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Economy of Time and Population Policy: Rethinking the 20th Century Life Course Paradigm in the Light of Below-replacement Fertility

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Setting the stage

All European countries, be it advanced market economies or countries in transition, share the main features of the demographic future. Low fertility is expected to persist, population ageing will continue with accelerating pace in the next decades and a growing number of people, especially women, will spend an increasing number of years living alone. These trends will require some considerable societal adaptations and reform regarding work, family life and social protection.

Below-replacement fertility is widespread throughout Europe and several countries are experiencing fertility levels that are extremely low. As a consequence long-term generational replacement is no longer guaranteed and the combined effect of increased longevity and decreased fertility is resulting in fast population ageing. The mainstream policy discourse, at the European and national level is strongly focused on adaptation of social security systems in view of offsetting the negative consequences of population ageing. However, adaptation to the consequences may not be sufficient, especially in the long-term, and the cluster of determinants of population ageing associated with low fertility will also need to be addressed in comprehensive population-friendly policies.

There is general consensus both in research and in policy circles that partial incompatibility between paid work and family life is one of the significant reasons why women choose to have fewer children. Opportunity enhancing measures aimed at lowering the financial burden of parenthood, extending the parental leave to both parents, creating a more individually tailored family-friendly child-care environment, involving fathers in a durable way in parenting, and targeting specific social policy measures to positively discriminate families with children constitute a typical basket of measures from which governments pick *à-la-carte* those that fit well with the history of the national development of welfare regimes embedded in social structures, and the newly emerging social pressures. While targeted policy measures matter and contribute to enhancing the quality of life of individuals and families they are poor tools for changing the negative population trends.

The life course paradigm characteristic of the last decades of the 20th century has largely been shaped by the capital-intensive economic growth policies. The state intervention in social protection through re-distribution of income policies was largely limited to buffering risks inherent to the economic model of the monetarist regimes.

The hypothesis that we are advancing here is that the key population challenge of the 21st century is associated with the economy of time. The way people spend time on daily activities, spread activities during their life course, and manage risks associated with family dynamics, maternity, labour force participation, retirement and old-age over their entire life span, will largely affect the quality of life of individuals, intergenerational solidarity, social cohesion in general, and trans-generational continuity.

About this contribution

We first analyse the main features of below-replacement fertility, its causes and effects. Then we discuss the population-friendly policies that have proven to produce beneficial effects for individuals and families, and in some countries may have prevented fertility decline to very low levels characteristic for less developed welfare regimes. Finally, we propose a theoretical framework for rethinking the life course patterns that have traditionally been modelled in the 20th century by the economic determinism.

