Blanchet and Ekert-Jaffé (1994)

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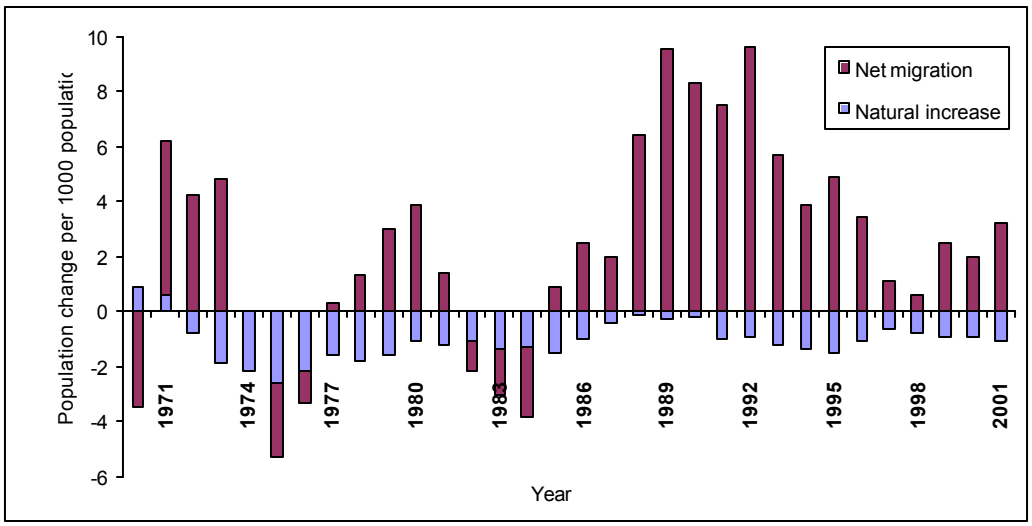
Figure 4.8: Crude Rate of Population Change by Component: Germany (Including the Former GDR from 1991), 1970–2001



SOURCE: Eurostat NewCronos database (2002)

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While fertility is very low, as in every European country, life expectancy at birth has increased substantially during the past half-century, from 68.5 for women and 64.6 for men around 1950 to 81.1 years for women and 74.6 years for men in 2002.[29] Both trends have added to the phenomenon of demographic ageing in Germany. Currently, the youth population under 15 years comprises only 15.3 percent of the total population. This is below the average of the other EU and OECD countries. The portion of the German population aged 65 years and over (17 percent) is already greater than that below the age of 15. The trend towards a reversed population pyramid is expected to continue in the next decades; this is posing a serious threat to the German economic position and the sustainability of its social security system. Figure 4.9, 4.10 and 4.11, show population pyramids for 1970, 2000 and a projection for 2020 respectively, clearly indicating an ageing German population.

Although the average family size is smaller than several decades ago (Figure 4.12), the family remains an important cornerstone in German society. This has been emphasised regularly by various German governmental administrations. The percentage of children with married parents has been relatively high compared with other European countries. However, in recent decades the traditional family has been losing popularity, since divorce rates are rapidly increasing: between 1999 and 2001 the number of divorces increased by 3.6 percent (Federal Statistics Office Germany, 2003).[30] Moreover, increasing numbers of births occur out of wedlock. Among young couples, cohabitation has become a popular household form: 35 percent of 16–29-year-old couples are cohabiting. As a result of these developments, 25 percent of the children born in 2001 had unmarried parents (Federal Statistics Office Germany, 2003). Additionally, the mean ages of marriage and childbirth have steadily increased since 1970 (Figure 4.13). Thus, women have postponed childbearing considerably, narrowing the timeframe for fertility. Figure 4.14, shows the age-specific fertility broken down by cohort.

Currently, the active population of Germany that are engaged in economic activities is estimated at around 40.6 million people. However, as illustrated in Figures 4.10 to 4.12, the German population is rapidly ageing. For 2020, fertility decline and demographic ageing are expected to lead to a decreasing population of labour force age.

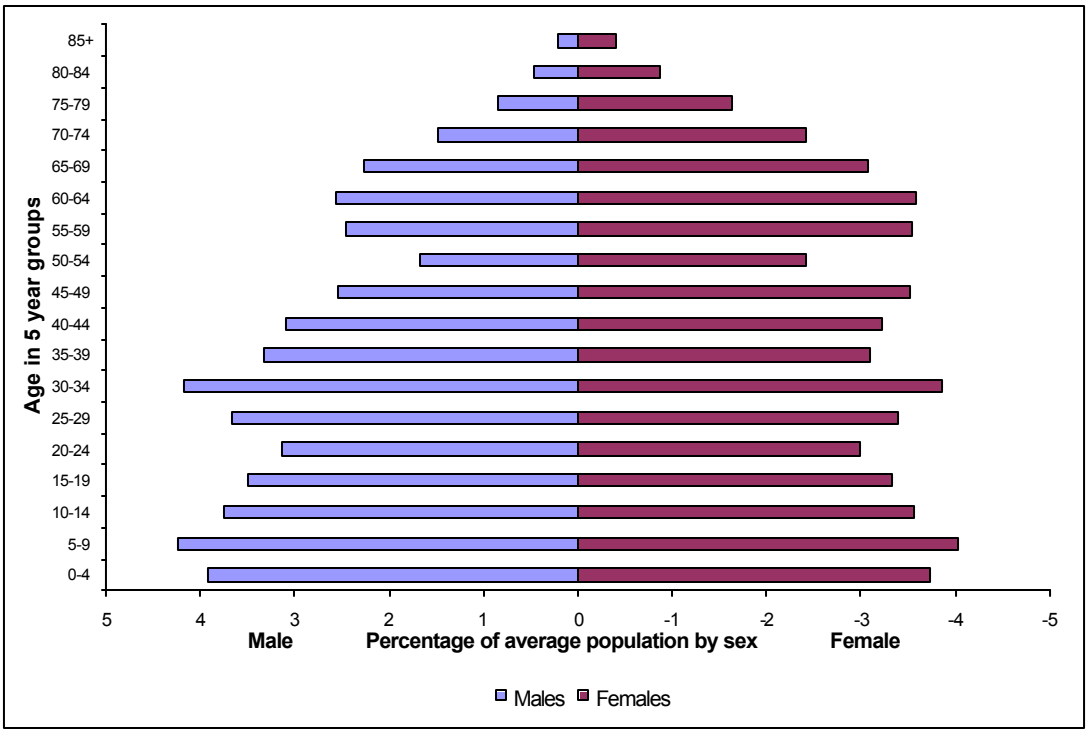
History of Policy Efforts

Currently, neither the federal government nor any of the *Länder* governments proclaims to have the intention of intervening in family formation. However, policies in the GDR used to differ considerably from those in the FRG. While in the West, family policy concurred with the non-interventionism of other Western European countries, the East German government implemented various pronatalist measures, in common with practice in most socialist countries behind the Iron Curtain. This section provides an overview of the most important policy measures in both East and West Germany during the past 50 years.

[29] The source for data from 1950: US Census Bureau, International Programs Centre, International Database, Gender and Ageing: Mortality and Health, 1B/98-2. The data refer to the former West Germany.

[30] Http://www.destatis.de/basis/e/bevoe/bev_tab1.htm.

Figure 4.9: Population Pyramid: Germany (Including the Former GDR), 1970



SOURCE: Eurostat NewCronos database (2002)

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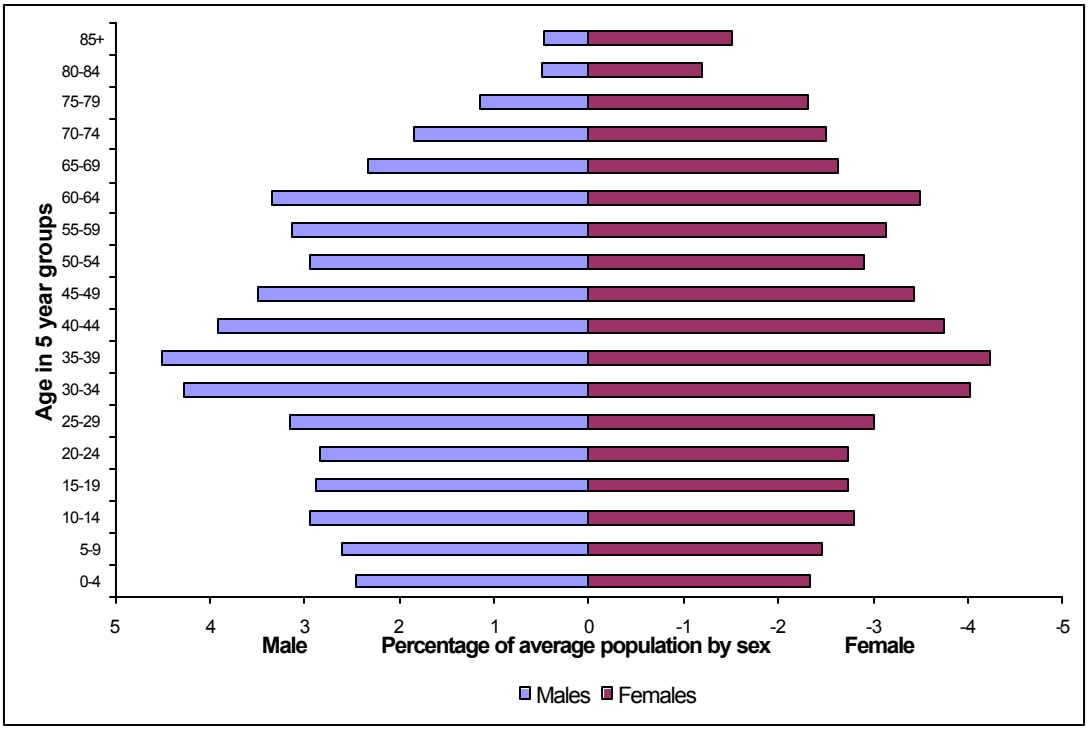
Figure 4.10: Population Pyramid: Germany (Including the Former GDR), 2000



SOURCE: Eurostat NewCronos database (2002)

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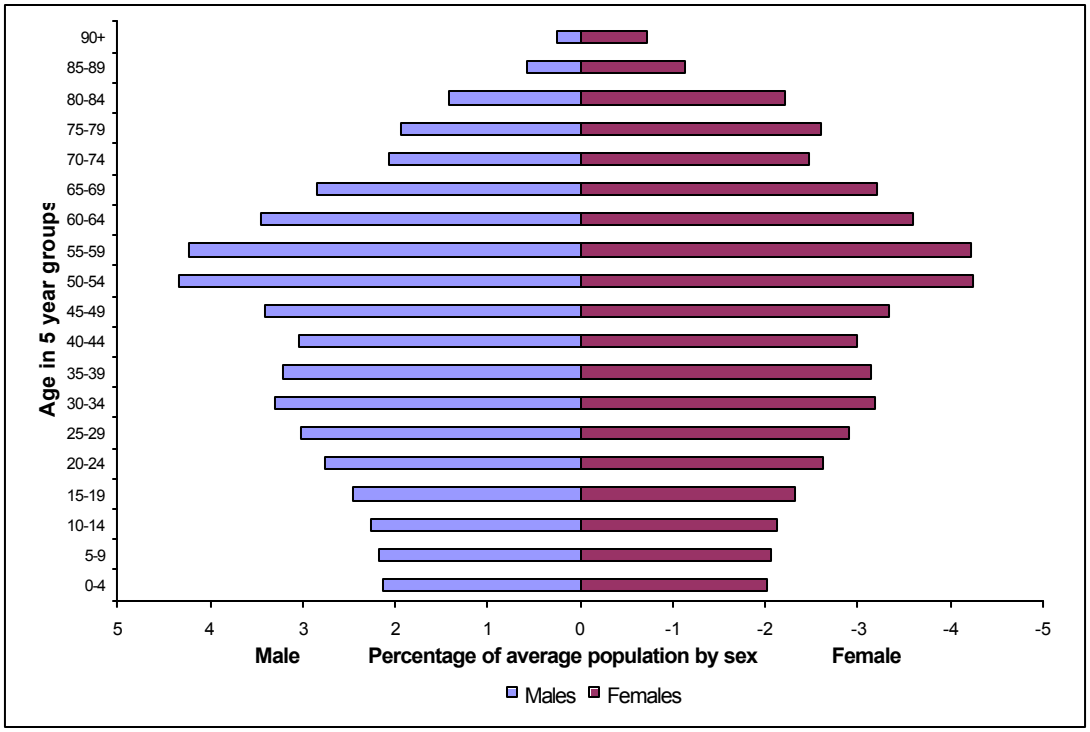
Figure 4.11: Population Projection: Germany (Including the Former GDR), 2020



SOURCE: Eurostat NewCronos database (2002)

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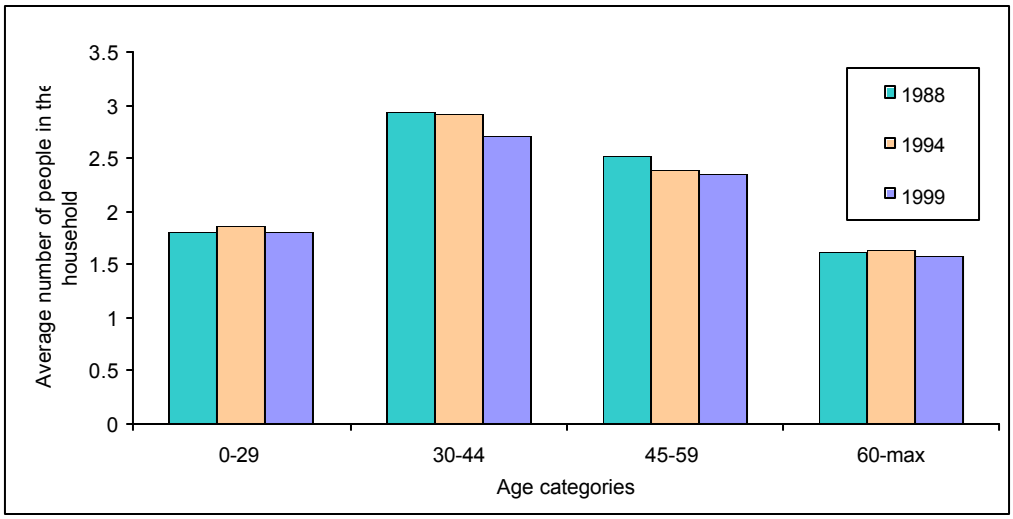
Figure 4.12: Average Household Size by Age of the Reference Person: Germany (Including the Former GDR), 1988, 1994, and 1999



SOURCE: Eurostat NewCronos database (2002)

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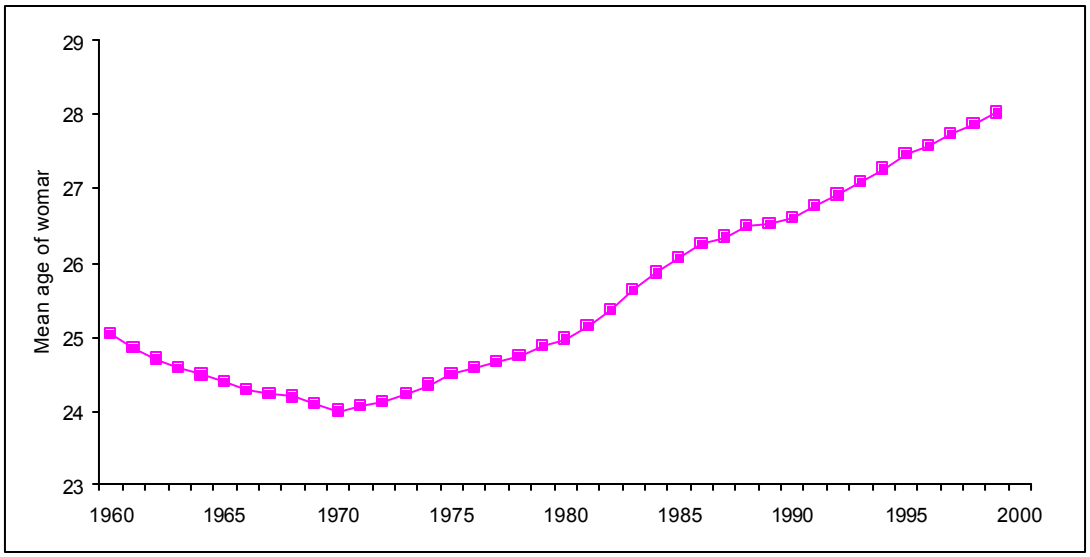
Figure 4.13: Mean Age of Woman at Birth of First Child, Germany (excluding the Former GDR from 1991), 1960–1999



SOURCE: Eurostat NewCronos database (2002)

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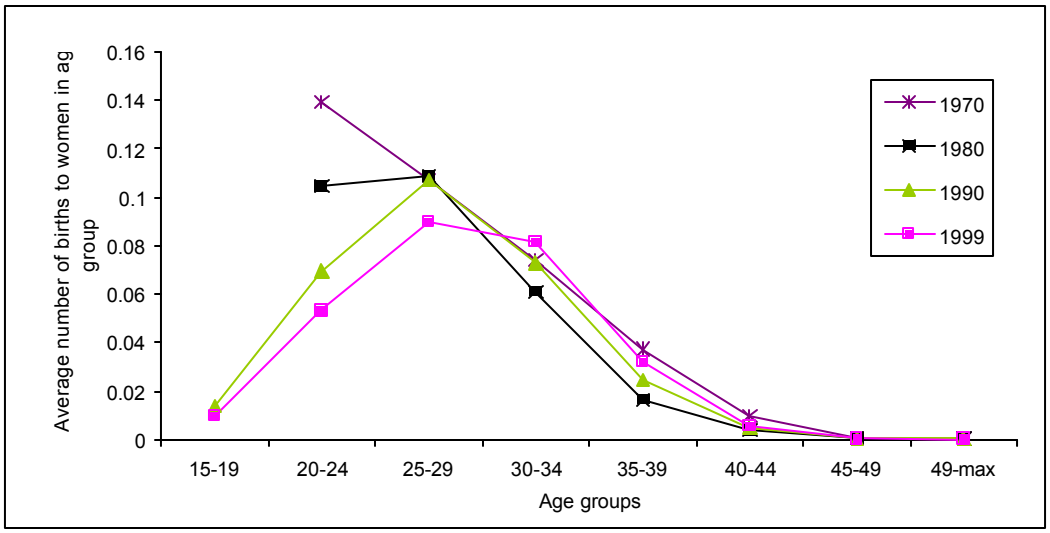
Figure 4.14: Age-Specific Fertility Rate, Germany (Excluding the Former GDR from 1991), 1970, 1980, 1990, and 1999



SOURCE: Eurostat NewCronos database (2002)

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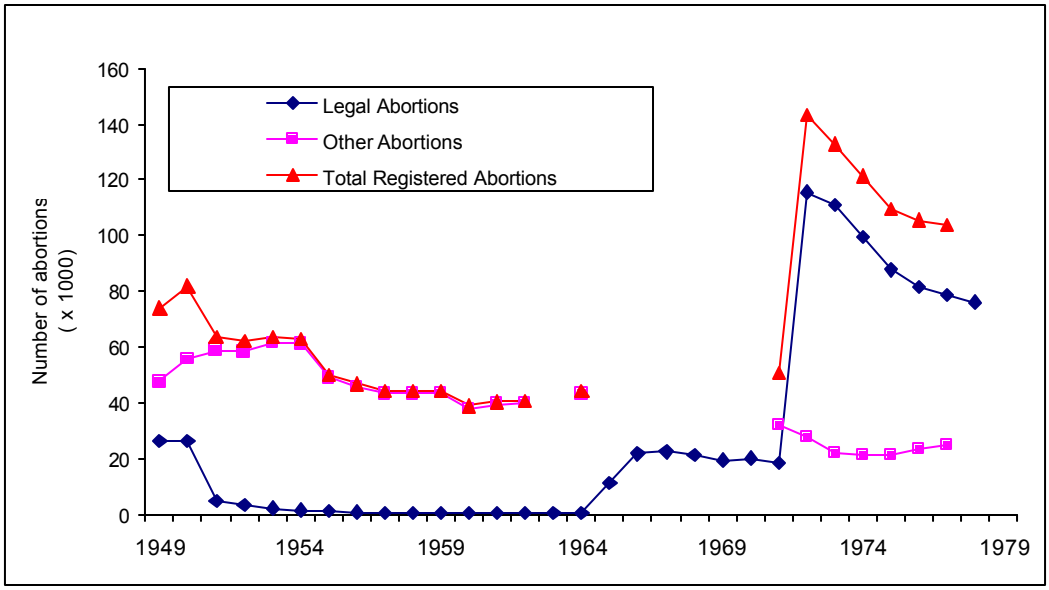
German Democratic Republic. Traditionally, former socialist regimes in Eastern Europe intervened in many aspects of individual and family life. Among the concrete aims of Marxist–Leninist social policy in the GDR was the intention to exert influence on the processes of demographic development, encouraging the formation of multi-child families while also maintaining a high level of female employment (Faude, 1978 as cited by David and McIntyre, 1981). This formal objective implies that the most important aim of family policy in the GDR appears to be economic (Legge and Alford, 1986). Therefore, the demographic development of low fertility raised concerns for socialist policymakers about the maintenance of their workforce. As Legge and Alford (1986) note, the objectives underlying these explicit pronatalist policy measures included population distribution, both in regions and different sectors of the economy; promotion of Marxist ideology; international politics (including control of migration and replacement of those who had left); and improvement of health (Besemeres, 1980 as cited by Legge and Alford, 1986). As a result, the GDR has provided young couples and families with an exceptionally broad range of social benefits. These are described below.