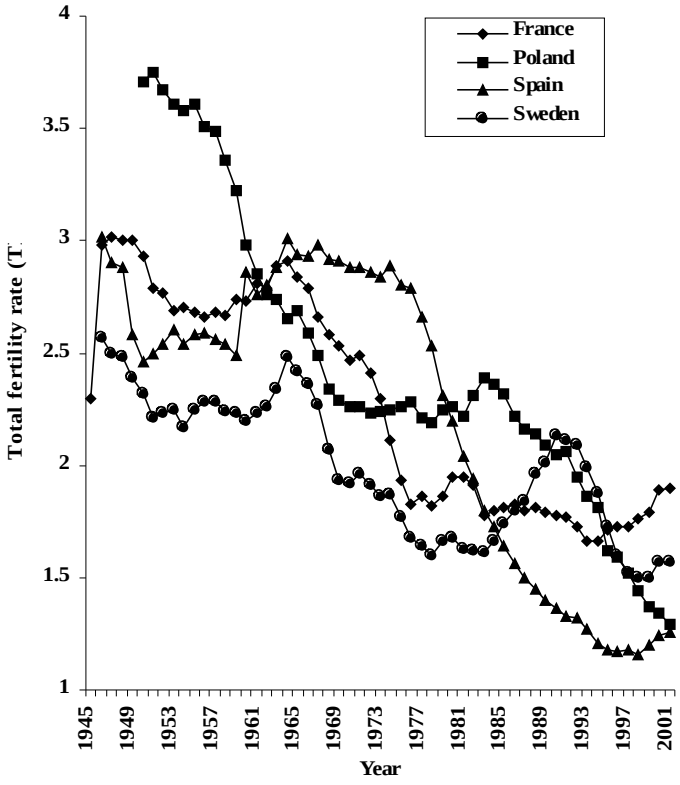
Below-replacement fertility

After a temporary post-World War II baby boom in the middle of the 20th century, fertility resumed its decline – in some countries in the 1960s and 1970s and in others as late as the 1980s. In the last decades of the 20th century fertility – measured by the total fertility rate, i.e. the average number of children that would be born alive to a woman during her lifetime, calculated on the basis of the age-specific fertility rates of a given year - reached unprecedented low levels, notably in the Southern European countries. By the turn of the century the total fertility rate seems to have stabilised at more or less strong below-replacement levels. This stabilisation was already apparent in most Northern and Western countries in the 1980s, but is now also observed in Southern Europe albeit at very different below-replacement levels. In most Eastern European countries fertility took a steep plunge after the collapse of planned economy and it is unclear what the expected stabilisation level will be (Figure 1).

The large majority of couples in Europe want and get children, but in most cases not more than two which is the smallest possible number if they want to have a child of each sex (Figure 2). Value of children research shows that one or two children appear to perfectly satisfy all major needs of parents with respect to having and educating children. Under present circumstances, there seems to be no need for most people to have a third or a fourth child. A small family appears to be, for the large majority, a good compromise between overall costs and benefits of having children. The present levels of wanted fertility, in combination with the availability of highly effective methods of birth control and the inevitable prevalence of a statistically non-negligible amount of voluntary and involuntary childlessness and one-child families, leads - at least in the present socio-economic and socio-cultural circumstances - to the establishment or perpetuation of demographically below-

replacement fertility levels. Before the introduction and widespread use of highly effective methods of birth control, the biologically or socially caused deficit fertility in the population was largely compensated by excess fertility, but in recent decades the latter has greatly been reduced and may be expected to regress further (Cliquet/Balcaen 1983; Lodewijckx *et al*. 1988).

Figure 1. Total fertility rate (TFR) in selected European countries



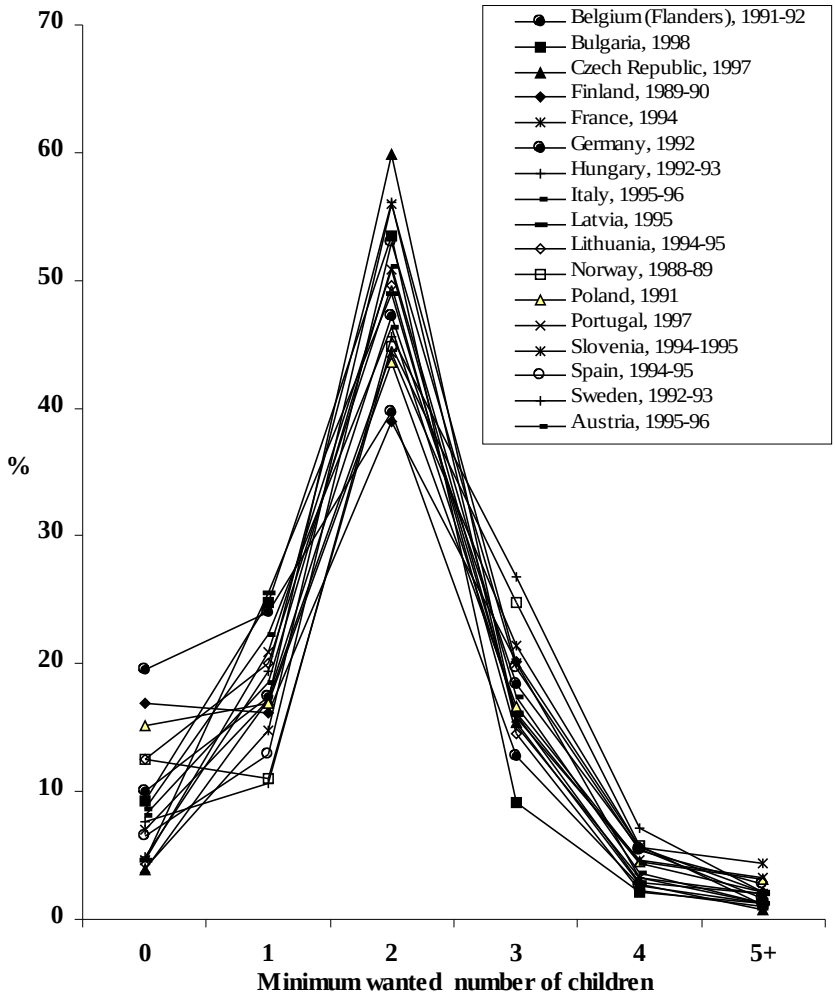
Sources: own calculations based on data from Chesnais 1986; Coleman 1996; Council of Europe 2003; Sardon 2002