Despite a predominantly pronatalist character, social policy in East Germany was not focused solely on increasing birth rates. In 1972 the GDR government implemented a series of measures that may, in part, have caused fertility to decrease. While paid maternity leave was extended from 14 to 18 weeks, birth allowances were granted, and child allowances and family formation loans were introduced, on 9 March 1972 the *Volkskammer* approved what is perhaps the most liberal abortion statute in Eastern Europe (David and McIntyre, 1981). While all other Eastern European socialist countries (except Albania) had adopted similar legislation for liberalised abortion around 1955, persistent low fertility may have delayed the introduction of legal induced abortion for longer in the GDR than elsewhere in Central and Eastern Europe (David and McIntyre, 1981). The law (which permitted women to abort pregnancy during the first 12 weeks) was introduced simultaneously with the distribution of free contraceptives. Despite the latter measure, abortion rates skyrocketed following the 1972 policy change, as illustrated in Figure 4.15, resulting in a significant and unintended decline in fertility rates (Büttner and Lutz, 1990, and see Figure 4.7).

By 1984, the GDR had taken the most liberal position towards abortion, contraception, and sexuality of all former eastern bloc countries. In contrast with countries such as Romania, access to abortion was not severely restricted. It was largely due to government awareness campaigns about alternative contraception and sex education that abortion rates decreased rather than increased, as they did in neighbouring eastern European countries.

As a means to offset this unintended fertility decline, the government introduced another set of population policy measures in May 1976. This explicit pronatalist social policy package was intended to "promote a correspondence between socio-economic development goals and demographic structures for the benefit of the individuals and the interest of the society as a whole" (Speigner, 1987 as cited by Büttner and Lutz, 1990). The policy clearly stated a quantitative goal, since it was aimed at reaching replacement-level fertility on a long-term basis. According to Büttner and Lutz, these measures received broad public approval and were psychologically considered to be a major improvement for mothers. The set of measures included:

Figure 4.15: Number of Abortions, GDR, 1949–1978



SOURCE: David, H.P. and McIntyre, R.J. (1981).

MG206-4.15

- prolongation of maternity leave from 18 to 26 weeks for average monthly earnings prior to leave;
- paid leave for all working mothers with two or more children beyond the basic maternity leave up to the youngest child's first birthday, and educational leave of one year with a monthly salary at the birth of a second or subsequent child;
- interest-free loans to newly-wed couples for housing, and the possibility of reducing the amount of the loan that needed to be redeemed by giving birth;
- substantially raised birth grants;
- monthly family allowances increased progressively for each child;
- reduction of working hours for mothers and increased efforts to provide full day care for children aged 1–3 years; and
- special features for single mothers: paid educational leave for the first child as well as for subsequent children, and priority at crèches.

Furthermore, the GDR had the most extensive network of state subsidised crèches, kindergartens, and childcare support services of Eastern Europe (David and McIntyre, 1981). The cost to parents of using these facilities was extremely low; only 50 pfennig per day. By 1977, around 90 percent of 3–6-year-olds were in kindergarten places.

In 1984, the government implemented additional benefits especially for the third child (Höhn, 1988). Mothers were granted a paid maternity leave of one-and-a-half years to care for a third child. Three years per child was considered as equivalent to active work for mothers with three and more children. Additionally, as for housing, consumer durables, holiday facilities, and better jobs, the criterion to qualify as a "large family" was reduced from four children to three. The expenditures for these and previous pronatalist and social measures for the East German government were substantial.

Table 4.5
Working and Having Children in Germany: Percentage of Women Currently Employed and Number of Children at Home, by Woman's Age

Number of children	Woman's age			
	20–24	25–29	30–34	35–39
0	45.3	29.3	19.8	15.2
1	1.3	5.3	7.8	9.9
2	0.3	2.3	5.6	8.9
3+	0	0.2	1.6	2.2
total	46.9	37.1	34.7	36.2

SOURCE: United Nations Economic Commission for Europe (2002), Population Activities Unit – Fertility and family surveys (http://www.unece.org/ead/pau/ffs/ger/nt31.pdf)

West Germany (FRG) and Reunited Germany. Since 1953, family policy has been the responsibility of the Ministry of Family in the FRG. Although this field of policy has held high priority throughout the last decades, because of the structural isolation of this ministry through federalism and ministerial organisation, it remained ambiguous in implementation. Therefore, Kaufmann (2002) qualified family policy in the FRG as "symbolic".

The absence of explicit population policy is largely due to Germany being a "prisoner of the past" (McIntosh, 1983), dating back to the legacy of the racist pronatalist policy of the Nazis. The end of National Socialism had left Germany without demographers and demographic institutions, with highly decentralised governmental structure, and with a strong aversion to the idea of population policy (McIntosh, 1986). Thus, in contrast to their East-German counterparts, both federal and West-German *Länder* governments have been reluctant to embark on an incentives programme for childbearing. The governments chose not to intervene, as it might have been interpreted as infringement of civil liberties (McIntosh, 1983).

Gender equality has been one of the foremost motivations of family policy in West Germany. In fact, "the Weimar constitution in 1919 was the first constitutional act in the world to provide for gender equality in the family and obliged the legislator also to improve the situation of illegitimate children" (Kaufmann, 2002).[31] During the 1970s, women's rights were enhanced through considerable liberalisation of abortion and divorce legislation, amid intense opposition by the political Right. And in the second half of the 1980s, the federal administration announced the aim to achieve full equality between the sexes, both at home and work, although Kaufmann (2002) argues that family policy remained ambivalent and contradictory, as illustrated in Table 4.5 that gives the percentage of women in Germany currently employed, by the number of children at home.

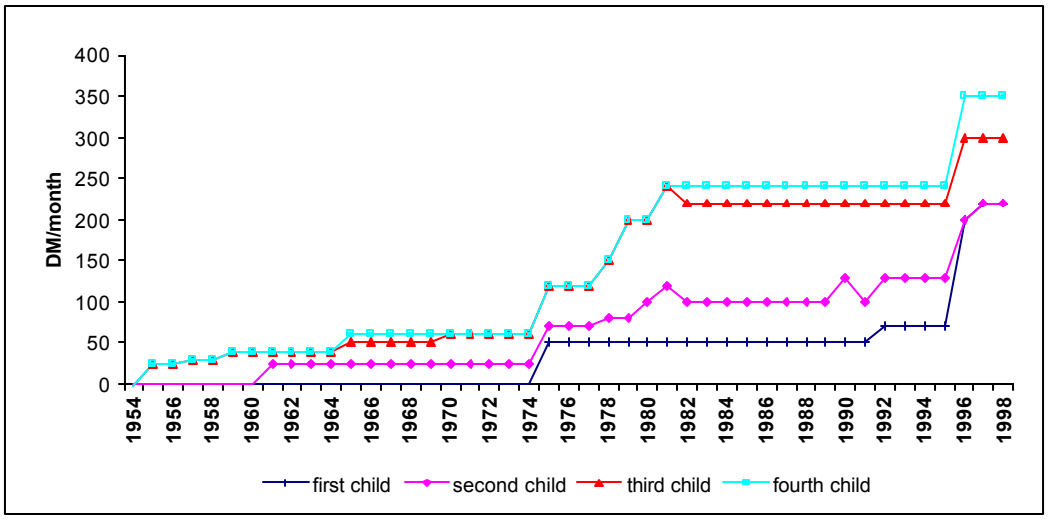
Since the 1970s, social objectives have strongly guided family policy in West Germany as well. The federal government believed that families should be compensated for the cost of children and the responsibilities of parenthood. Therefore, family policy in West Germany focused on

[31] These provisions were reinforced by the constitution of the Federal Republic in 1949, although they did not become effective until the 1960s (Kaufmann, 2002: 464, n. 153).

economic compensation, and emphasised constitutional obligation to protect families (Kaufmann, 2001).

As a first step in 1979, the federal government extended the length of paid post-maternity leave from 8 weeks to 6 months (McIntosh, 1983, 1986) and, despite economic constraints, substantial increases in family allowances were made, especially for the third child (which were reduced by the following administration one year later). Figure 4.16 shows the development of family allowances for employees in the general scheme.[32] In addition to the 1979 family policy package, low-interest loans were made available to newly-wed couples in order to assist them with housing, and their repayment was to be cancelled gradually at the birth of each child (McIntosh, 1986). Furthermore, West Berlin implemented a comprehensive economic development programme that was funded by the federal government, as a way to counteract population decline. In 1986, parental allowances, parental leave, and the crediting of parental periods with old-age pension were created, which have been further developed throughout the 1990s (Schwarz, 1992).

Figure 4.16: Child Benefits General Scheme: Germany, 1954–1998



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

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The approach of the Christian-liberal (and also current social-green) governments in the 1980s and 1990s towards family policy remained similar with regard to gender equality and economic growth. Since reunification none of the West German federal governments have had any outspoken intention to influence fertility. While the federal and decentralised *Länder* governments agree that fertility is too low, they reported to the National Population Policies Survey of the UN Population Division (2001) that no intervention is considered on fertility policy. A report from the government for the International Conference on Population and Development (1994, as cited by Höhn, 2002) stated this attitude as follows: "For the German Government, family policy in general and family-relevant political measures have a significance of their own which need not be justified through population-relevant considerations; nevertheless, side-effects considered demographically desirable might occur."

[32] Although the family allowances to employees in public services deviate slightly from the general scheme, it is sufficient for our purposes to illustrate only the general scheme.

Box 4.1
Summary of Current State of Family-Related Policy in Germany with High Symbolic Priority

- German family allowances are generous in the European context, but are not among the leaders.
- Paid and job-protected maternity leaves for 14 weeks, starting 6 weeks before childbirth.
- Good coverage for children (3–5 years) in public pre-schools (90%), but very poor coverage for children whose mothers work (5%).
- Social security system: breadwinner-housewife model – advantages for single-income household in tax-system.
- Constitutional definition of family by marriage.[33]

Sources: Höhn (2000), Kaufmann (2002)

German couples marry mostly for reasons related to the birth of their first child, and the percentage of births to unmarried parents has remained comparatively low. Thus, the legal status rendered through marriage remains important, partly because of the constitutional definition of family by marriage (Kaufmann, 2002). This traditional Christian foundation is also reflected in the German social security system. The main characteristics of this system, and in particular the pension system, are still oriented towards the breadwinner–housewife model. Moreover, single-income households are especially advantaged in the tax system (Kaufmann, 2002). While the traditional family functions as a cornerstone of society, services for children have little political priority, both at the *Länder* and the federal level. Box 4.1 provides a summary of the main characteristics of the current state of family-related policy in Germany.

Since the German social security and pension systems were so flexible and generous, their affordability had become questionable in the light of demographic ageing and a declining labour force. Therefore, in 1989, the federal government decided on a pension reform, including extending the age of eligibility for retirement benefits from age 60–63 to 65 years, restriction of early retirement benefits, and moving towards reliance on advance funding of pension schemes (as discussed in Chapter 2). These reforms became effective in 2001. (Although the literature is vast, this policy field will not be further discussed as it is beyond the scope of this study.)

Whereas in previous decades, governments focused on either direct or indirect strengthening of the family through reinforcing the position of women and economic incentives, in the last decade the focus of population-related policy has shifted toward policies that attempt to alleviate the economic burden of an ageing society. In other words, in Germany the policy focus appears to have shifted from direct and indirect preventive measures (regarding families) to ameliorative measures (regarding the consequences of population ageing).

Policy Impacts

The case of Germany seems very useful for impact analysis of family policies, since it provides an opportunity to compare fertility trends in two demographically comparable countries (FRG and GDR). Although, as argued by Höhn (1988),

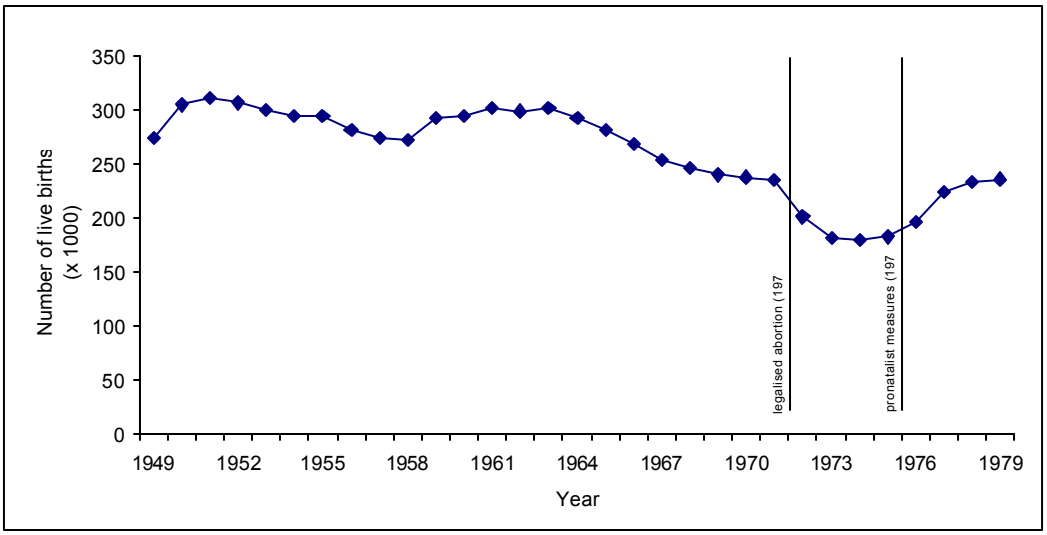
[33] Which has led to a comparatively low percentage of births to unmarried parents.

> these countries had been one, speak the same language and had the same fertility level and trend for twenty years, it is not sufficient to take West Germany as a control case and use the […] difference in fertility between the countries to measure the efficacy of the East German government's pronatalist policies.

Nonetheless, lessons can be learned from analysing the fertility responses to family policies. Aside from the notable similarities between the two countries, fertility trends in both the FRG and GDR before and after reunification show several remarkable trend-breaks. The question remains as to whether those trend-breaks are attributable to specific policies. The problem with most policies is that they are implemented as part of a comprehensive package of measures, such as the pronatalist policy package of 1976 in the GDR. Hence, it is impossible to determine the impact of individual measures.

The 1972 policy package in the GDR induced a dramatic increase in registered abortions in the country (see Figure 4.15). However, the measures did not appear to have a long-term effect on abortion rates, since these were reduced to normal levels after several years. Although the 1972 policy package was pronatalist in nature, the impact it had for birth rates (see Figure 4.17) and fertility (see Figure 4.7) was counteractive. Whereas first birth orders were not greatly affected by the availability of legal abortion, births of second and, to a much larger extent, third and higher orders fell sharply (Monnier, 1990).

Figure 4.17: Number of Live Births: GDR, 1949–1979



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The 1976 policy package was an example of purely economic pronatalist incentives, which were intended to raise the family salary, encouraging families to have more children. Although it is difficult to assess the impact of specific policy measures, several authors report that a comparison of fertility trends before and after the package powerfully suggests that period fertility rates responded quite strongly to the introduction of the 1976 package (e.g. Büttner and Lutz, 1990; Monnier, 1990). In addition, Legge and Alford (1986) claim that the pure economic incentives work most sustainably in comparison with other pronatalist measures that were introduced by other Eastern European socialist regimes (e.g. restrictions to abortion).

Monnier (1990) also acknowledges that the family policies had an undeniable and immediate impact on the number of births, which increased rapidly. However, he indicates that this effect was limited in time for two reasons:

1. such measures do accelerate family formation, but they do not have an appreciable effect on completed fertility; and
2. certain measures in the 1976 package cancelled out the effect of other measures.

The decreasing popularity of marriage could have been the result of benefits provided to unmarried mothers. These conditions were less favourable for increasing family size.

Aside from the success of the 1976 policy package in the GDR, other family policy packages in the GDR and FRG did not seem to have a substantial impact on fertility. For example, Schwarz (1992) examined the impacts on the birth rate of family-related policy measures implemented in 1986. He provides examples revealing that, while various measures reduce women's workload as a result of raising children, these measures do not contribute to decisions about having children. The impact on fertility is limited, since measures do not compensate for the opportunity cost that is incurred in the children's first months of life.

The fertility decline in the former GDR after unification cannot be attributed to specific policy, but rather to a changing social environment, as described by Witte and Wagner (1995). They claim that:

> [W]omen who expressed concern about their personal economic situation were far less likely to have a child in the coming months than those who faced unification without these worries. For first births the negative effect of individual economic concerns is even stronger than for all births taken together.

Conclusion

The case of Germany did not reveal the driving forces behind fertility as had been hoped; the two separated German countries are less comparable than initially anticipated. Nonetheless, the case study provides an example of the introduction of several family policy packages with varying success. In the GDR, the effect of the 1986 policy package was not correlated with many changes, while the 1972 measures were related to reduced fertility. The purely economic incentives of the 1976 family policy package had an undeniable and immediate impact on the number of births. However, the longer-term effects of this policy package are less visible.

Case Study: Poland

Poland provides researchers with an opportunity to explore the relationships between policy and demography, and is an example of a low migration Applicant Country (Table 4.1). While some countries in Central and Eastern Europe (such as Bulgaria, the former Czechoslovakia, the former GDR, Hungary, and Romania) have had pronatalist policies during the past 50 years, Poland has had several major changes to family and abortion policies during this time (Balicki, 2001). In addition, after decades of above-replacement fertility, Poland experienced a sharp decrease in fertility in recent decades, particularly since 1989, along with other post-communist nations in the region (Althaus, 1992; UN/ECE, 1999). In this case study, we ask:

> *How have family and abortion policy changes been related to fertility patterns in Poland? Also, how has Poland's relatively recent transition to a free market economy contributed to its drop in fertility?*

First, we review Poland's demographic characteristics and trends in terms of population size and growth, family formation, life expectancy, population composition, and economy. Second, we discuss how social policies have changed during different periods, and how these policy changes are associated with demographic changes. Finally, we draw conclusions based on the key findings of the case study.

Table 4.6
General Population Characteristics: Poland

Population Size and Growth			Source	Year
Total population	38,644,211	people	Eurostat	2001
Crude rate of population growth rate	−0.3	growth/1,000 population	Eurostat	2001
Crude birth rate	9.5	births/1,000 population	Eurostat	2001
Crude death rate	9.4	deaths/1,000 population	Eurostat	2001
Rate of natural increase	0.1	natural increase/1,000 population	Eurostat	2001
Net immigration rate	−0.4	net immigrants/1,000 population	Eurostat	2001
Family formation				
Total fertility rate	1.29	children/ woman	Eurostat	2001
Mean age at first birth	24.5	years	Eurostat	2000
Percent of births outside of marriage	13.1	%	Eurostat	2001
Marriage rate	5.0	marriages/1,000 population	Eurostat	2001
Mean age at marriage	23.9	years	Eurostat	2001
Divorce rate	1.2	divorces/1,000 population	Eurostat	2001
Life expectancy at birth – male	70.2	years	Eurostat	2001
Life expectancy at birth – female	78.4	years	Eurostat	2001
Population composition				
Ethnic composition	Polish 97.6%,German 1.3 %, Ukrainian 0.6%, Belarusian 0.5 %		CIA	1990
Religion	Roman Catholic 95%, Eastern Orthodox, Protestant, other 5%		CIA	1990
Sex ratio (total population)	0.94	male/ female	CIA	2003
Age distribution: 0–14 years old	18.8	%	Eurostat	2001
Age distribution: 15 – 64 years old	68.9	%	Eurostat	2001
Age distribution: 65 and over	12.3	%	Eurostat	2001
Dependency ratio (age 0 – 14 and 65 + to 15–64)	45.1	%	Eurostat	2001
Economy and human capital				
GDP per capita	9,500	purchasing power parity $ US	CIA	2002
GDP – real growth rate	1.3	%/year	CIA	2002
Unemployment rate	18.6	%	Eurostat	2001
Female activity rate	48.2	% of 15–64 years old	Eurostat (a)	2001
Women per 100 men graduating from tertiary education	183.14	women/100 men	Eurostat	2000

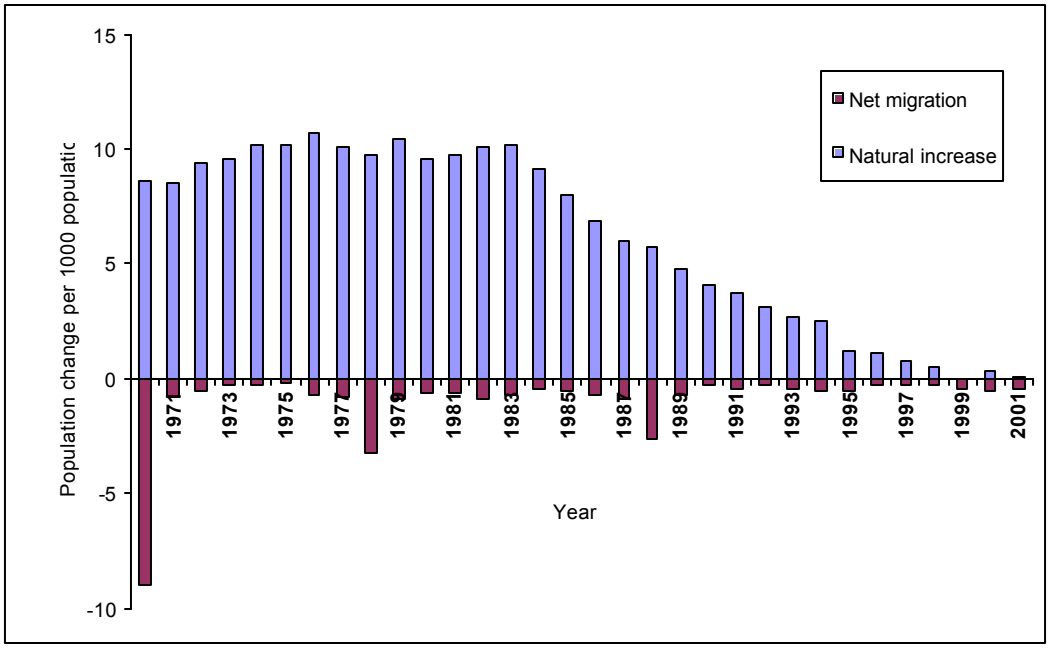
SOURCE: (CIA) (2003) (http://www.cia.gov/cia/publications/factbook/index.html)c

Demographic Trends and Figures

Table 4.6 provides an overview of general demographic characteristics in Poland. They are discussed in the corresponding sections following.

Population Size and Growth. Poland is the largest Applicant Country to the EU, with a population of over 38.6 million people in 2001 (Eurostat NewCronos database, 2002). In fact, Poland is the 26th largest country in the world and the 8th largest in Europe.[34] However, the size of its population is decreasing, and currently its rate of population loss is small (0.03 percent per year). The United Nations (UN) projects that the population will drop to below 38 million people by the year 2020,[35] and by 2050 to around 33 million, amounting to a percentage decrease over 50 years of 14.7 percent, the 21st largest projected decrease at the country level in the world.[36]

Figure 4.18: Crude Rate of Population Change by Component, Poland, 1970-2001



SOURCE: Eurostat NewCronos database (2002)

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The crude birth rate is low, at 9.5 births per 1,000 people, and the crude death rate is at a comparable level, thus making the natural population growth rate trivial. As shown in Figure 4.18, prior to 1998 the majority of the population change was due to natural increase. However, in recent years the negative population growth is driven by a net out-migration, which at present

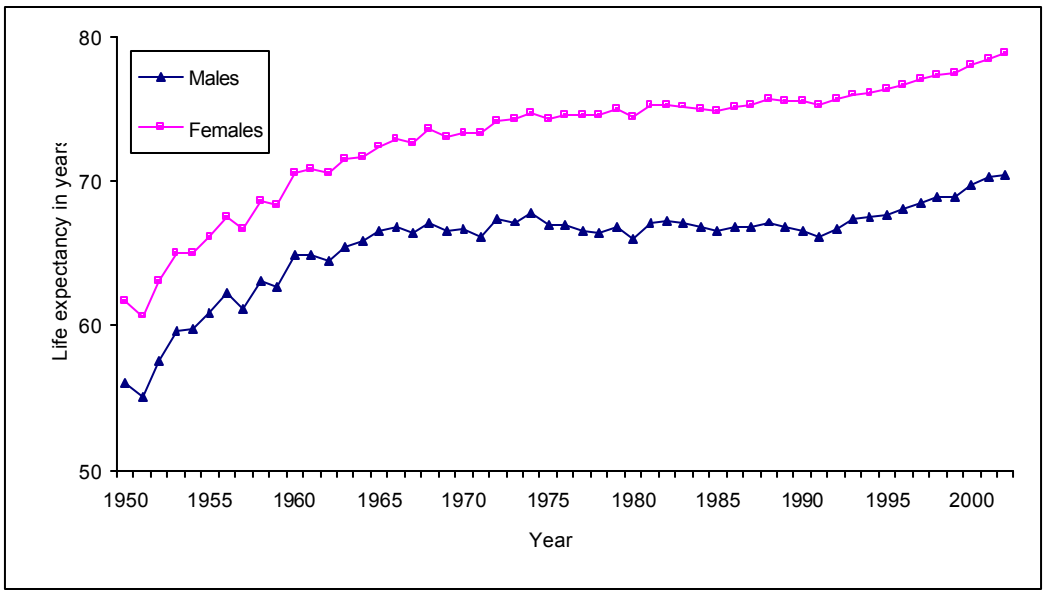
[34] Http://www.poland.pl.

[35] Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2002 Revision* and *World Urbanization Prospects: The 2001 Revision*, http://esa.un.org/unpp, 19 September 2003.

[36] Http://www.cyberschoolbus.un.org/index.asp (p. 75). The countries at the top of that list are Bulgaria, Estonia, Latvia, and the Ukraine, respectively.

fluctuates between 10,000 and 20,000 net out-migrants per year.[37] In less than five out of the past 50 years, has there been a positive net in-migration to Poland, and that was in the 1950s. After the 1950s, the greatest outflows of people were in 1970, the late 1970s and the late 1980s.

Figure 4.19: Life Expectancy at Birth by Sex, Poland, 1950–2002



SOURCE: Central Statistics Office (CSO, 2003)

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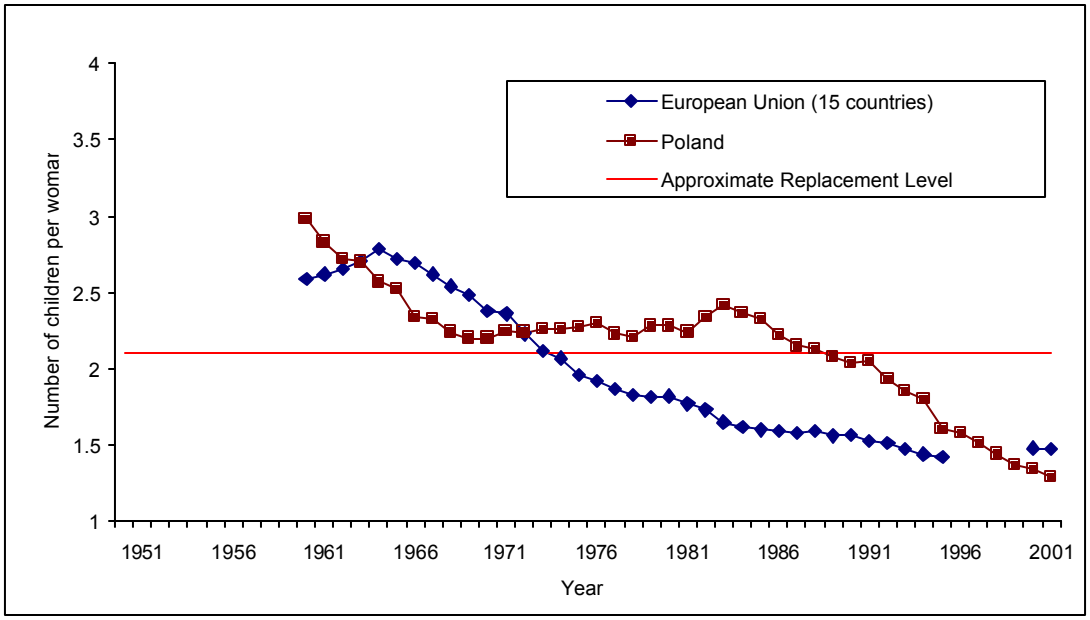
In 2000, the life expectancy at birth in Poland was 77.9 years for females and 69.7 years for men. Poland has experienced a steady increase in life expectancy over the past 50 years with the steepest increase in the 1950s, early 1960s, and 1990s, as shown in Figure 4.19. Nolte et al. (2000) find that the mortality declines in Poland have been greatest for men aged 40–64 and for women aged 65 or greater. The improvements in life expectancy in the 1990s are in marked contrast to the experience in Russia (DaVanzo and Grammich, 2001). In Poland, part of the improvement in life expectancy could be due to a change in diet (greater availability of produce) over time. Other possible factors could be changes in alcohol consumption and medical care. Since Poland has a relatively low life expectancy (compared to other European countries), improvement in life expectancy is a potential area for policy development.

Fertility and Family Formation. In the early 20th century, fertility throughout Eastern Europe was high. In Polish areas, women bore 6.2 children on average. The TFR decreased to 3.5 by 1931–1932 (2.2 in urban and 4.1 in rural areas), and remained at a similar level through the beginning of the 1950s. After the Second World War, there was an increase in the TFR, which peaked in 1955. Other than the Soviet Union, at that point in history Poland had the highest rate of natural increase in Europe (Balicki, 2001). Fertility then decreased for the next decade. In the early 1970s, the TFR in Poland was around 2.2, where it stayed or increased until the early 1980s before a steady decline, which lasted throughout the 1990s.

[37] The five most popular destinations for Polish emigrants in 1999 were Germany (71.3 percent), USA (10.9 percent), Canada (5.2 percent), Austria (2.7 percent), and France (1.2 percent) (Wanner, 2002).

As shown in Figure 4.20, on average European countries have been below replacement-level fertility (approximately TFR = 2.1) since 1970, whereas Poland only reached replacement-level fertility in 1989, at the beginning of its transition to a free market economy. However, a more careful analysis reveals that in urban areas in Poland, the TFR had been below 2.1 since 1963, and in rural areas the TFR did not dip below 2.1 until 1995 (Fratczak, 2003). In 2000, the TFR in Poland was 1.34 children per woman, well below replacement-level fertility. In urban areas the TFR was 1.19, and in rural areas the TFR was 1.59 (CSO, 2003). The decline in the fertility rate has occurred in all age groups between age 15 and 45, but especially for women aged 20–24 and 25–29 years of age (CSO, 2003).

Figure 4.20: Trend in the Total Fertility Rate, Poland, 1950–2001



SOURCE: Eurostat NewCronos database (2002)

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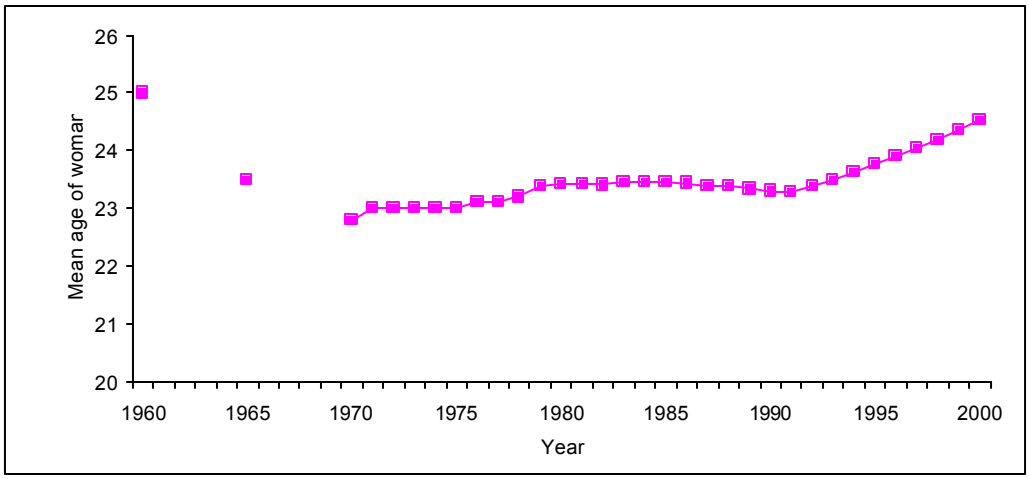
Figure 4.21: Mean Age of Woman at Birth of First Child, Poland, 1960–2001



SOURCE: Eurostat NewCronos database (2002)

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Table 4.7
Percentage of Population that are Foreign – Born: Poland 1965, 1975, 1985, 1990, and 2002

Year	Foreign population (in thousands)	Total population (in thousands)	%Foreign Born
1965	2,200	31,303	7.0
1975	1,800	33,872	5.3
1985	1,500	37,040	4.1
1990	1,709	38,111	4.5
2000	2,088	38,605	5.4

SOURCE: United Nations Population Division (1994, 2002)[38, 39]

Polish women have delayed slightly their age of first childbirth since the 1970s. In 1970, the mean age of first birth was around 22.8 years old. In 2000, it was 24.5, which is closer to where it was in the 1960s, as shown in Figure 4.21. Compared to the other case studies in this project, Poland has the lowest age of first childbirth and the least steep increase over the past 30 years. Philipov and Kohler (1999) emphasise that delays in the timing of childbirth can reduce the fertility rate, and thus the TFR, to make it appear that women are having less children overall when in fact they are changing simply the timing of their births. They calculate an adjusted TFR using the Bongaarts -Feeney formula (Bongaarts and Feeney, 1998) and show that the steepness of the TFR decline in Poland during the 1990s can be explained largely by adjusting for the age of first childbirth. Even so, during the 1990s the adjusted TFR decreased, especially during the late 1990s.

With about 10.5 million families in Poland, marriage provides the basis of family life (GPC, 1998). Whereas cohabitation is not widespread, non-marital childbearing increased substantially during the 1990s. In 1990, 6.2 percent of children were born outside of marriage, while in 2000, 12.6 percent of live births were outside of marriage (Council of Europe, 2001).[40] The number of marriages has declined since the early 1980s, with the crude marriage rate decreasing from 6.7 to 4.5 marriages per 1,000 population between the years 1989 and 2000. Marriage occurs most frequently for women between the ages of 20 and 24 years and for men between the ages of 25 and 29 years (GPC, 1998). The divorce rate is relatively low, at 1.2 divorces per 1,000.

Population Composition. Approximately 95 percent of people in Poland are Roman Catholic (75 percent are practicing Roman Catholics).[41] The remaining 5 percent are Eastern Orthodox, Protestant, or other religions. The ethnic composition of the country is 97.6 percent Polish, 1.3 percent German, with the remaining groups Belarusian, Ukrainian, or other.[42] Poland has a very small foreign-born population, which has decreased during the last 40 years but increased slightly in the past 10 years, as shown in Table 4.7. In 1965, 7 percent of the population was foreign-born (including refugees), whereas in 2000 the figure was around 5.4 percent.

The age structure of the population in 2000 is shown in Figure 4.22. Since the Eurostat NewCronos database (2002) does not have projections for Poland, a UN projection of the age

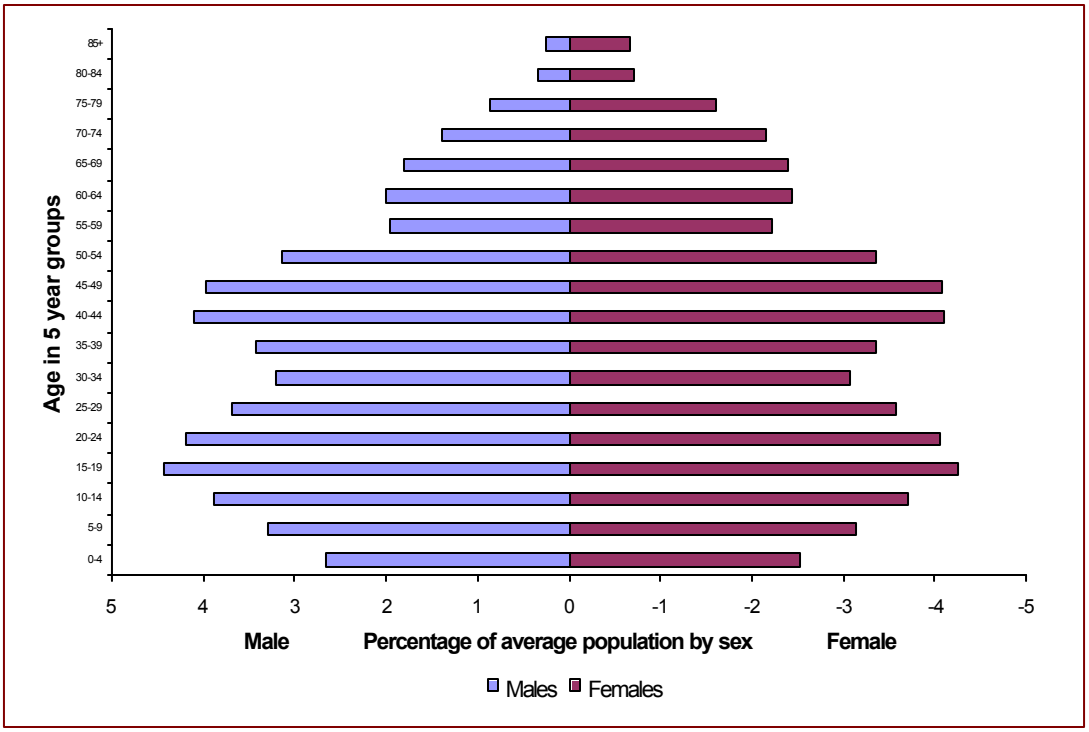
[38] Http://migration.ucdavis.edu/mn/data/foreign_pop/foreign_pop.html.
[39] The numbers for 1990 and 2000 come from the United Nations Population Division, *International Migration Report* (2002).
[40] Http://www.coe.int/t/e/social_cohesion/population/demographic_year_book/2001_Edition/Poland%202001.asp
[41] Http://www.indexmundi.com/poland/religions.html.
[42] Http://www.indexmundi.com/poland/ethnic_groups.html, using 1990 data.

structure in 2020 is shown in Figure 4.23. An age pyramid of this shape reflects three demographic characteristics:

1. decreasing fertility, as seen in the small number of persons aged 0–14;
2. increasing life expectancy, as seen in the increasing number of people in the highest age range; and
3. net emigration.

Poland faces several implications of this age structure. In the short-term, there is a projected increase in the number of people of working age. The government estimates the increase to be around two million additional people by 2010 (GPC, 1998). In the longer term, the inverted age pyramid means that a greater proportion of individuals will be beyond working age, and fewer people will be entering the working ages. The number who will be beyond working age will increase by 50 percent before the year 2020 (GPC, 1998). As in other ageing populations, a fast-growing retired population can be a large burden on the economy.

Figure 4.22: Population Pyramid, Poland, 2000



SOURCE: Eurostat NewCronos database (2002)

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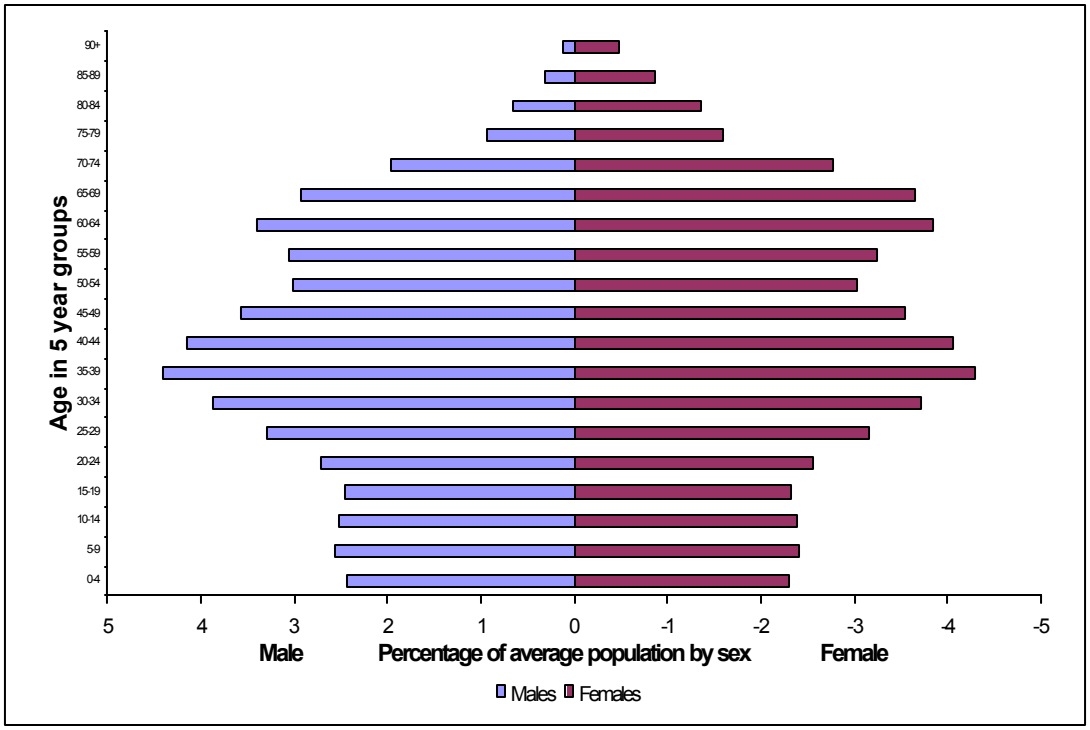
Figure 4.23: Population Projection, Poland, 2020



SOURCE: UN projection

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Economy. In 1989, the Solidarity-backed candidates defeated the ruling Communist Party in the national elections. The market reforms led to a fall in output and an increase in unemployment (Forster and Toth, 2001). For example, in 1990 unemployment was less than 1 percent, and it increased to nearly 12 percent in 1992 (Winter et al., 1999). During the first three years of the transformation, the state and cooperative sector lost 4.6 million jobs, while the private sector gained 2.6 million new jobs. Yet, since 1992 Poland has experienced significant economic growth, ranging from 3 to 7 percent per year, and inflation has decreased from 585 percent in 1990 to 11.8 percent in 1998 (Mieczyslaw et al., 1999), and 1.9 percent in 2002. [43] In 2000, the GDP per capita was €4,223 and the unemployment rate was high at 16.5 percent. In 2002, at 18.1 percent, unemployment is more than 2.5 times the European average (Eironline, 2003a). The real growth rate of GDP is currently relatively high in Poland at 1.3 percent, and the female employment rate is at 48.2 percent (Eurostat, Labour Force Survey, 2001). An opinion poll conducted in 1997 revealed that 40 percent of respondents believed "Poland was a better place to live for people like you" before 1989, whereas 45 percent reported being better off at the time. Others (15 percent) said it was difficult to say (CBOS Bulletin, 1997).