According to the Fertility and Family Surveys of the 1990s, it appears that in most European countries the achieved fertility lies below the desired number of children. When people say that they want or have wanted more children than they actually have, the obvious hypothesis is that individuals encounter obstacles during the family building phase that prevent them from having more children. Socio-economic factors, notably prolonged education and partial incompatibility between paid work and family life, relational factors such as higher age of marriage as well as couple dissolution, and biological-reproductive factors such as sub-fecundity after years of prolonged education and pursuit of firm footing in the labour market, have been shown to influence this discrepancy between the wish for more children and the realisation of small families (e.g. Cliquet/Debusschere 1984; Cliquet/Callens 1993; Avramov/Cliquet 2004).

A recent, statistically significant phenomenon in some countries with very low fertility levels is the substantial increase in childless couples (Figure 3). For the western territories of Germany, it

is expected that almost one third of the women and men born after 1960 will remain childless (Dorbritz/Schwarz 1996).

Figure 2: Frequency distribution of minimum wanted number of children in selected European countries (1988 -1997)

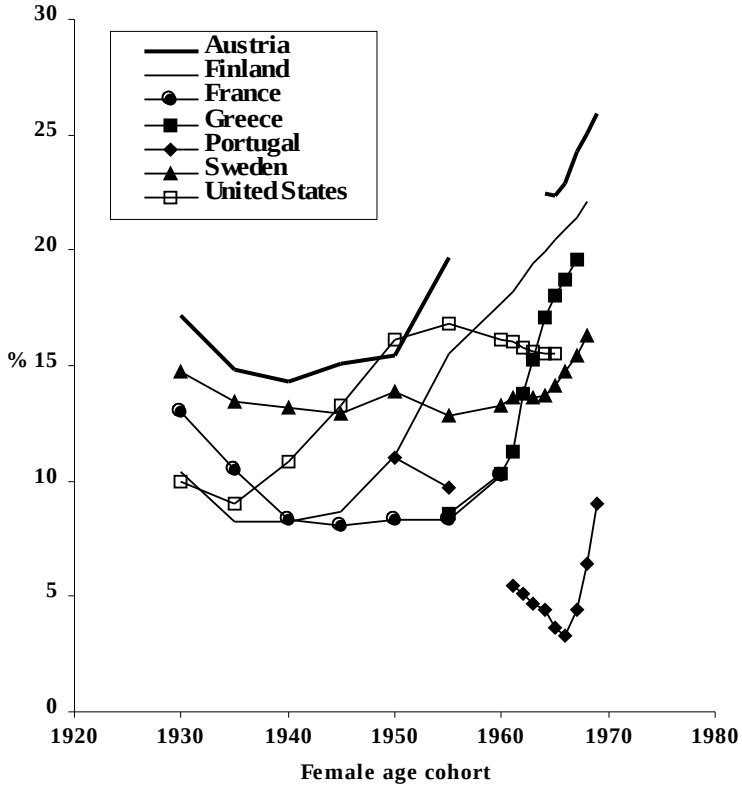


Source: own calculations based on the Fertility and Family Surveys (UN/ECE-Population Activities Unit, Geneva)

At the population level, long-term intergenerational replacement necessitates a considerable family size variation with a view of compensating childlessness and one-child families. Various 'games of numbers' can be used to illustrate the importance of family size variation in a population. On the basis of current mortality and sex ratio figures, about 210 children per 100 women are needed to ensure long-term population replacement. On the basis of present trends in partnership, desired family size distribution, sub-fecundity and other life course events, it may be expected that at least 10% of the female population will remain childless and 10% will have only one child. Only about 5% of women will have four children and virtually none will have five children or more. To ensure generational replacement and compensate for childless and one-child families there would have to be 45% of two-child families and 30% of three-child families. If even higher proportions of women would remain childless or have only one child, the required proportion of women having three children will need to increase even more while the proportion of women with two children would decrease. With 15% childless women and

20% one-child women already 50% women need to have three children and only 10% two children. If the level of childlessness were to rise further, reaching 20 to 25%, then even the number of four-child families would have to increase (Table 1).