Although Poland is not yet a member of the EU, it has integration with the EU through trade. Almost 70 percent of its exports are sent to the EU, with Germany being its principal trade partner.[44]

[43] Http://www.poland.pl.

[44] Http://www.researchandmarketsreports.com.

History of Policy Efforts and Policy Impacts

Pronatalist Policies and Increasing Fertility: Post-Second World War-mid-1950s. The population policy after the Second World War was pronatalist, stemming from the need to make up for losses from the war, and also the Marxist idea that population growth is a sign of social vitality (David and McIntyre, 1981). The government supported motherhood through child allowances, and by giving priority to families in terms of receiving an apartment. This period was associated with a large increase in fertility (Balicki, 2001).

Limited Family Policies and Decreasing Fertility: Mid-1950s-1970. In the second half of the 1950s and with the onset of difficult economic conditions, the government withdrew support for families, expressing that one way to improve the standard of living was to limit the level of natural increase. The government launched campaigns in newspapers and magazines to encourage couples to have smaller families. In addition, despite being a primarily Catholic country, in 1956 a liberal abortion law was passed (Balicki, 2001; Fratczak et al., 2003). Women were encouraged to work and to use birth control (David and McIntyre, 1981). During this time-period Poland experienced a drop in fertility rate. The effectiveness of these policies to reduce fertility provides evidence that policies contribute to the fertility decisions of women. On the other hand, we do not have enough information to identify the magnitude of the impact for each policy.

Expanding Family Policies and above Replacement Fertility: 1970-1989. A series of pronatalist measures were initiated again in the early to mid-1970s. First, there was an improvement in family allowances at the end of 1970 and a revision and extension of maternity leave in January 1972. Employed women were given maternity leave of 16 weeks for the first child and 18 weeks for each additional child. [45] The amount of the allowance was 100 percent of their wage. Unpaid childcare leave, which began in 1968, was extended from one to three years in 1972 (Fratczak et al., 2003). Special credits were established in the same year for married couples that were under age 30 and married less than five years. In 1974, a childbirth allowance was introduced for all employed women or unemployed wives of employed men. In 1978, this was expanded so that it was granted to all citizens regardless of employment status (Fratczak et al., 2003). This programme of welfare benefits was a burden for the national budget but it encouraged population growth (Balicki, 2001; Sokolowska, 1978). During this period, fertility increased and by the mid-1970s, the TFR was above 2.2.

During the 1980s, family benefits continued to increase. Childcare allowance was introduced in 1981, lasting for 18 months from the day that maternity leave ended. Single mothers or women whose children required longer care could receive this benefit for up to an additional 18 months (Fratczak et al., 2003). The baby boom peaked in 1983 with 720,800 births; however, since then there has been a fertility decrease. Family allowances were higher in the Central and Eastern European countries than any Western European country during this time relative to average wages. In Poland, for example, family allowances were around one-fifth of average wages (Forster and Toth, 2001). It is not clear what caused the turnaround in fertility in the years following 1983, but decreasing fertility persisted through the 1990s.

Economic and social transition and dramatic decline in fertility: 1989 and onwards. Since the economic transformation from a planned to a free market economy, Poland has experienced a number of social and economic changes, including an increase in unemployment, poverty, housing shortage, and the privatisation of numerous services such as family centres,

[45] Twenty-six weeks of leave are given to women with multiple births.

nurseries,[46] kindergartens,[47] and schools (Balicki, 2001). Despite the expectation that the move to free market liberalism would lead to radical cuts in social spending, Poland experienced an unprecedented expansion of social spending relative to the GDP in the form of unemployment benefits, assistance for the poor, extension of early retirement rights, and pension benefits (especially provided to older recipients who had suffered from the hyperinflation) (Erdmann, 1998; Inglot, 1995). This expansion of benefits could have been due to growing needs in a tougher economy. Substantial policy reform occurred later, around 1995, when the government moved away from universal access to family benefits and introduced an income test for benefits, restricting eligibility and stigmatising recipients (Fodor et al., 2002; Potoczna and Prorok-Maminska, 2003). Since 1992, there had been a reduction in total family cash benefits, child allowances, and maternity allowances (Forster and Toth, 2001). Social spending as a percentage of GDP dropped from 2 percent in 1992 to 0.7 percent in 1999 (Fodor et al., 2002). Others report that the government was making efforts to increase family size. For example, it stopped subsidising contraceptives, and parents were allowed to make decisions about whether the mother or father was to accept parental leave (Warzywoda-Kruszynska and Krzyszkowski, 2000).

With regard to abortion, policies became more restrictive in 1990 due to changes in political leadership; they relaxed in 1995, but then became more restrictive again in 1997 (GPC, 1998). The effects of these policy changes on the number of abortions are difficult to ascertain since it is hard to obtain accurate data. Fertility patterns did not alter markedly with the changes in abortion policies during the 1990s (Warzywoda-Kruszynska and Krzyszkowski, 2000), as fertility had been on a fairly constant downward slope.

To address the ageing population issue, the government is responding in multiple ways outside of the fertility component. One example is that the government has substantially reformed and privatised the pension system (Fultz, 2002). Although the new system was implemented in 1999, benefits will be paid under the old formula until 2009. After 2009, benefits will reflect each individual's contributions more directly than the previous system (Fultz, 2002). Individuals are also encouraged to extend their working lives in exchange for increased benefits (Estrin and Lennox, 1998).

Possible explanations for the decrease in fertility during the 1990s. We discuss three non-exclusive, potential explanations for the rapid decrease in fertility during the 1990s. First, fertility reduction could be due to the social and economic difficulties associated with economic transition (Philipov and Kohler, 1999; UN/ECE, 1999, 2000). Economic hardship may deter or delay additional births. Support for this argument in Poland comes from a "Family Questionnaire", which was conducted by the Central Statistics Office in 1995. The primary reasons that one-fifth of the surveyed women did not achieve their maternal plans were poor material conditions (35 percent of cases) and poor health (25 percent of cases). Other less-cited reasons were the threat of unemployment and commitment to their career (Balicki, 2001). If the major reason for low fertility is due to difficult financial conditions, we might expect fertility to rise again once those social and economic difficulties are overcome. The theoretical explanations that support this reason for fertility decline are rational choice theory and risk aversion theory (Fratczak, 2003). With regard to rational choice theory, the costs of having children outweigh the benefits. With regard to risk aversion theory, people are worried about the stability of their jobs

[46] While only a small percentage of Polish children were enrolled in nurseries, after 1989 the number dropped by more than 50 percent. For example, in 1989, 3.26 percent of children between 0 and 3-years-old were in day nurseries, but in 2001 only 1.47 percent were in day nurseries (Fratczak et al., 2003).

[47] In contrast to the experience with nurseries after the transition, with kindergartens the percentage of enrolled children aged 3–6 remained similar over the years. In 1989, 49.5 percent of 3–6-year-olds attended, and in 2001, 51.4 percent attended (Fratczak et al., 2003).

and the overall economic situation, so they are more reluctant to have children (Potoczna and Prorok-Maminska, 2003).

Second, with the diffusion of Western ideas and modernisation of the family, fertility patterns could be shifting toward the Western European pattern of fewer children (Philipov and Kohler, 1999; UN/ECE, 1999, 2000). This may be related to changing values, an increase in women pursuing higher education, and a larger percentage of women being committed to their careers. If the diffusion of Western ideas is a driving force behind the decline in fertility, we might expect the fertility rate to stay at a similar level as the present. For example, Germany – the country with which Poland has the greatest trade – has had a TFR hovering around 1.4 for the past 20 years. The theories that support this explanation for fertility decline are post-materialist values theory and gender equity theory. With regard to post-materialist values theory, the assumption is that individuals attach a greater value to aspects such as self-realisation, satisfaction of individual preferences, and freedom from traditional family patterns. Gender equity theory argues that the decrease in fertility levels is related to an increase in the power of women to make decisions concerning their fertility (Fratczak, 2003).

Third, and as highlighted above, there have been major policy changes in terms of benefits for mothers and families since the transition. For the most part, these allowances have been reduced and the social services that were provided previously have been privatised (Balicki, 2001; Forster and Toth, 2001). The reduction of benefits over the course of the 1990s could be a compelling explanation for the decrease in fertility. While we do not have the data to investigate which of these potential explanations are driving the changes, it is a feasible research project. Several ideas on how better to answer this question are as follows:

1. survey young couples and ask them about factors in their fertility decisions;
2. conduct a cross-national study that compares standardised data on policy changes in each country with changes in fertility since the transformation; and
3. look for natural experiments where analysis of policy change on a demographic outcome can be conducted. For example, if certain regions in Poland implemented a given policy before other areas, it would be possible to compare fertility in two similar regions both with and without the policy.

A variety of research approaches could be useful in identifying sources of fertility decline in the transition economies.

Conclusion

The demographic history of Poland provides a compelling argument for the way in which the communist government used population policies as an instrument to drive fertility. For example, in the 1970s, when the Polish government became pronatalist after a lapse in pro-family policies, fertility declines halted and fertility rates actually increased slightly during the following decade (Balicki, 2001). Thus, in answer to our first research question, changes in family and abortion policy have had an impact on Polish fertility.

However, more recently and with a shift to a free market economy, fertility has been decreasing steadily, despite the fact that the public have been pronatalist. During this time, the political, social, and economic changes have been so widespread that it is not possible to identify a causal relationship between the various changes and their accompanying demographic outcomes, given our data. Three potential causes of this transition to low fertility are:

1. economic hardship associated with the shift to the free market economy;
2. a diffusion of Western European culture; and
3. changes in family policies.

Future research is certainly needed to explore how the policies, economic, and social conditions of the country contribute to its fertility patterns.

Case Study: Spain

Spain represents the traditional southern European country with its belief systems, ways of life, and struggling demographic profile. From our case-study clusters, Spain (like Germany) represents a low low fertility / high migration Member State (Table 4.1). Many of the issues presented in relation to Spain are also present in Greece, Italy, and Portugal, to a greater or lesser extent. Democratic rule emerged in Spain with the dissolution of Franco's regime in 1975. Under Franco, contraception was prohibited, women were maintained in traditional roles as spouses and mothers and large families were honoured, explicitly to protect the family and encourage population growth. Spain has since undergone a number of political and ideological adjustments (e.g. within the realms of family policy, labour policy, and welfare policy). The view towards family policy, in particular, has dramatically changed from the explicit policy found under Franco to the "hands-off" approach found today (Flaquer, 2000; Vidal and Valls, 2002). The dramatic change in governance most likely reinforced the belief system that the family is best left undisturbed by the state and should be the resource that is first utilised in caring for other family members. Thus, in this case study, we focus on the following research question:

> *Can the relatively low fertility rate in Spain in the period 1975–now be explained by the lack of family policy, and if not, which other factors might contribute to it?*

This case study considers Spain's demography and policy. First, we discuss Spain's demographic characteristics and trends in terms of population size and growth, family formation, population composition, economy and human capital. Second, we assess its policy efforts, the impact of such policies, and the challenges faced.

Demographic Trends and Figures

A summary of Spain's general demographic characteristics is given in Table 4.8. These characteristics are discussed below.

Population Size and Growth. With over 40 million people, Spain currently has the fifth largest population among the EU Member States. Within the southern European states, Spain has the second largest population, trailing that of Italy by nearly 20 million people, and its population is currently growing at an annual rate of 0.72 percent per year. This small rate[48] of growth reflects the fact that the crude birth rate in Spain is now very low (10.1 births per 1,000 population), the crude death rate is 8.7 deaths per 1,000 population, and the rate of natural increase is small at 1.4 per 1,000 population. With nearly 100,000 immigrants in 1999, the current level of immigration to Spain is higher than most European countries.[49] The life expectancies at birth for males (75.6 years in 2001) and females (82.9 years in 2000) in Spain are comparable to the European averages (75.3 years in 2000 for males; 81.4 years in 2000 for females).

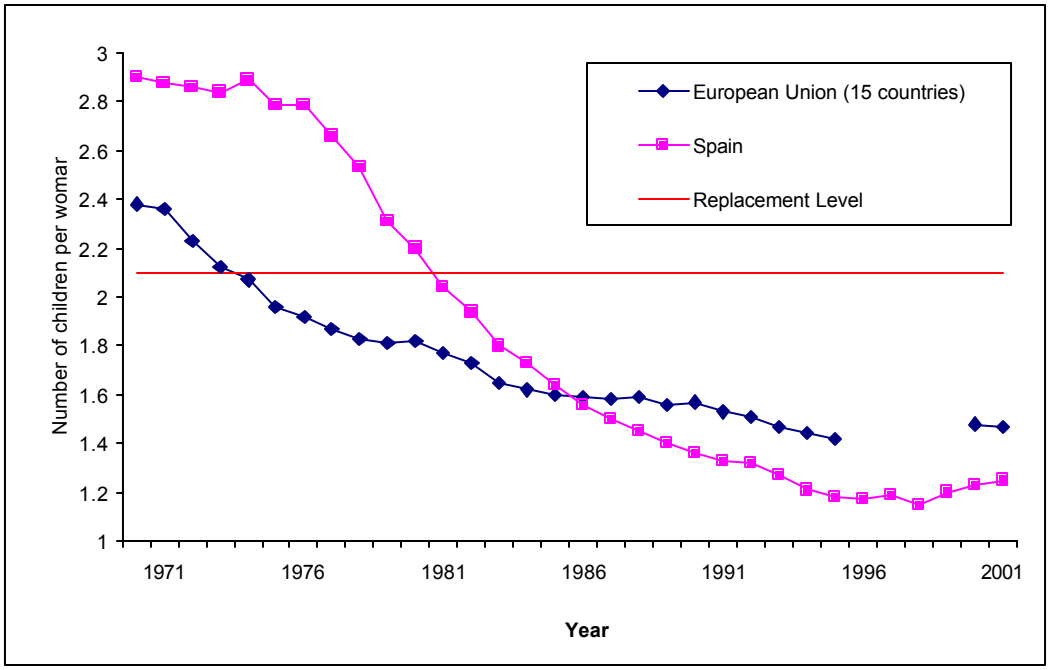
[48] This is, however, the largest growth rate of the five case study countries considered in this report.
[49] Eurostat NewCronos (2002)

Table 4.8: General Population Characteristics, Spain

Population Size and Growth			Source	Year
Total population	40,121,673	people	Eurostat	2001
Crude rate of population growth rate	7.1	growth/1,000 population	Eurostat	2001
Crude birth rate	10.1	births/1,000 population	Eurostat	2001
Crude death rate	8.7	deaths/1,000 population	Eurostat	2001
Rate of natural increase	1.4	natural increase/1,000 population	Eurostat	2001
Net immigration rate	5.8	net immigrants/1,000 population	Eurostat	2001
Family formation				
Total fertility rate	1.25	children/ woman	Eurostat	2001
Mean age at first birth	29.0	years	Eurostat	1999
Percent of births outside of marriage	17.0	%	Eurostat	2000
Marriage rate	5.2	marriages/1,000 population	Eurostat	2001
Mean age at marriage	27.7	years	Eurostat	2000
Divorce rate	1.0	divorces/1,000 population	Eurostat	2000
Life expectancy at birth – male	75.6	years	Eurostat	2001
Life expectancy at birth – female	82.9	years	Eurostat	2001
Population composition				
Ethnic composition	Composite of Mediterranean and Nordic types		CIA	2003
Religion	Roman Catholic 94%, other 6%		CIA	2003
Sex ratio (total population)	0.96	male/ female	CIA	2003
Age distribution: 0–14 years old	14.7	%	Eurostat	2001
Age distribution: 15 – 64 years old	68.4	%	Eurostat	2001
Age distribution: 65 and over	16.9	%	Eurostat	2001
Dependency ratio (age 0 – 14 and 65 + to 15–64)	46.2	%	Eurostat	2001
Economy and human capital				
GDP per capita	20,700	purchasing power parity $ US	CIA	2002
GDP – real growth rate	2.0	%/year	CIA	2002
Unemployment rate	10.6	%	Eurostat	2001
Female activity rate	51.7	% of 15–64 years old	Eurostat	2001
Women per 100 men graduating from tertiary education	134.3	women/100 men	Eurostat	2000

SOURCE: Eurostat NewCronos database (2002) and Central Intelligence Agency (CIA) (2003) (http://www. cia.gov/cia/ publications/factbook/index.html)

Figure 4.24: Trends in Total Fertility Rate, Spain 1970–2001



SOURCE: Eurostat NewCronos database (2002)

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Fertility and Family Formation. As seen in Figure 4.24, Spain has experienced a dramatic decline in fertility over the past three decades. In the 1970s, Spain had the second highest fertility rate among all countries that are now Member States or Applicant Countries of the EU, surpassed only by Ireland. Spain's fertility rate began to decrease sharply in the late 1970s, and fell below replacement level (2.1 children per woman) in 1981. Spain's declining fertility rates in the early stages were due to an almost complete disappearance of third and subsequent births and a considerable reduction in the frequency of second children (Cordon, 2000).

The fertility rate reached a low of 1.15 children per woman in 1998 and has increased slightly since then. Cordon (2000, 2001) suggests that this recovery is mainly due to an increase of the fertility of women over the age of 30 and as a consequence of the very low fertility that these women have had in the recent past (as indicated in Figure 4.25), coupled with the arrival of a significant number of young immigrants with a higher fertility rate. Nonetheless, the most recent measure (2001) of the fertility rate in Spain, 1.25 children per woman, is clearly well below the replacement level and is one of the lowest in the world.

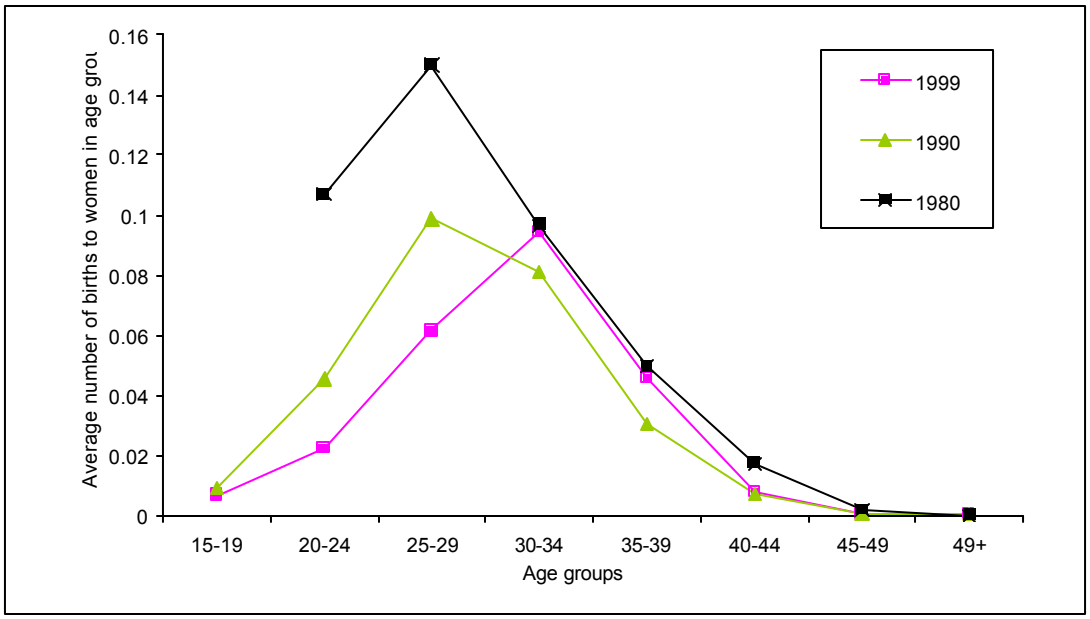
Several interacting factors have been proposed to account for Spain's low fertility rates, including:

- high unemployment (especially for those under 30), deterring early family formation;
- the tendency of young people to continue to reside with their parents, resulting in relatively low cohabitation rates;
- lower rates of non-marital childbearing than other European countries;
- low teenage fertility; and

- late age at marriage.[50]

All of this resulted in the postponement of childbirth. In the mid-1970s, the average age at which women had their first child was about 25; by 2001 this had increased to 29 (Eurostat NewCronos database, 2002). This delay in beginning childbearing contributed to the decrease in the fertility rate. Spain has also witnessed a steady increase in the mean age of first marriage for women: increasing from 23 years in 1980 to 27 years in 1999. Divorce rates have also been on the increase in Spain, doubling from one in 10 marriages in the early 1980s to one in five in 2001. Delays in marrying and the increase in divorce rates have also contributed to a decline in the marriage rate to 5.2 marriages per 1,000 population in 2001, compared to 7.4 marriages per 1,000 population in 1970 (Eurostat NewCronos database, 2002). Related to this, births outside marriage have also been on the increase, to 17 percent in 2000, but this is relatively low compared with other European countries.

Figure 4.25: Age-Specific Fertility Rates, Spain 1980, 1990, and 1999



SOURCE: Eurostat NewCronos database (2002)

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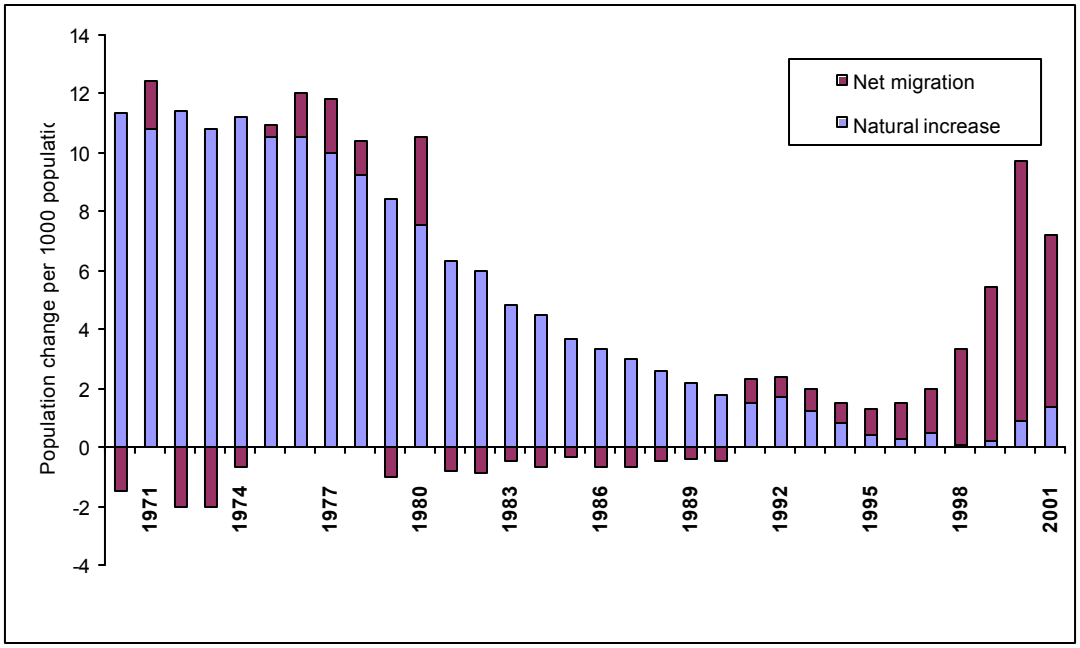
Population Composition. The trends in the crude rate of natural population growth for Spain from 1970 to 2001 are given in Figure 4.26. Reflecting the pattern of changes in Spain's fertility rate, the crude rate of natural population growth decreased from 11.3 per 1,000 population in 1970 to a low of 0.1 in 1998, and then took an upturn to 1.4 in 2001. The rate of decline of Spain's crude rate of natural population growth is much greater than the Member States' average, from 5.7 in 1970 to 1.7 in 2001.

[50] Spain Country Summary, 2003, The Clearinghouse on International Developments in Child, Youth and Fertility Policies at Columbia University: http://www.childpolicyintl.org/countries/spain.pdf.

Figure 4.26: Crude Rate of Population Change: Spain, 1970–2001



SOURCE: Eurostat NewCronos database (2002)

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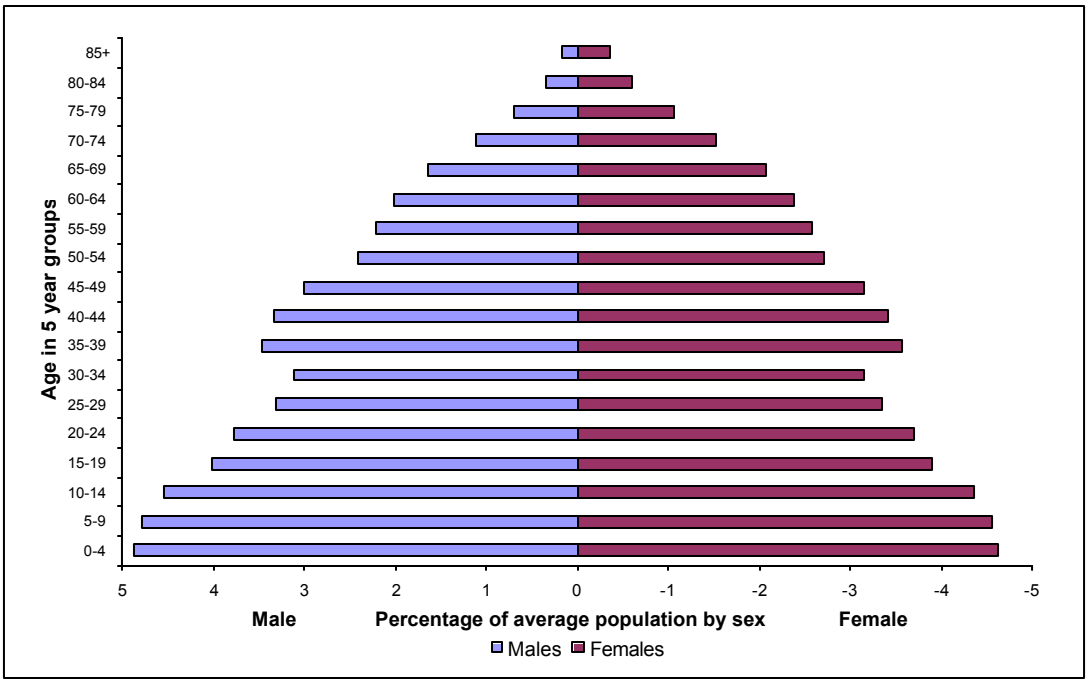
Despite low rates of natural population growth, Spain has experienced an increase in the crude rate of total population growth in recent years, from 1.3 per 1,000 population in 1995 to 9.7 in 2000, resulting from increasing net immigration of 0.9 per 1,000 population to 8.8 over this period. All EU Member States have experienced annual increases in population during the 1990s due to net immigration. Between 1981 and 2000 most Member States saw a decline in the proportion of foreign nationals from other European countries, and an increase in the share of foreigners from Africa or Asia. This has been particularly marked for Spain, as it experienced an increase in the percentage of all foreigners who are of African and Asian origin from 2.2 percent and 6.3 percent respectively of all foreigners in 1981, to 26.6 percent and 8.3 percent in 2000 (Wanner, 2002).

Past, current, and projected trends in Spain's population structure are illustrated by population pyramids for 1970 (Figure 4.27), 2000 (Figure 4.28) and projections for 2020 (Figure 4.29). In 1970, Spain's population structure did indeed have the shape of a pyramid and reflected a young population, with 28 percent being 0-14-year-olds, 63 percent 15–64 year olds, and 9 percent aged 65 and over. By 2000, declining fertility rates and ageing population is indicated in Figure 4.29 by the narrow base of the pyramid shape: 0-14-year-olds make up only 15 percent of the population, whereas 17 percent were aged 65 and over. That is, the number of older people exceeded already the number of the young.

A Eurostat projection of the current population structure to 2020 indicates a further ageing population, as shown by the more profound narrowing of the pyramid in Figure 4.29, where it is estimated that 0–14 year olds will make up only 14 percent of the population, and those aged 65 and over will make up 20 percent of the population. That is, in 2020 the percentage of the population that is under 15 will be half of what it was in 1970, but the percentage aged 65 or older will be more than double what it was 50 years earlier. Furthermore, the relatively small projected percentage of women in the childbearing ages of 25–44 in 2020 has potential to lead to even lower crude birth rates.

Figure 4.27: Population Pyramid, Spain, 1970



SOURCE: Eurostat NewCronos database (2002)

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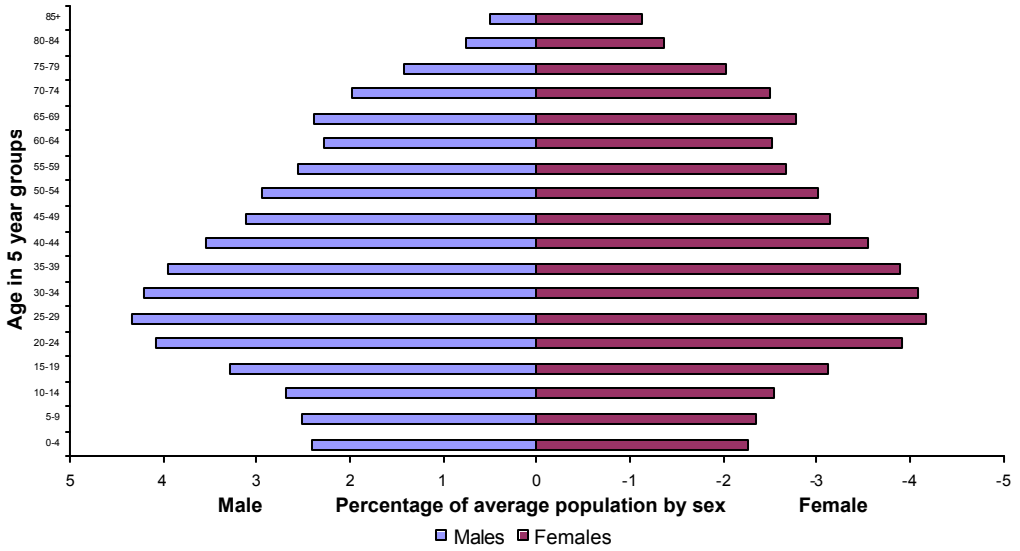
As the percentage of the population of working age continues to shrink, and the number and percentage of those of pensionable age continue to increase, this has implications for the whole population. In 2001, an old-age dependency ratio of 18 percent means that every 10 working-age people 916-64 years old) must support nearly two older persons (age 65+) (Eurostat NewCronos database, 2002). Given Spain's projected population structure, a major concern is whether a sufficient working-age population will be available to support an increasing older population.

Economy. In terms of Gross National Income, Spain has the fifth largest economy in Western Europe, behind Germany, UK, France, and Italy (World Bank, 2002). The unemployment rate for 2001 was 10.6 percent, which is one of the highest within the EU Member States. Only a few Eastern European countries and Greece have comparably high unemployment rates (Eurostat NewCronos database, 2002). Employment in Spain is primarily full-time in nature, making it difficult for young people and women who might want to work part-time to find such jobs. In fact, only 16 percent of women between the ages of 25 and 34 have part-time contracts (as cited by Vidal and Valls, 2002). Women constituted 37.5 percent of Spain's workforce in 2000, but female unemployment remained high at 20.6 percent.

High unemployment rates and housing prices increasing faster than the rate of inflation are the two main reasons that are attributed to the continued growth in young people living at home with their parents for longer periods than their European counterparts.[51] According to Flaquer (2000), in 1995 only 1 percent of either men or women in the 20–29 year age group in Spain lived in single-person households, whereas the European average was 12 percent for men and 10 percent for women.

[51] Cordon (2000) anticipates that the fertility level in Spain will be highly dependent on housing policy, as labour markets improve.

Figure 4.28: Population Pyramid, Spain 2000



SOURCE: Eurostat NewCronos database (2002)

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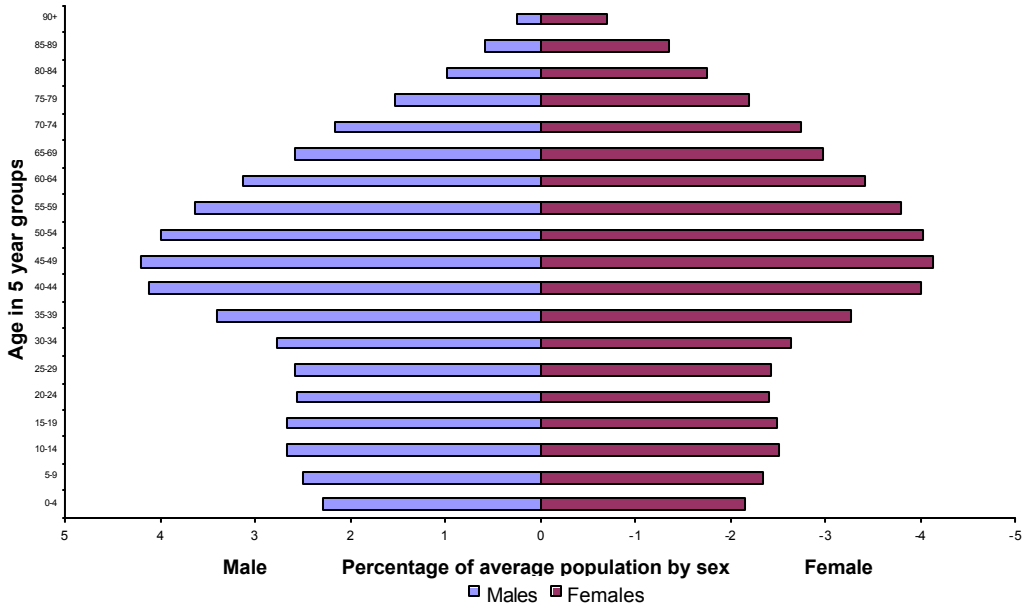
Figure 4.29: Population Projection, Spain, 2020



SOURCE: Eurostat NewCronos database (2002)

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One trend that is interesting to trace is the emancipation of women in the late 1970s and their increasing role in the workforce. As, increasingly, women began to choose to spend their time in work-related activities rather than in the familial role, Spain began to experience falling fertility rates. Most researchers contend that the reduction in the fertility rate can be attributed to better educational and career opportunities for women (Adam, 1996; Vidal and Valls, 2002).[52] The delay in marrying and decline in marriage rates is most likely due to these same factors.

As with most European countries, women joined the workforce in increasing numbers during the late 1970s and early 1980s. The female activity rate for 15–64-year-olds in Spain in 2001 was just over half, at 51.7 percent, increasing from 40.6 percent in 1990 (Eurostat NewCronos database, 2002). However, there is a large difference between the activity rates of married and unmarried women: the activity rate for married women aged 25–49 was 57 percent in 2000, whereas the activity rate for unmarried women was over 80 percent in 2000 – close to men of the same age and marital status (Cordon, 2001). The structure of the workforce influences the nature of the family unit, but currently the demands of both family and work responsibilities are not addressed by policy (Sanchez-Marcos, 2003). Women who have secure full-time work and would like to have children are forced typically to choose between one or the other. Should they choose to have children, they may prefer to work part-time after the birth of their child, but, as previously mentioned, part-time work in Spain is not easily found.

History of Policy Efforts and Policy Impacts

For many years, most people in Spain strongly opposed any public action that was aimed at increasing fertility. This was for two reasons: first, the general belief was that Spain's birth rate was too high; and second, the people held strong ideological beliefs rejecting policies that were associated with the Franco dictatorial regime (Cordon, 2000). Since 1998, family issues have shown a marked presence in Spain's political agenda as well as the media; in particular, attention has been given to reconciling work and family recently (Cordon, 2001). Efforts in this area are a result of two main concerns: the future of the pension system given Spain's ageing population and concerns over high rates of immigration.

In order to understand policy and its implications, one must first understand the government structure. Spain consists of 19 autonomous communities or "regions", all with different degrees of autonomy. These regions each typically think of themselves as different ethnically and socially from the remainder of Spain. The existence of these autonomous regions creates a three-tiered political system with local, regional, and national interests. Each level of government has particular issues for which it is responsible. Most social policy in Spain falls under the purview of the regional authorities, making it difficult to find one policy that is applied equally to the entire country. Considering that each region may have unique concerns that need to be addressed, policy that is passed at a national level may be enhanced differently in order to best suit the needs of the region's population.

At a national level there are no explicit policies to increase the birth rate, but effects on fertility tend to be mentioned as one of the justifications for introducing family policy measures. At a regional level, government is becoming involved increasingly in family policies: Catalonia adopted a "Plan for the Family" in 1993; Madrid and Galicia are now making similar plans; and the Basque country has announced the first explicit policy response to the demographic situation in Spain. Both the increasing role of the regions in family policy and the diversity of measures increases the difficulty of tracking and assessing Spain's family policy measures (Cordon, 2000); however, this opens up opportunities to assess the effects of different policies. Perhaps in

[52] See also www.apsoc.ox.ac.uk/fpsc/bulletin/winter2000/index/200.com.

recognition of uncoordinated policies, earlier in 2003 the government introduced a national family policy: a three-year initiative to coordinate family policy measures and enhance their coherence.

Family Policies. There are several national policies that attempt to assist families with dependent children who are struggling financially. It is suggested by several researchers that the aim of many of these policies is not to encourage reproduction, but to keep the poorest segment of Spanish society from becoming socially excluded. As such, policies fall more into the area of welfare policy rather than pronatal policy. Families with children under the age of three and who make less than €7,800 per annum, are eligible to receive €300 per year per child from social security. This is less than half the average monthly family income in Spain for the first quarter of 2003 (€1,412). [53] In 2002, nearly 800,000 families received this benefit, costing the Spanish government over €600 million in total. Several other fiscal policies exist that provide additional monetary transfers, discounts for higher education, and tax relief to needy families. The amounts of these state benefits tend to increase with family size and financial need; the duration tends to decrease with the age of the children. [54] Some assistance programmes are often paired with additional regional support in order to increase the overall amount for the families that are most in need. According to Vidal and Valls (2002), these benefits are difficult to obtain unless large families are verging on poverty. A significant change in the tax relief structure occurred in 1999; however, it does not benefit families who receive social assistance as they are not required to file taxes.

Maternity leave within Spain has been designed in accordance with EU directives in order to "reconcile working and family life" and create equal opportunities for women. [55] These directives specify the minimum amount of benefit that should be provided; the effectiveness of the policy largely depends on how the state decides to implement or augment the directive. In order for women to take advantage of this benefit, they must have made contributions for at least 180 days in the five years prior to the birth of a child. The contributions and benefit base are determined by the woman's salary and only come into effect if she is working in a registered job. [56] Although maternity leave is mostly paid for by social security, it is perceived by employers as an important cost for the company. [57] Fully funded maternity leave can last for up to 16 weeks. The father has a similar benefit if he is also employed; however, the time length is limited to 10 weeks. Unpaid leave of up to three years is also available, although the fact that no money is received during this time makes it difficult for parents to take advantage of this policy in order to care for their child. Escobedo (1999) suggests that only one-third of Spanish mothers utilise maternity benefits. This is in part due to the bureaucracy of getting registered jobs and the nature of the Spanish economy, with many small family-owned businesses.

Childcare services for working families, and their level of utilisation, vary by region. Generally, they fall into one of two categories. One is based upon an educational model, while the other is focused on caring for the children rather than "educating" them. Educational programmes are often shorter than the length of the working day and, hence, alone they do not provide adequate coverage for a parent who is working full-time. Those that fall within the educational model are

[53] Estimates of the International Monetary Fund, at http://www.ine.es/tempus/fmi/fmi.html.

[54] Details are given in Vidal and Valls (2002).

[55] 92/85/EEC Directive (October 1992), and 96/34/EEC (June 1996).

[56] The majority of the non-registered ("black market") jobs are in the agricultural sectors and large parts of the tourist and service industries. Spain is one of the countries (together with Italy) in the EU with the highest percentage of black money circulating (about 20 percent of GNP).

[57] Http://www.reformmonitor.org/httpd-cache/doc_reports_1-47.html.

free to parents, as they are part of the educational system.[58] With this system, Spain has succeeded in providing care for nearly all children over the age of four. In contrast, programs for children under the age of three vary in availability and price by region. On average, most parents pay 20 percent of the cost for the care of children under three at public centres and 50 percent of the cost for private care. The remainder of the money comes from local, regional, or national subsidies. Perhaps the scarcity of programmes for children under the age of three at the public level causes the private sphere to be utilised more frequently, costing on average €150 per month for 5-6 hours per day of care (Vidal and Valls, 2002).