Figure 3: Definitive childlessness of female generations (percent of childless women)



Source: collated on the basis of data from Sardon, 2002

Since currently most people are satisfied with one or two children and childlessness is unlikely to be completely avoided, under the prevailing socio-economic circumstances and normative standards it is highly unlikely that spontaneous recovery of fertility to approach replacement levels can occur. This brings us to the conclusion that there is a clear mismatch between the life course perspective of individuals and trans-generational perspective of sustainability of social institutions and continuity.

Table 1: Fertility variance necessary to maintain long-term inter-generational replacement

	Alternative models	
Number of children	% women	% women
0	10	15
1	10	20
2	45	10
3	30	50

4	5	5
Average: 2,1	100	100

Source: Cliquet/Balcaen 1983

The mainstream identification of causes of below-replacement fertility

Proximate causes

The major proximate causes of (very) low fertility is that people want only a small number of children and have nowadays effective and safe means – modern contraceptives and pregnancy termination methods – to limit their high fecundity to the desired number of children. The average number of realised children in the population lies even below the average desired number because of a series of factors such as partial incompatibility between family building and work or leisure, problems related to partnership and to sub-fecundity. Births are more and more postponed in the life course and are or cannot sufficiently be compensated at higher ages. Below-replacement fertility at the population level results from the fact that the high proportions of childless and one-child families are insufficiently compensated by three- and more child families.

Underlying causes

The low number of desired children has, of course, more deeply rooted causes, which have fundamentally to do with the interaction between the biological specificity of the human species and the novel environment that emerged with modernisation.

Biosocial scientists point to the fact that the human species is genetically predisposed to seek sexual relations and to nurture children, but that there is no predisposition for a particular family size (e.g. Potts 1997). Modern culture as 'novel environment' allows people to respond to their 'phenotypic interests' only and to ignore their 'genotypic interests' (e.g. Alexander 1979; Vining 1986; Potts 1997; Cliquet 1998) - meaning that people can achieve personal development without necessarily producing offspring. Recently, it has been argued that fertility may be approaching its lowest level as the predisposition to nurturing behaviour motivates most women to have at least one child (Foster 2000).

High fecundity and the strong sexual urge of the human species have in the past (wrongly) been interpreted to imply that humans are also endowed with a strong urge toward the realisation of a large number of offspring. However, the high fecundity in humans is explained rather as a biologically selected safety valve, allowing for the realisation of a high fertility when required by factors like high mortality. The strong sexual urge is a feature that is considered to have a functional significance with respect to the maintenance of an enduring relationship that is in its turn a function of the prolonged helplessness of the human child, rather than in the function of the production of a large number of children (Beach 1978).

It is obvious that reproductive fitness in humans depends largely on socio-cultural determinants, and that consequently it has the potential for large variability. However, not only the result (reproductive fitness) may vary, but the biological and cultural means to achieve the result may

also show considerable variation, not only in their relative importance but also in their interaction and feedback relations.

This culturally mediated potentiality towards variation in the expression of particular needs not only applies to reproductive behaviour but also to other needs, such as self-development, sexual expression, and property acquisition, most of which are mutually competitive. Material conditions of life as well as ideological convictions may one-sidedly favour the realisation of some of these needs and may neglect or suppress others.

In pre-industrial society the maximisation of inclusive fitness was largely associated with the degree to which phenotypic fitness was maximised (Retherford 1986). The strong differentials in phenotypic success, that existed in those days and that resulted from differences in largely uncontrollable opportunities to avoid morbidity and early mortality, induced differential genetic success almost automatically. Phenotypic success was and still is, moreover, largely fuelled by genetic endowment, thus closing the vicious circle.

However, the production of a large number of children was also an advantage to the parents - not only it compensated for the high infant mortality, but it also strengthened the familial production system and, last but not least, it constituted an insurance against risks, traumatic events and vulnerable phases in life, more particularly at old age.

In modern culture, circumstances of life leading to phenotypic fitness have changed so fundamentally that reproductive fitness no longer coincides automatically with phenotypic fitness. The direct interdependency between parents and their own children, or between kin in general, which existed in pre-modern society has in modern culture been disrupted unilaterally. Societal protection mechanisms have taken over the earlier survival functions of kin, and more particularly of the own offspring. The fundamental cause of this modified relationship between phenotypic and reproductive fitness during modernisation lies in the fact that phenotypic fitness is a condition for but not a cause of genetic fitness. Low fertility has become possible, since the phenotypic fitness of the adults does no longer depend on their kinship relations and in particular on the number of offspring they produce themselves.

Causes of the decrease in fertility since the mid-1960s

The acceleration of the fertility decline that started in many market economies in the mid-1960 in conjunction with a broad spectra of changes in family structures and processes was labelled by some as ‘the second demographic transition’ (Lesthaeghe/van de Kaa 1986). The major changes in partnership and fertility have been explained by different, be it not necessarily mutually excluding theories: some have emphasized the effects of economic factors (e.g. Easterlin 1980; Becker 1991; Van de Kaa 1996; Nambodiri/Wei 1998) and technological innovations in different domains - from the oil-boom, over jet-planes, TV and the Internet, to modern contraceptives and medically safe abortion methods (Kooy 1985), others have emphasized the role of cultural factors, and changes in values and ideology, more particularly in the domains of individualisation and secularisation (e.g. Inglehart 1990; Lesthaeghe 1995). Occasionally attention has been drawn on the extended leisure opportunities, which strongly compete with the traditional family values and patterns, in particular with having (a large number of) children (Keyfitz 1987). Still others have emphasized the changes in gender relations and female labour force participation, and the

specific effects of the second wave of emancipatory women's movement (e.g. Chafetz 1995). Some also point to the effects of the presence or absence of particular social (public) policies, e.g. in the fields of childcare, reconciliation of work and family life, housing, fiscal measures, family benefits, and replacement income (e.g. Golini 1999; Avramov 2003).

Modernisation process also enforces much higher societal demands and enhanced expectations of individuals with respect to achievement in education, training, and income generation, but also more gratification for both sexes in partnership and parent-offspring relations. The increasing expectations in modern culture for personal development combined with the increased possibilities of achievement of relative prosperity and personal comfort, made people more sensitive to risks and enhanced risk-avoiding in choices that appear as threats to their current well-being. The increased sensibility to relative deprivation, particularly given the persistence of inequalities in opportunities, and persistent calls for flexibility in the labour market and foot-loose workers, drives people away from family building that entails irrevocable choices. Birth of a child anchors people and brings about partial, albeit temporary loss of the potential for social and spatial mobility, but may also lead high long term opportunity costs for mothers in particular. Not only does this lead to a smaller number of children, but probably also to more scrutiny and hesitation with respect to the start of an enduring relationship, resulting in postponements among others of marriages and births.

An integrated approach in viewing the recent, current and possible future changes in partnership and reproductive behaviour as the result of the combined effect of changes in economic (e.g. production systems), cultural (e.g. secularisation), ideological (e.g. second feminist wave), social (e.g. welfare state policies), and technological features (e.g. modern contraceptive and abortion methods; information and communication technologies) of advanced societies (Roussel 1989; Romaniuk 1990; Cliquet 1991; Avramov/Cliquet 2004) obviously provides a more comprehensive understanding of the loss of appeal of the large family model.

A special case is the recent steep fertility decline in Eastern Europe. The economic and political changes after the collapse of the communist regimes were accompanied by the dismantlement or weakening of the socialised family protection system (e.g. Philipov/Dorbritz, 2003). High female labour participation is under scrutiny, extensive coverage of family allowances is revoked, the nurseries and day-care facilities and of the social protection system in general is being scaled down, mostly at the result of the pressure from the international economic organizations.