The fragmented parent and child policies present in Spain reflect the belief system that family creation and structure are matters to be decided upon and supported by families rather than the state. Further evidence is found in the relatively small amount of money that is earmarked for family and social policy. With its expenditure of 2.1 percent of GDP on family and childhood issues, Spain spends the least in this area of all EU countries – only one-quarter of the European average of 8.5 percent of GDP (Vidal and Valls, 2002). The values attached to the importance of the family can also be found in the large number of multi-generational households. Only 1 percent of 20–29-year-olds live outside of their parents' home (Flaquer, 2000). The family is viewed as the prime resource to be utilised in times of need, whether it is for the care of young children or ageing parents. This belief system is also found in other Mediterranean countries, namely Italy, Greece, and Portugal, which are facing many of the same issues that are to be found in Spain.

Some of the initiatives discussed above are a result of the government's "Support for Families" programme (*Plan Integral de Apoyo a la Familia*) to overcome obstacles faced by families, with the aim of giving families what they want rather than promoting more births. Other interesting approaches cited by Cordon (2001), at various levels of development, include:

- increasing the housing supply and lowering rents (to allow young adults to leave home earlier);
- financial incentives to employers for hiring an unemployed woman within 24 months of giving birth;
- expanding public education to cover the total demand by families with children under three years of age;
- the chance for mothers and fathers to work part-time during maternity leave; and
- enabling fathers to receive maternity allowances if the mother were eligible for them.

Although family associations and the media welcomed the programme as the first step, it was criticised for not being more substantial and lacking budgetary commitment.

Pension System. The current pension system in Spain is a social security system, wherein the individual can receive 100 percent benefit if he or she has worked and contributed for at least 10 years and retires at age 65. People can choose to retire earlier, at age 62, and receive less money. The size of the benefit depends upon the salary of the worker. It is noteworthy that pension expenditures have remained steady at approximately 9.9 percent of GDP for the past 10 years, despite the fact that the number of older people has slowly increased both in absolute and relative terms.[59] However, Spain has not yet made any significant changes in its pension scheme. Cordon

[58] The Law on the General Organisation of the Education System was implemented in 1990, making basic education (including infant education) free, as explained by Vidal and Valls (2002).

[59] Data from Eurostat NewCronos gives the population aged 65 and over in 2000 at 6.7 million (17 percent of total population), compared to 5.3 million (14 percent of total population) in 1990.

(2001) states that, contradictory to previous fears, the public pension system is now experiencing a financial surplus due to a significant increase in employment and slowing down of early retirement.

Abortion, Contraception, Divorce, and Cohabitation. Spain's Roman Catholic population (94 percent) has had significant influence on abortion, contraception, and divorce, all of which may affect fertility. Abortions are only allowed in Spain when the mother's life is danger, her mental or physical health are at risk, or in cases of foetal impairment, incest, or rape.[60] A 1998 bill that attempted to relax these laws was rejected. In 1996, the rate of abortion in Spain was the lowest in the EU, at 5.7 per 1,000 women of childbearing age (i.e. 15–44 years) – even lower than Ireland, the only country in the EU that has no legal abortions (5.9 per 1,000 women of childbearing age). By comparison, Italy (which has much more liberal abortion laws and abortions which are provided free by the state) has an abortion rate of 11.4 per 1,000 women of childbearing age.[61] According to the International Planned Parenthood Federation, there is no family planning policy in Spain; however, contraceptives are readily available,[62] with 69 percent of women in Spain of childbearing age (15–49 years) using modern contraception, as compared with 72 percent in Germany and 68 percent in France.

Divorce was legalised in Spain by the Divorce Act of 1981. Since that time the rate of divorce has slowly increased from 4.7 divorces per 100 marriages in 1981 to 17.4 in 1997; however, this divorce rate was the third lowest of all Member States and Applicant Countries (Eurostat NewCronos database, 2002). It has been widely debated that Spain's two-step procedure, which involves legal separation as condition of divorce, is outdated, but no amendment agreement has been reached. Legislative changes regarding the rights of cohabiters have also been debated, with many regions enforcing a legal basis for cohabitation, but no specific legislation at a national level.

Conclusion

Given Spain's demographic situation, many of its citizens that are currently of middle age may face their retirement years without the help of a large extended family. This is a common problem that must be addressed by many southern European countries that rely heavily on the family as the key caregiver for children and the elderly. As previously discussed, the policy options available will be few and far between if Spain continues to hold the steadfast belief that the family must remain undisturbed and is the best provider of care services. The political problems were best described by Flaquer (2000: 6), and confirm our research question that Spain's low fertility can be explained, at least in part, by the lack of family policy:

> As in a sort of self-fulfilling prophecy, the outcome of a passive family policy is that difficulties faced by individual families are not tackled via public mobilization but through people's private strategies. This creates a kind of negative feedback situation in which the system is reproduced and even reinforced. In Southern European countries, family solidarity both explains and is the result of an undeveloped family policy.

In sum, the strength of Spain – and for, that matter most, southern European countries – has become its weakness, and this should be addressed more effectively at the larger policy level.

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[60] Abortion policy and statistical information was retrieved from:
http://www.un.org/esa/population/publication/abt/fabt.htm
and http://ippfnet.ippf/pub/IPPF_Regions/IPPF_CountryProfile.asp?ISOCode=ES

[61] International Planned Parenthood Federation, http://ippfnet.ippf.org.

[62] Under Franco's regime (dissolved in 1975), contraception was prohibited.

Case Study: Sweden

Demographers have characterised the behaviour of fertility in Sweden as that of a "rollercoaster". It is an example of a high-migration Member State, from our case study selection (Table 4.1). This analysis of data and literature focuses on developments since the 1970s; Sweden experienced an increase in fertility during the 1980s, followed by a marked decline since 1990. Hence the research question to be answered in this case study is:

> *Is it possible to explain the rollercoaster nature of fertility in Sweden since the 1970s by specific policy measures and/or contextual factors?*

The emphasis of the description of policies is on gender equality and the compatibility of work and parenthood.

Demographic Trends and Figures

The population characteristics of Sweden are given in Table 4.9. Following the economic crisis during the 1930s, TFRs began to rise and subsequently remained 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 women). This baby boom was largely related to an increased birth rate among younger women (Andersson, 1999) and, remarkably, was accompanied by growth in the proportion of women in the labour force from 78 percent to 81 percent (Kohler, 1999).

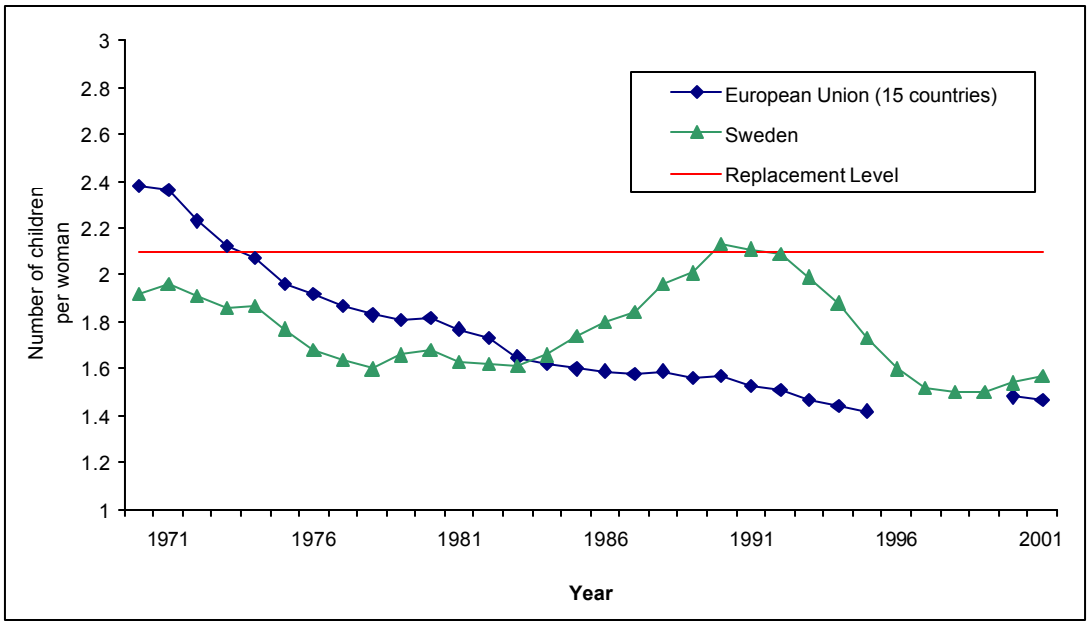
However, with the emergence of the 1990s, Swedish rollercoaster fertility experienced yet another distinctive trend, and started falling again. In 1999, the TFR in Sweden had decreased to 1.52, the lowest ever rate (Swedish Institute, 2003), although still slightly above EU average (see Figure 4.30). Various studies analysed this fertility decline and its relation with other socio-economic and demographic characteristics. A decline in fertility was found among all educational groups except the most highly educated women. Young women, in particular those in the age group 25–29, experienced a marked a fall in fertility (Jönsson, 2003). 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, 1999).

Table 4.9: General Population Characteristics, Sweden

Population Size and Growth			Source	Year
Total population	8,882,792	people	Eurostat	2001
Crude rate of population growth rate	3.0	growth/1,000 population	Eurostat	2001
Crude birth rate	10.3	births/1,000 population	Eurostat	2001
Crude death rate	10.5	deaths/1,000 population	Eurostat	2001
Rate of natural increase	–0.3	natural increase/1,000 population	Eurostat	2001
Net immigration rate	3.2	net immigrants/1,000 population	Eurostat	2001
Family formation				
Total fertility rate	1.57	children/ woman	Eurostat	2001
Mean age at first birth	27.9	years	Eurostat	2000
Percent of births outside of marriage	55.5	%	Eurostat	2001
Marriage rate	4.0	marriages/1,000 population	Eurostat	2001
Mean age at marriage	30.1	years	Eurostat	2001
Divorce rate	2.4	divorces/1,000 population	Eurostat	2001
Life expectancy at birth – male	77.5	years	Eurostat	2001
Life expectancy at birth – female	82.1	years	Eurostat	2001
Population composition				
Ethnic composition	Indigenous population Swedes and Finnish and Sami minorities; foreign-born or first-generation immigrants : Finns, Yugoslavs, Danes, Norwegians, Greeks, Turks		CIA	2003
Religion	Lutheran 87%, Roman Catholic, Orthodox, Baptist, Muslim, Jewish, Buddhist		CIA	2003
Sex ratio (total population)	0.98	male/ female	CIA	2003
Age distribution: 0–14 years old	18.4	%	Eurostat	2001
Age distribution: 15 – 64 years old	64.4	%	Eurostat	2001
Age distribution: 65 and over	17.2	%	Eurostat	2001
Dependency ratio (age 0 – 14 and 65 + to 15–64)	55.3	%	Eurostat	2001
Economy and human capital				
GDP per capita	25,400	purchasing power parity $ US	CIA	2002
GDP – real growth rate	1.8	%/year	CIA	2002
Unemployment rate	4.9	%	Eurostat	2001
Female activity rate	73.4	% of 15–64 years old	Eurostat	2001
Women per 100 men graduating from tertiary education	140.1	women/100 men	Eurostat	2000

SOURCE: Eurostat NewCronos data(2002)&CIA(2003) (http://www.cia.gov/cia/publications/factbook/index.html)

Figure 4.30: Trends in Total Fertility Rates: Sweden, 1970–2001



SOURCE: Eurostat NewCronos database (2002)

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As with the other European countries, the mean age for a woman's first birth is 28 years (2001). However, this age used to be 23 in the 1970s and even lower in the 1960s. In the 1980s, when fertility was increasing, the intervals between childbearing had become shorter. This trend continued in the 1990s; however, third-order births became rather scarce in 1999 the birth rate of third children returned to the level of 1980. Not only have large families become unusual, but the proportion of one-child families and the relative number of childless women have also decreased,[63] whereas the proportion of two-child families has increased (Jönsson, 2003). This development of delayed family-building and a reduced willingness to have children can be seen as an effect of the difficulties in the labour market during the economic crisis of the early 1990s, as unemployment affected mainly those groups that now demonstrate very low fertility rates (Bernhardt, 2003; UN/ECE, 1999). [64]

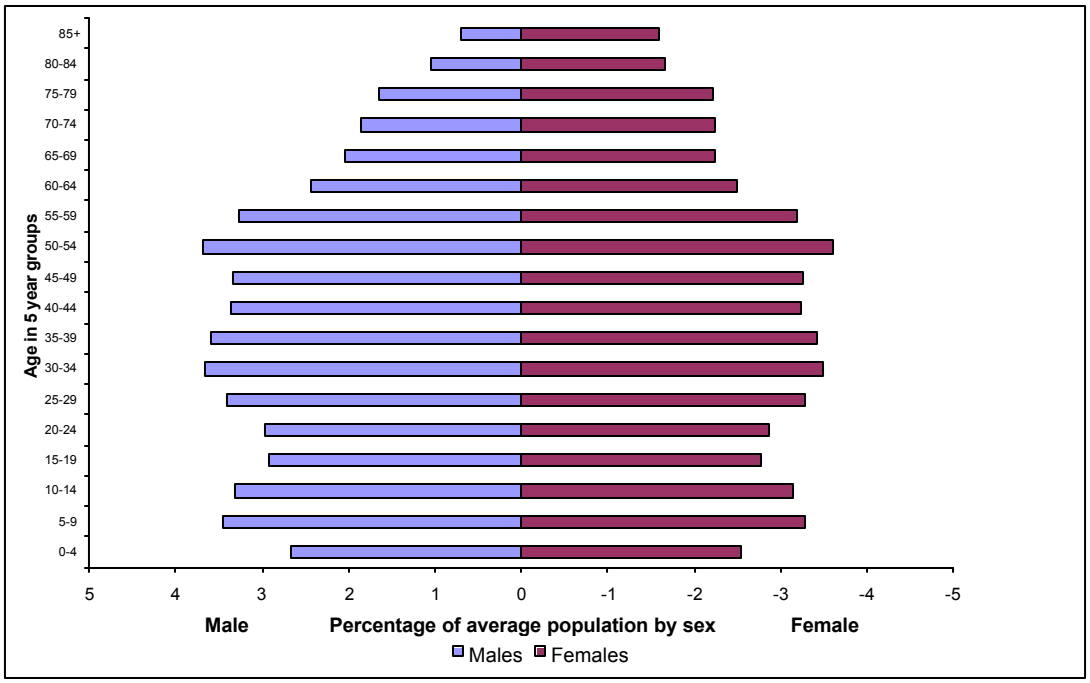
A typical characteristic of the distinct fluctuations of fertility trends in Sweden is that they seem to move concurrently with cyclical economic trends more than in any other European country. The effects seem to be particularly strong for first and third births, while second births are affected much less (Bernhardt, 2000).

Furthermore, in modern Sweden it has become widely accepted that young couples will cohabit without being married; marriage is often preceded by several years of cohabitation. 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. Divorce and separations have become common; however, families of married couples with children appear to be more stable than those where the parents are unmarried (UN/ECE, 1999).

[63] With the excepti on of a slight increase for the youngest cohort.

[64] European Observatory on the Social Situation, Demography and Family, under "General Monitoring: The Situation of Families in the EU Member States". The specific reference can be found under: http://europa.eu.int/comm/employment_social/eoss/downloads/ gm_01_sweden_bernhardt_en.pdf.

Figure 4.31: Population Pyramid, Sweden, 1980



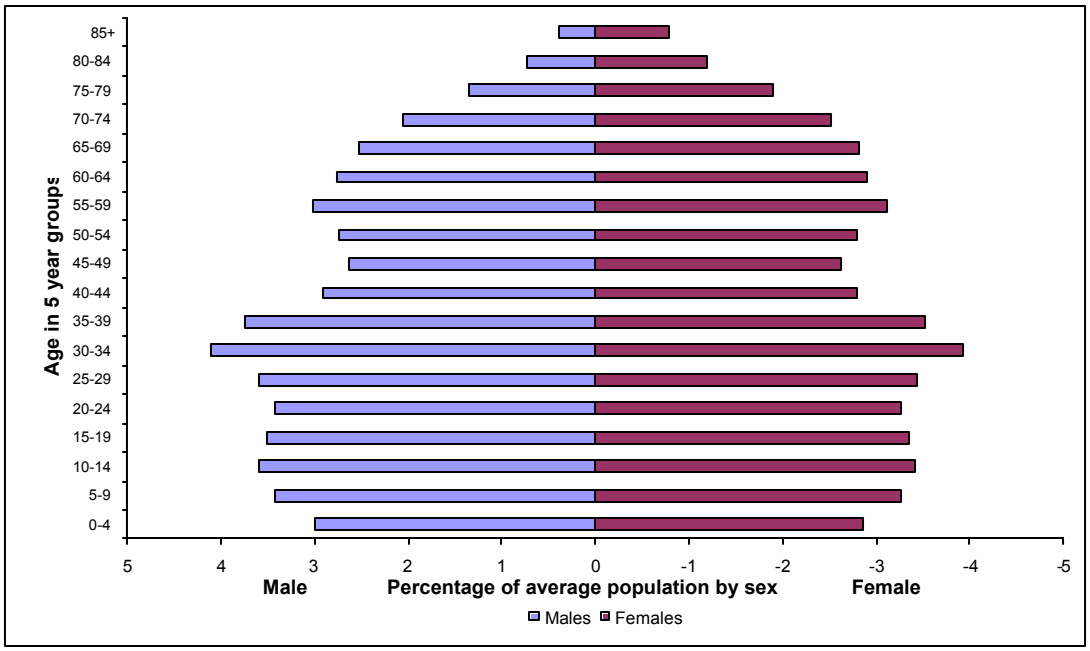
SOURCE: Eurostat NewCronos database (2002)
MG206-4.31

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 has 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 (see Figure 4.31). 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.[65] The population structures in the years 1980, 2000, and 2020 are displayed in Figure 4.31, 4.32, and 4.33.

[65] 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).

Figure 4.32: Population Pyramid, Sweden 2000



SOURCE: Eurostat NewCronos database (2002)

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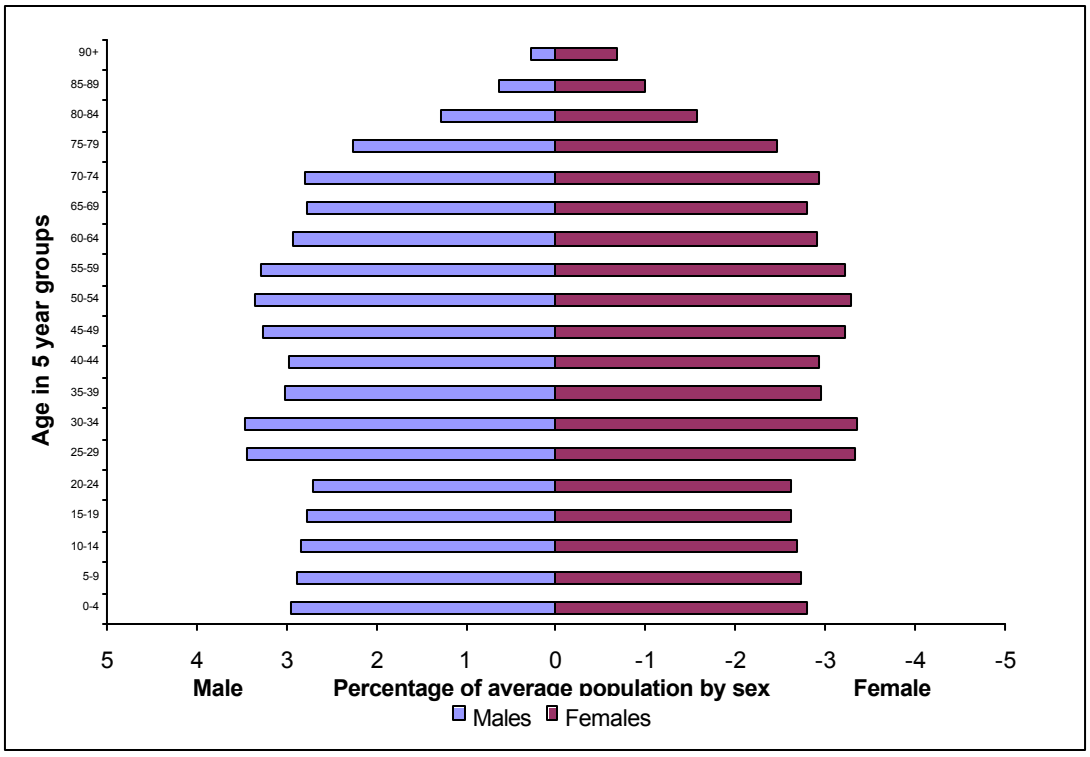
Figure 4.33: Population Projection, Sweden 2020



SOURCE: Eurostat NewCronos database (2002)

MG206-4.33

History of Policy Efforts

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 heavily subsidised public day care. Three major decisions in the 1970s shaped the formation of current family policy in Sweden: the introduction of individual taxation (1971); parental leave (1974); and the decision to expand public childcare. Further improvements in parental leave insurance, regarding both duration and financial compensation, and expansion of subsidising public childcare were implemented in the 1980s (Jönsson, 2003).

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). It is a universal social insurance benefit, to which all parents are entitled when giving birth or adopting a child. 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. When the policy was introduced initially, parents were entitled to six months' leave, but in the 1970s and 1980s there were several extensions of the period during which the entitlement applied. As of the 1990s, it extended to 390 days of income-related benefits and an additional 90 days of flat-rate benefit; the final three months are unpaid, but still job-protected. The days of parental leave can be divided between parents according to their wishes, with the exception of 30 days: since 1995, this "daddy month" has been reserved exclusively for the co-parent. In 2002, "daddy months" were extended to 60 days. This extended period covers the right to a guaranteed job after a parental leave period has been taken. Non-working parents are entitled to a maternity "leave" of a similar duration, paid at a flat rate which is low but certainly not negligible (approximately €200). However, most women have a job preceding their first childbirth (Andersson, 2000). Parents are entitled to use parental leave on a flexible basis until the child is 8 years old.

During the heyday of Swedish family policy in 1985, the government introduced the so-called "Speed premium": "if within 30 months another child is born, then parents are entitled to the same income replacement as for the first child, irrespective of the level of income between the two births" (Jönsson, 2003). 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: 11).

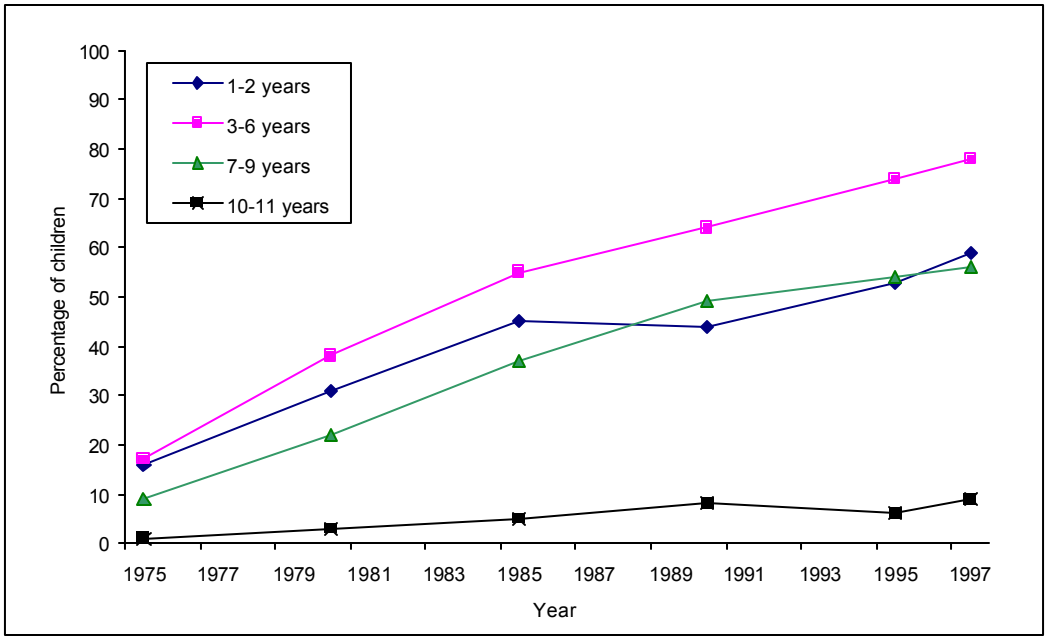
Public Childcare. Approximately two-thirds of the mothers with young children work outside the home, most of whom have their children in public day care (Bernhardt, 2003). Until the 1960s, public childcare was merely intended for lone mothers. But in line with various other Swedish family policy measures, 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),[66] 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; since then, high-quality childcare has become a trademark of Swedish welfare (Jönsson, 2003). The Clearinghouse on International Developments in Child, Youth and Family Policies (at Columbia University)[67] provides a useful overview of the Swedish Early Childhood and Education Care (ECEC) programmes:

> The programs were developed initially as a service for the children of poor, working, single mothers. However, with the rise in female labour force participation rates in the 1960s and 1970s, and the high current rates for mothers of preschool-aged children (75 percent), they are increasingly serving almost all children. The programs charge income-related fees usually equal to 1–3 percent of family income and these fees cover about 17 percent of operating costs. As of January 1, 2002, a maximum fee for these ECEC programs went into effect, reducing the cost of these programs for many families. The government has established a policy of guaranteeing a place for any child whose parents wish them [to be] enrolled, from the age of one year [due to Sweden's extensive parental leave, infant care is largely accounted for by the parents]. The government has announced its intention of establishing a uniform national maximum ECEC fee. It is up to the municipalities to implement this.
>
> Swedish … ECEC programs constitute the highest quality of out-of-home care and education available anywhere. Centres are held to the same standards of quality, and charge the same fees to parents, regardless of whether they are public, private non-profit or for-profit … Standards concerning group size, staff/child ratios, and caregiver qualifications are high, rigorously set and enforced, and are based on extensive research. Staff salaries are comparable to average wages in other occupations. Staff turnover is low (about 10 percent a year). Even though staff:child ratios were lowered in the mid-1990s as a consequence of cuts in public spending on childcare in Sweden, they still remained higher than in other countries.

The ECEC programmes are targeted towards all children aged 0–7, although it is prioritised for children with mothers that are participating in the labour force, lone mothers, or low-income families.[68] Since the 1970s the proportion of children in public childcare institutions has increased considerably from 17 percent in 1975 (children aged 3–6 years) to 64 percent in 1990. Figure 4.34 illustrates the rising proportions of children in public childcare by age.

[66] Based on Gunnarsson et al. (1999).
[67] Http://www.childpolicyintl.org.
[68] In addition, children from immigrant families, or who have a disability.

Figure 4.34: Percentage of Children in Public Childcare Institutions, Sweden 1975–1997



SOURCE: Jönsson (2003)

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Child Benefits and Taxation Aside from policies that target the compatibility of labour and childrearing, a generous child allowance scheme also constituted Swedish social policy. Child allowances are cash benefits that are provided to families residing in Sweden, based on the presence and age of the child(ren) and are excluded from taxable income (http://www.childpolicyintl.org). It is a universal, non-means-tested benefit for families with children under 16. In 1982 the scheme adopted a proportional model that provided families with third and higher-order childbirths with a special benefits. In 2001, the basis granted to every child was 950 Swedish crowns a month (about €85), which was paid to the mother. Figure 4.35 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. A special child allowance is payable to children of widows, widowers, and other single parents, which is displayed in Figure 4.36.

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. Each child is entitled to a certain minimum amount, which is guaranteed by the government, in case the non-custodial parent is not able to pay at least the minimum:

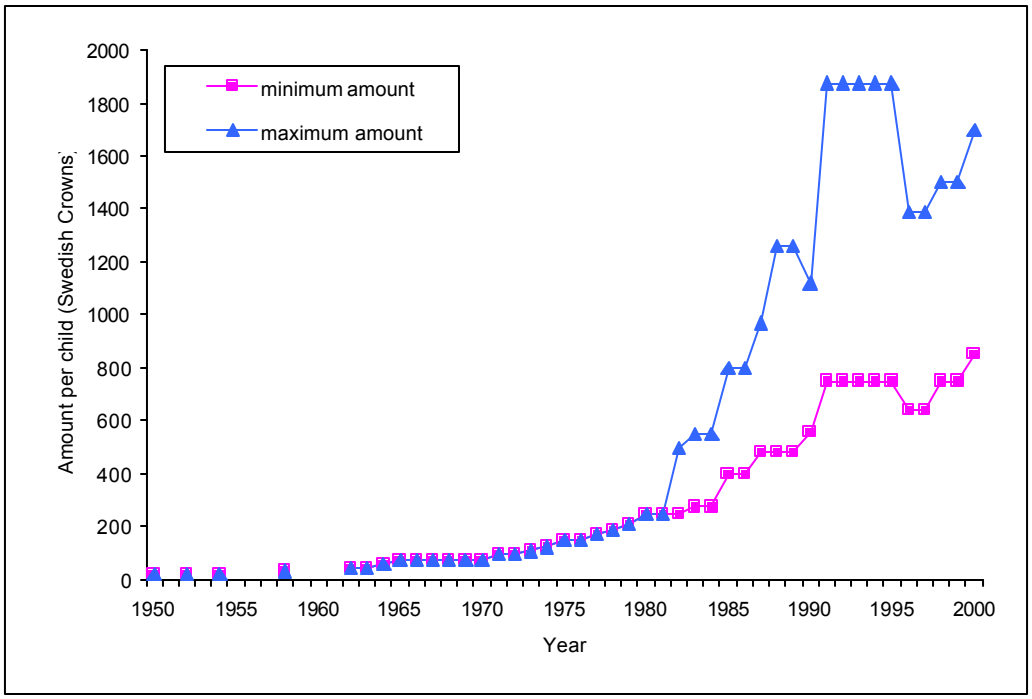
> The child support benefit (guaranteeing a minimal level of support to children in single-parent families) was reformed in the latter part of the 1990s in an effort at getting non-custodial parents to provide more in the way of support. The reform linked the court-ordered support awards more closely to the non-custodial parent's income and eliminated the indexing of the minimum support benefit.
> (http://www.childpolicyintl.org)

In contrast to other European countries (e.g. Germany), tax concessions for families are not recognised in the Swedish system. Mandatory separate taxation for couples in Sweden was introduced in 1971, with an explicit aim to promote gender role equality as well as means to increase the labour force (Gustafsson, 1992, as cited by Basián et al., 2002). 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 contributed to household income.

Post-1990 Policies. 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 these financially difficult times, 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. But policy measures that explicitly targeted families with children were also subject to reform (Bernhardt, 2003).

Figure 4.35: 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)

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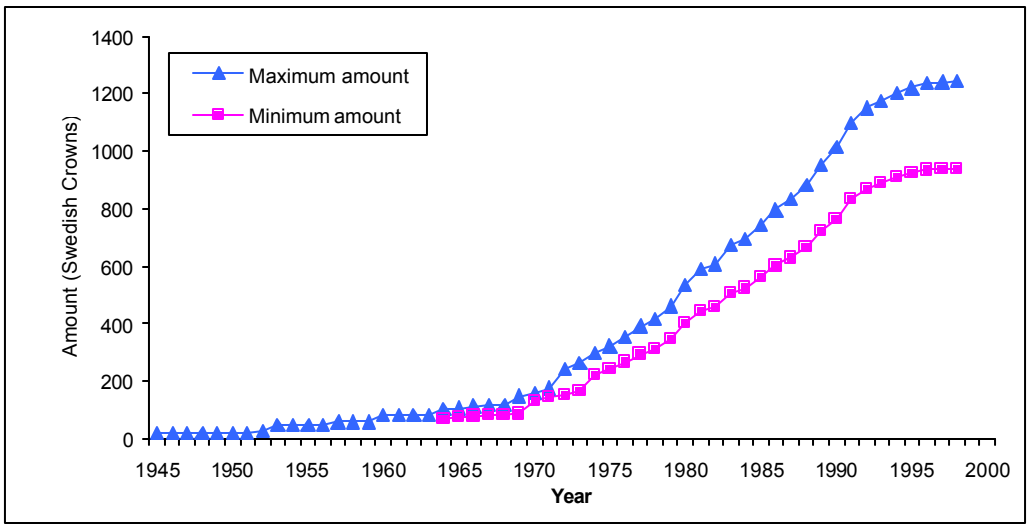
Figure 4.36: Minimum and Maximum Child Benefits for One-Parent Families: Sweden, 1945-1988



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

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The municipalities' tightened purse strings brought serious consequences for publicly-funded childcare institutions, as fees increased substantially (from 15–20 percent of operating costs to 25–30 percent in some municipalities; http://www.childpolicyintl.org). Although the supply of childcare was sustained, quality declined somewhat, since average expenditure per child in pre-school care was cut by about 14 percent (Jönsson, 2003). This was mainly due to an increasing number of children in day care, while the total resources remained the same. One result of this has been a marked increase in the number of children per group and staff member in childcare facilities, both in pre-school care and leisure centres for school children, but particularly in the latter (Jönsson, 2003). While public childcare institutions have experienced difficult times, there has been a noticeable increase in such facilities outside the public sector. The Clearinghouse on International Developments in Child, Youth and Family Policies indicates that in Sweden,

> about 15 percent of the services were privatised; about half of those now are for profit, operating largely through contracts with local government. Privatization, decentralization, and an increase in user fees for social services and early childhood education and care services characterized much of the 1990s.

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 (see Figure 4.35). In particular, supplementary benefit for families larger than two children was eliminated in 1996. However, these allowances for large families were reintroduced soon after. Despite the reductions in child benefits, 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). The protection of families' economic status remained relatively strong after 1990, as family allowances were only reduced marginally in comparison with other economic reforms. Moreover, family benefits, which had declined from 4.6 percent of GDP in 1993 to 3.7 percent in 1997, began to rise again in 1998 (http://www.childpolicyintl.org).

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 raises (higher social security contributions), expanding unemployment, and reduced salaries. It was this sum of these factors which caused a deteriorated economic situation for households, especially those with more than two children.

Because the Swedish government was concerned with the marked fertility reduction since the 1990s, child allowances had returned to their nominal high of a few years earlier. As of 1998, special benefits for families with three or four children were re-established; benefit replacement rates had been increased to 80 percent of prior wages; and the grants to municipalities for social services, including childcare, were close to the high level of earlier in the 1990s (http://www.childpolicyintl.org). By 2001, child benefits had been restored to 950 Swedish Crowns and the supplementary level for larger families was higher again. 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). Current Swedish welfare policy may be less generous than it was a decade ago, but benefits and services to children and families have been protected; in fact, the Scandinavian model remains the most generous among OECD countries.

Policy Impacts

One of the most crucial success factors of Sweden's high fertility during the 1980s is that Swedish women have been able to participate in the labour market throughout childbearing and childrearing. In 1990, female labour participation was among the highest in the world, at a level of 83 percent. According to a UN/ECE report (2002: 134) public policies may play a crucial role in allowing the combination of employment and parenthood: "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). In the case of Sweden, social policies do appear to have had an impact on reproductive behaviour. However, the demographic effects seem to be primarily influenced through the impact on birth-spacing behaviour, since completed cohort fertility has remained relatively stable at a level just below two children per woman (Calot, 1990 as cited by Hoem, 1990) and there has been no evidence for a substantial increase in permanent childlessness (Hoem, 1990).

Andersson (1999) 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) showed that this was not the case. While the impact of social policy, gender relations, and economic trends on first births has not been established unambiguously, Oláh (1998) argues that one-child parents do continue childbearing as a result, and 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." She concludes that increasingly, women and men share the role of income provider and the responsibilities of childcare tasks. Social policies that are targeted at combining these roles do facilitate the combination of these competing roles for individuals, especially for women. Combined with more gender-equal parenting practices, these policies have had a positive influence on fertility until 1990.

The childcare system is considered to be an important component of Sweden's strategy towards relatively high fertility rates in the 1980s (e.g. Hoem and Hoem, 1996). However, 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.

Not only have the increasing fertility rates during the 1980s been studied thoroughly, the marked decline in fertility since 1990 has also been subject to extensive analysis. Fertility decline is not a new phenomenon in Sweden, since it experienced similar decreases in the 1930s and early 1970s, when economic crises hit the country as well. Thus, the TFRs greatly reflect changing economic conditions as well as related changes in lifestyle. 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 macro-economic conditions. Therefore, women with a relatively low-income level and women enrolled as students generally had a lower fertility than other women (Hoem, 2000). Hence, part of the decrease in fertility during the 1990s can be explained by an increase in the number of women with such characteristics (Bernhardt, 2000).

Andersson (2000) concludes that Sweden is characterised by a pattern of "pro-cyclical" fertility, where levels of female earnings are positively related to levels of childbearing. Aside from female unemployment as a crucial determinant for family building, Jönsson (2003: 64) reports other impacting factors, including

> discrimination against mothers in the labour market, negative impact of motherhood on wages, negative attitudes at the workplace towards part-time working mothers, the impact of motherhood on careers, double workloads for women and increasing stress in working life with implications for family life.

Therefore, high-quality childcare and parental leave on reasonable economic terms are regarded as essential for supporting family formation and the quality of family life.

However, a recent 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.[69] 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. Hence, for Sweden, researchers have predicted that when economic conditions improve, fertility will rise again (Bernhardt, 2000).

Conclusion

In contemporary demographic literature 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 (Chesnais, 1996). It has been shown that tolerance for working mothers and fathers, secure incomes, and improved employment conditions, in combination with favourable economic conditions and low unemployment, have been successful in raising Sweden's fertility in the 1980s. However, these policies have been particularly effective in influencing the timing and spacing of births rather than the completed cohort fertility, which has been remarkably constant throughout the past decades. 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, the Sweden case study demonstrates that economy cycles and varying social policy can result in rollercoaster fertility.

[69] See Hoem (2000) at http://www.demographic-research.org/.

Concluding Comments

We conducted five in-depth case studies to gain more insight into the policies that countries formulate and implement to intervene in their population structure, and into the effectiveness of those policies. The selected case study countries included France, Germany, Poland, Spain and Sweden. For each of the case-study countries, we formulated one key question focused around fertility trends in that country and tried to find explanations for the observed trends.

The five case-study countries were selected in such a way that there was wide variation in terms of the demographic situation of the country, but also in terms of other characteristics, such as the social, geographic, economic, and political situation. For example, including both France and Poland (where France currently has one of the highest and Poland one of the lowest total fertility rates in Europe) ensures variation in terms of the demographic situation. Variation in the social, economic, and political situation can be found through comparisons among the case-study countries, but also through comparisons of one specific country at different points in time. The most prominent examples of the latter are Germany, Poland, and Spain, which all experienced fundamental changes in regime, often accompanied by serious changes in the social and economic situation.

From the case studies, it can be concluded that there is a wide range of factors influencing the fertility behaviour of households and individuals, and that it is difficult, if not impossible, to single out the effects of population policy on fertility. This is most clearly demonstrated by the Polish case study, which shows that decreasing fertility in the 1990s might be explained by changes in the economic situation that occurred after the introduction of the free market economy in 1989 and the changed lifestyles that resulted from the communists' downfall in 1989, and/or by the changes in family policy that occurred in the 1990s. However, there are no studies providing evidence on the relationship between any of these changes and the decreasing fertility. This finding is strengthened by evidence from the other case studies, which also failed to provide unambiguous explanations for the observed trends in fertility.

In the next chapter we draw out the policy implications arising from the literature review, data review, and case studies.

CHAPTER FIVE

Conclusions and Implications for Policy and Research

The aim of this study is to examine the interrelations between government policies and demographic trends and to assess which policies can prevent or mitigate the adverse consequences of low fertility and population ageing through direct or indirect interventions. In this chapter, we provide a brief overview of our research and draw out a number of policy implications for the EU, its Member States and Applicant Countries.

Overview

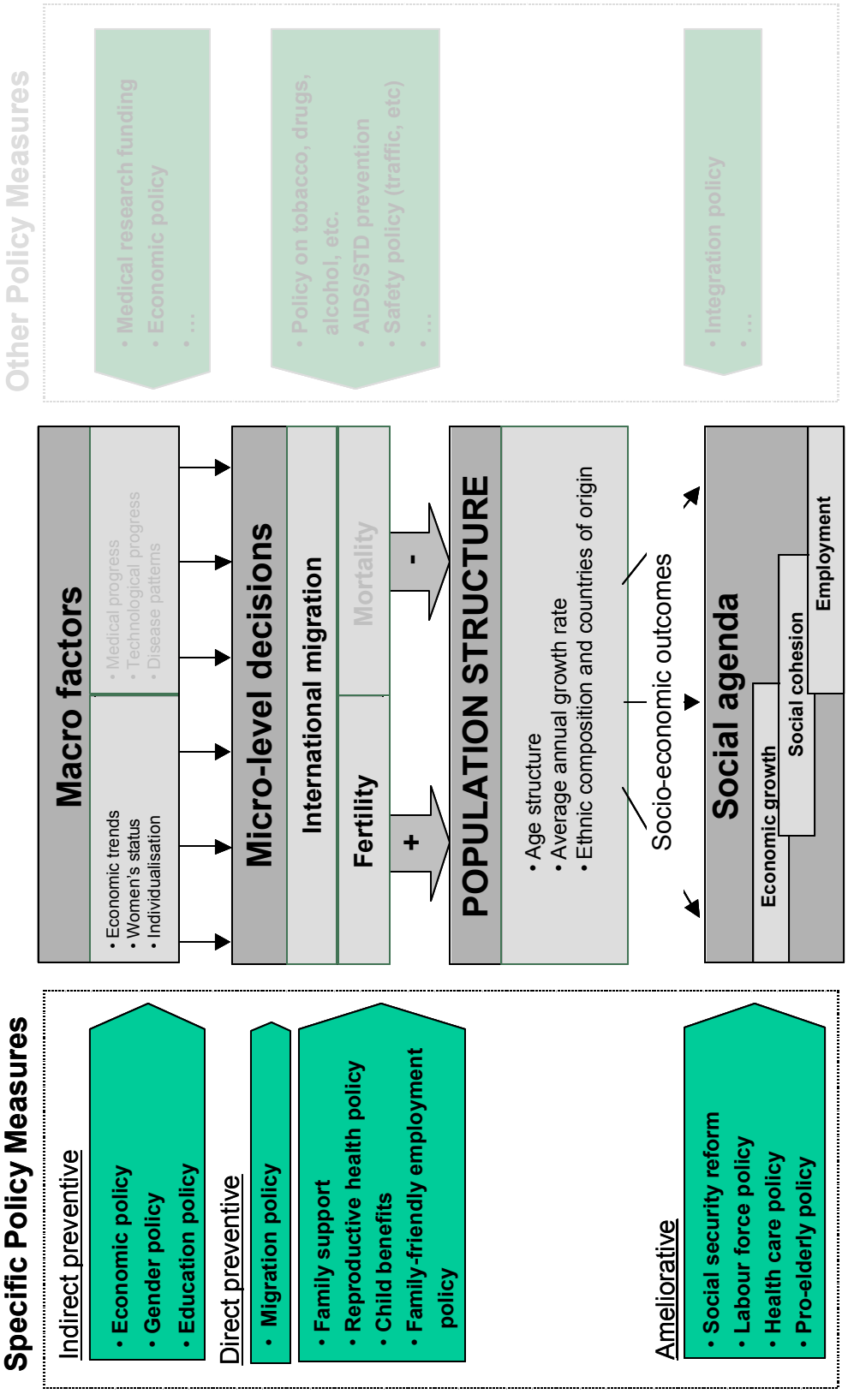
To structure our thinking and analysis we developed a framework (repeated in Figure 5.1 for ease of reading) that conceptualised the relationship between socio-economic developments and demographic behaviour, and the ways in which government policy can influence these relationships. Naturally (and as we emphasised in Chapter 1) such a model necessarily abstracts from various feedback loops and secondary effects that influence biological, behavioural, and policy time lags that in themselves condition various responses.

In Chapter 2, using the conceptual framework, we reviewed the literature regarding the four boxes in the central panel – that is, the relationships between macro factors (e.g. the economy) and micro-level decisions (e.g. on family formation, migration, and mortality); the effects of these micro-level decisions on the structure of the population; and how the population structure affects the Social Agenda. We also reviewed the literature, describing 12 categories of policies that governments can use to affect fertility behaviour and prevent or slow population ageing, be they indirect (as in the case of education policy) or direct (as in the case of reproductive health policy), and policies that are used to ameliorate or mitigate the adverse effects of population ageing (such as pension reform). At the outset of the study we recognised that it was unethical for governments to try to increase mortality – which would be one way of preventing population ageing – and thus excluded this from our literature review and subsequent analysis.

In Chapter 3, building on the literature review, we investigated trends and differences across countries in population structure and the key underlying demographic indicators that describe various aspects of the conceptual framework.

In Chapter 4, we undertook five case studies of France, Germany, Poland, Spain, and Sweden. Each case study addressed a specific question pertaining to the relationship between policy and fertility. On the basis of the evidence, in this chapter we present our findings as a series of five policy implications.

Figure 5.1
Conceptual Framework



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In synthesising the results of our literature review, data review, and five case studies, we are sensitive to the complex political debate and ideological positions that are associated with policies that aim to affect demographic behaviour. We also acknowledge that it is a legitimate question to ask whether the state has a right to intervene and influence the private discussion of individuals and their partners in making decisions about their own fertility and family formation. However, in drawing out our conclusions we have *assumed* that there is political will to address the issue of low fertility and population ageing in Europe and, given this will, we assess the options, effectiveness, and impact that governments can have in influencing family formation. Given this assumption, it is worth stressing that the objective of population policy is *not* to effect a change in population structure for change's sake. The ultimate aim is to ensure a sustainable flow of human capital in Europe to take forward (or at least not pull backwards) the Social Agenda of full employment, economic growth, and social cohesion.

As with any form of policy analysis, there are strengths and weaknesses to our methodology. The strengths include the mixture of case study and broad overview approaches to the analysis of demographic outcomes, and the relationship to policy and socio-economic environment. The limitations include the restrictions of the quantitative overview to what is available in the Eurostat NewCronos database (2002), focusing the case studies on certain countries, and the decision to focus on fertility rather than immigration. This means it is possible that our observations are skewed to the countries – and their policy environs – that were assessed.

Policy Implications

Based on our analysis we have drawn out five policy implications for the European Commission, its Member States, and Applicant Countries. We also believe that these findings will be of interest to other researchers who are concerned with the relationship between policy and demography. Therefore, we have developed a research agenda for future studies that is based both on the gaps that were found in the literature and questions that arose as we conducted this project. The research agenda is summarised in Box 5.1 and is described in the text alongside the various policy implications below.

Replacement Migration Will Not Prevent Population Ageing and its Consequences

There is an extensive literature debating whether the deficit in the working-age population (relative to the elderly population) could be replaced through the immigration of economically active people. This debate was recently revitalised by the release of a UN report, studying the feasibility of "replacement migration" as a means of offsetting population decrease, low fertility, and population ageing (United Nations, 2000). The consensus of the literature was that such a policy is neither feasible nor sustainable in the long term.

The sheer numbers of immigrants that are needed to prevent population ageing in the EU and its Member States are not acceptable in the current socio-political climate prevailing in Europe. Lesthaeghe et al. (1988) point out that a record number of annual immigrants would be needed at a time when the EU and its Member States are actively trying to limit immigration. Even if there were an acceptance that large numbers of immigrants who would be economically active should be encouraged into the EU, it is not certain that this would prevent population ageing and its consequences in the long-term as these immigrants themselves will age (Le Bras, 1991; Mitra, 1990). The UN reports that the levels of migration that would be needed to prevent ageing are of substantial magnitudes (United Nations, 2000). By 2050, these extensive migration flows would result in a migrant population constituting 59–99 percent of the total populations. Such high levels of migration have not been observed in the past for any of the studied countries or regions.

Moreover, it seems extremely unlikely that such flows could happen in these countries in the foreseeable future.

Given these observations, we have focused our efforts on looking at whether and how governments can affect changes in fertility as a strategy for preventing population ageing. This is not to say that we believe that "replacement migration" is a closed topic; there are a number of interesting research questions that (to our knowledge) still remain to be answered. For example, we are conscious that although the consensus of demographic opinion may be that immigration policy will not prevent population ageing or its consequences, a more detailed assessment (as undertaken in this report vis-à-vis fertility) may provide important insights into the possible effects of immigration on slowing population ageing and slowing or reversing population decline.[70] Hence one of our research questions (Box 5.1) is to explore the demography of migration in the context of low fertility and population ageing in Europe in further depth. For example, this could include an assessment of the effectiveness of "temporary labour migration" as a way of providing human capital for the European economy. In this context, it is interesting to note that US and European immigration policies have diverged since the 1980s, with the US having proactive and positive approach to the immigration of skilled workers, compared with a more closed approach by Member States (The Economist, 2003). Over this same period, there has been a higher rate of productivity increases in the US, which have driven economic growth, compared to the EU. Thus, a further research question is the extent to which the more open immigration policy in the US, as compared to the EU, helps to explain the higher rate of economic growth in the former, as opposed to the latter.

Governments Can Slow Down the Fall in Fertility Rates…

One of the most interesting conclusions arising from the literature review and case studies is that there is sufficient evidence to suggest that government policy *can* have an impact on fertility. In reaching this conclusion there are a number of important caveats, namely:

- there is no single policy that can be recommended for affecting fertility;
- the political, social, and economic context is important in determining the effectiveness of such a policy; and
- the impact of such policies takes a long time.

Given the importance of each of these caveats, we cover them below as separate policy implications. It is also worth stressing that the impact that governments have is limited, inasmuch as it is likely to slow down the fall in fertility rates, as opposed to halting the fall or bringing them back to replacement level.

The evidence to support this conclusion comes from each of our case studies. First, France currently has the second highest rate of fertility in Europe (to Ireland; see Figure 3.10) and one of the most interventionist set of policies that is aimed at encouraging families to have children. Some people might find the relatively high fertility rate in France surprising, since it was the first country in Europe to witness a fertility decline. However, this decline prompted a deep and ongoing concern about its population, resulting in the drafting of the Family Code in 1939. Ever since, family policy has been high on the political agenda, resulting in relatively high fertility rates.

[70] For example, a forthcoming study by Jonsson and Rendall (2004) evaluates the large fertility contribution of Hispanic immigrants to the overall age structure (and ethnic composition) of the US.

Conversely, Spain currently has the second lowest rate of fertility of the EU Member States (to Italy; see Figure 3.10) and is characterised by a distinct lack of population policy. However, in 1971, Spain had the second highest European fertility rate in Europe. Its dramatic decline in fertility is associated with a shift from the pronatalist policies under Franco – prohibiting contraception, honouring large families, etc. – to a passive policy relying on the family to be the key caregiver, which has prevailed since the onset of democracy.

Likewise, the other "before and after" examples of the former GDR and Poland, following the fall of the Iron Curtain in 1989, demonstrate a fall in fertility rates with the relaxation of pronatalist population policies. The German case study provides an example of the introduction of several family policy packages with varying success. The introduction of the 1986 policy package in the GDR was not correlated with many changes, while the 1972 measures were related to reduced fertility. The purely economic incentives of the East German 1976 family policy package appears to have had an immediate impact on the number of births. The TFR increased from 1.54 children per woman in 1975 to 1.94 in 1980. However, the longer-term effects of this policy package are less visible, perhaps because it appears to have affected the timing of births more than the number of children that women ultimately have. There is remarkably little research on the extent to which fertility decline in Europe has been affected by changing the timing of births, and as a result we have included this as a point in the research agenda (see Box 5.1)

In Poland, the introduction of pronatalist policies in the 1970s reversed the decreasing trend of fertility until the mid-1980s. While fertility did decrease again in the late 1980s, during the 1990s the decrease in fertility occurred even faster with the onset of economic transformation and its accompanying social, economic, and policy changes.

In making the observation that government policies can slow the decline in fertility rates, it is important to understand the causal processes at play on proximate determinants of fertility such as cohabitation and marriage. For example, Spain's low fertility rates have been explained, amongst other things, by high unemployment rates for people under the age of 30, high housing costs, and the tendency of young adults to reside with their parents for much longer than other countries in Europe. Thus, an indirect policy that stimulates economic growth may reduce unemployment, increase disposable incomes, and allow young couple to set up home. Making housing more affordable could have a similar effect.

Another point worth noting is that any policy to affect fertility rates needs to be affordable. This was brought home by the Canadian study identified in the literature review, that showed that to increase fertility rates to replacement level (from 1.69 children per woman in 1988) would require a sevenfold increase in family allowances – from CAN$289 to CAN$1982 per year (Zhang et al., 1994), a level rate not dissimilar to family allowances in some European countries. One approach to make such policies more affordable is the one adopted in France, where child or family benefits are focused on higher-order births. It is worth noting that France focuses on these largely due to the belief that it is easier to affect the total number of children (decisions to have additional children) than the choice of whether to have children at all (the decision to have the first child). It appears that throughout Europe, most couples want to have at least one child, although there are few studies of the incidence of actual or intended childlessness, and this is a fruitful area for further research. In many industrialised countries, observed fertility is far below stated reproductive preferences, leaving open the possibility that low fertility is due to temporary factors (Bongaarts, 2001). It appears that couples often delay childbearing because of economic uncertainty and may not may not have time before the end of their reproductive period to have the number of births that they say they want (Frejka and Calot, 2001; Lesthaeghe and Willems, 1999). Or, as in Ukraine, when faced with financial hardships, such as lack of housing or unemployment, they may not delay first births, but may delay or forego additional childbearing (Perelli, 2003).

From a research perspective there is a need to understand the causal relationship between policy interventions and changes in fertility behaviour, but the data for so doing are often incomplete and inconsistent, especially when it comes to defining policy interventions. Thus in the research agenda (Box 5.1), we suggest that the European Commission may wish to develop a standard taxonomy to describe direct and indirect population policies. Moreover, we believe there are opportunities for the European Commission to undertake some unique "natural experiments", especially with the accession of the Applicant Countries. Specifically, if an inventory of current policies is undertaken, then a subsequent change in policy will be traced prospectively, allowing a more sophisticated analysis of the cause–effect relationship between policy change and demographic change. Further still, the power of this analysis could be increased if the European Commission could persuade Member States and/or Applicant Countries to phase in policy interventions in a way that allows for sounder evaluation of the impacts of the policy.

…but There is No Single Policy that Can Be Recommended…

It is apparent from the literature review and case studies that there are a number of different ways of achieving the same objective of slowing falls in fertility, whether through direct or indirect policy interventions. For example, the focus on higher-order births in child and family benefits in France seems to be effective, as was the parental leave model in Sweden during the 1980s.

Letablier (2003) concludes that family policy in France has been successful in creating an environment favourable to children and family life. This environment is not created by a single policy that focuses on reconciling work and family life, but results from a wide range of policies that jointly serve this aim. In addition, it is important to stress that in France, family policies are established in partnership with companies, and that the public and private sector formulate policies jointly to support the reconciliation of work and family life. It is highly likely that this involvement of various stakeholders has contributed to the "success" of these policies.

In Sweden, neither the high-quality childcare nor the extensive parental leave on reasonable economic terms appears to be individually responsible for the relatively high fertility rates in the late 1980s. It appears that it was the *combination* of policies – targeted both at equal responsibilities for men and women as income provider/childcarer and at the welfare of children – that were essential for supporting family formation and the quality of family life.

Also, in the former GDR, the introduction of a family policy scheme in 1976, which included prolongation of maternity leave, paid educational leave, interest-free loans to newly-wed couples, substantially raised birth grants, increased monthly family allowances, and improved day care, had a subsequent impact on fertility. It was not a single measure, but the extensiveness and generosity of the whole package that had an effect on family formation. However, a similar package that was introduced in 1986 did not have the desired effect, although the reason for this is not clear.

While the countries previously discussed employed a "suite" of policies, it should be stressed that there is no evidence that such an approach was intentionally coordinated or intended to affect fertility per se. However, if the EU wishes to prevent or slow (as opposed to mitigating the effects of) population ageing and a consequent decline in human capital over the next generation, it will be necessary to acknowledge – and "mainstream" – population policy. This will still mean that governments can use either direct or indirect policy interventions, but the primary and secondary consequences of those interventions will need to be explicit.

In terms of future research we feel it is important to develop knowledge and understand the magnitude of the effects of different population policy interventions particularly in different contexts, and at a regional as well as country level. As noted above, this will require better data collection, especially in defining policy options and outcomes (see Box 5.1).

…because the Political and Socio-Economic Context Influences Change…

One of the reasons that different policy objectives are achieved through different interventions is due to variations in the political, economic, and social contexts within which they are implemented. This is perhaps best illustrated with the political transitions of the GDR, Poland, and Spain. The fertility decline in the former GDR after unification cannot be attributed to specific policy, but rather to a changing social environment, as described by Witte and Wagner (1995). Women who faced the unification with concerns about their personal economic situation were less likely to have children in the following months. Similarly, the transition to a free market economy in Poland not only changed the economic environment and incentives for childbearing, but it introduced greater diffusion of Western ideas and values. In Spain, a dramatic decline in fertility was associated with the democratic rule that emerged following the dissolution of Franco's regime.

The French case study shows that there has been a long-lasting concern in France that declining fertility will threaten the nation's economy. As a result, the French populace has been more open to state intervention in family life than those of some other European countries, such as Spain. Although we did not identify any studies that focus on the degree to which the general public's acceptance of family policy enhances the effectiveness of that policy, we conjecture that openness to state intervention in family life might improve the effectiveness of policies to affect fertility.

The Sweden case study showed that the political, social, and economic context is an important determinant of Swedish fertility, where levels of (female) earnings are positively related to levels of childbearing. Hence, Sweden is characterised by a pattern of "pro-cyclical" fertility. Thus, it is worth noting that policies to encourage female labour force participation help to promote the goal of the Social Agenda, but they will reduce fertility *unless* they are accompanied by family-friendly policies that enable women to combine childbearing and rearing with work.

While, so far, the exact impact of policies on fertility has not been established unambiguously, to draw conclusions from the literature and case studies on the driving factors behind fertility other than policy is also highly speculative. Despite its alleged importance, the area has remained virtually untouched by researchers. The influence of social and cultural background, for example, is often mentioned as a crucial determinant. However, what is exactly meant by this context and why it is important, still remains to be studied (see Box 5.1).

…and Change is Slow

Implementation of policy is slow. There are five periods during the process:

1. political consensus is sought;
2. consensus is translated into policy actions;
3. policy actions are delivered and implemented;
4. those actions alter behaviour; and
5. impact of the change in behaviour achieves the (direct or indirect) policy objective.

In the context of population policy, some policies may have an immediate impact, e.g. abortion policy, but these are the exceptions to the rule and their effects are generally short-lived. That said, the last stage in the cycle for policies to affect fertility will take a generation before they affect the number of new entrants to the labour force.

The implication of this is twofold. First, there is a significant disconnection between the electoral cycle of 4–5 years and the much longer cycle of population policy. This means that there is limited political incentive to advocate such policies, especially when political capital could be expended needlessly in entering such a contentious policy domain. Second (and partly as a result of the first point), politicians tend to focus on ameliorative policies (listed in Figure 5.1) in order

to mitigate against the adverse effects of population ageing. As noted in Chapter 2, there are four broad areas of ameliorative policies. Social security reform aims to reduce the economic burden of increased state support with declining contributions in "pay-as-you-go" welfare systems. There is a considerable debate in the literature about the desirability, feasibility, and effectiveness of these policies (Chesnais, 2000; Höhn, 2000). Related to this is the need for cost containment of welfare provision as the population ages, most notably through the rationing of health care. Another way to mitigate the adverse consequences of low fertility and population ageing is to increase human capital by encouraging people to work longer. This can mean promoting a longer working life (by getting people to begin work earlier – which may detract from their ability to invest in their human capital and hence result in lower productivity – and/or retire later), and encouraging new entrants into the workforce, such as women. Related to this is the need to develop "pro-elderly" policies, where it is the social norm for people in the "third age" to be active and productive members of the workforce.

An interesting point that arises from the debate surrounding ameliorative policies – and specifically, employment policies that aim to encourage women into the workforce – is that they can have a perverse affect on fertility if women choose a career over family formation, thus reducing fertility rates. However, Sweden provides a counter to such a theoretical argument, where employment policy and family policy have gone hand-in-hand. During the 1970s and 1980s, Sweden created conditions in which the adverse effects of family formation on labour force participation were reduced to a minimum and were equally shared between both parents. These conditions enabled reasonably high fertility and high female labour participation to coincide, which was unique in Europe. However, from the Swedish case study, it appears that this equilibrium may be unstable as it seems to be dependent on a thriving economic environment.

Conclusion

We conclude that replacement migration and efforts to increase fertility are unlikely to *stop* the ageing of Europe's population, although they may *slow* it. Hence it is important that the European Commission, Member States, and Applicant Countries also continue to consider other ways to deliver the Social Agenda of full employment, economic growth, and social cohesion.

Box 5.1
Research Agenda

Effects of immigration

- Assess the extent to which the greater openness of immigration policy in the US, as compared to Europe, helps to explain why the US has experienced greater economic growth than Europe.
- Review the demography of migration in the context of low fertility and population ageing in Europe, and its impact on the Social Agenda.

Effects of policy interventions on fertility

- Study the incidence of childlessness and the extent to which people intend to have children but circumstances (e.g. delayed marriage, marriage break-up, infertility) intervene and prevent them from achieving their goals.
- Study the extent to which fertility decline in Europe is a affected by the timing of births.
- Develop a standard taxonomy to describe direct and indirect population policies and use it to try to understand the causal relationship between policy interventions and changes infertility behaviour.
- Look for natural experiments that may provide an opportunity for understanding the impact of a policy change, and collect data that enable the appropriate "before and after" comparisons. (The power of this analysis could be increased if the European Commission could persuade Member States and/or Applicant Countries to phase in policy interventions in a way that allows for sounder evaluation of the impacts of the policy.)
- Assess the impact of different regional policies within countries. (Analyses of variations within countries permit control of other factors, e.g. culture, that may differ across countries and confound efforts to assess the effects of inter-country policy differences.)
- Investigate the role of contextual factors in demographic change. For example: why do we see the apparent effects of family-friendly policies in some countries and not in others? Does openness to state intervention in family life improve the effectiveness of policies to affect fertility? Is there a relationship with the level of economic development? Does social and cultural background appear to influence fertility decisions and whether policies affect them?
- Try to understand the factors that influence the political process in population policymaking.

Effects of policies to ameliorate the effects of population ageing

- Assess the sustainability of ameliorative efforts to offset adverse socio-economic consequences of population ageing.

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