All in all, modernisation resulted in a situation where individual and societal needs with respect to intergenerational continuity no longer coincide. Individuals and couples can, under current living circumstances, be satisfied with one or two children, because they do not need or cannot afford to have more, whereas society for its long-term sustainability of institutions and continuity needs to enable a substantial proportion of families to have three and four children.

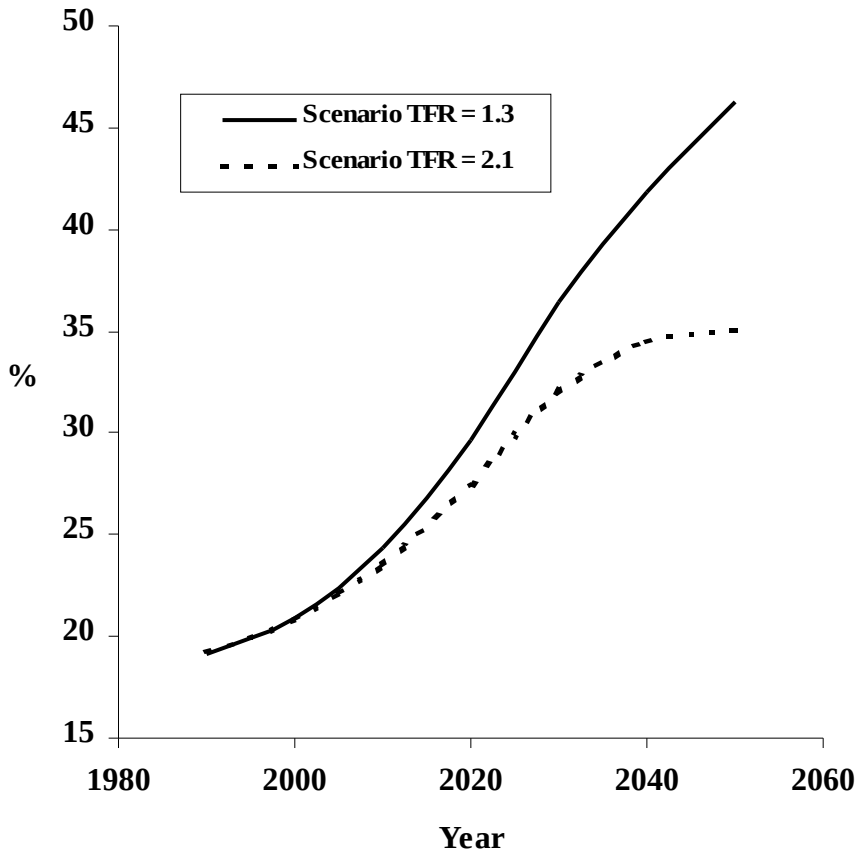
Effects of below-replacement fertility

Below-replacement fertility has three major demographic effects: it exacerbates population ageing, results in population decline and increases the possibility of ethnic substitution through mass immigration from culturally more distant populations. Each of those demographic effects has, in turn, specific societal consequences.

Demographic effects

Europe is going to experience an accelerated ageing wave in the coming decades, regardless of possible future changes in fertility, partly due to the further mortality decrease at higher ages ('population greying'), partly due to the fact that the large post-war baby-boom cohorts and the smaller age cohorts succeeding them will respectively have reached the age of retirement and active life. If fertility remains below the level necessary for long-term generational replacement, it will exacerbate population ageing by diminishing the numbers and proportions of younger age cohorts in the population, a phenomenon called population dejuvenation, putting out of balance the ratio of the active age groups to the elderly (Figure 4). Future population scenarios for Europe with total fertility rate (TFR) at replacement fertility (TFR = 2.1), species-specific life expectancy (e.g. male = 90; female = 95) and zero net migration lead to 35 percent elderly aged 60 years and over by 2050 (Prinz/Lutz, 1993). Strong below-replacement fertility levels, such as are nowadays observed in some regions of Italy (Golini 1999), obviously would lead to much higher proportions of elderly. With a TFR of 1.3 and the above mentioned species-specific life expectancy, elderly of 60 years and over would account for 46 percent of the total population in 2050.

Figure 4: Future population ageing scenarios hypothesising different fertility levels

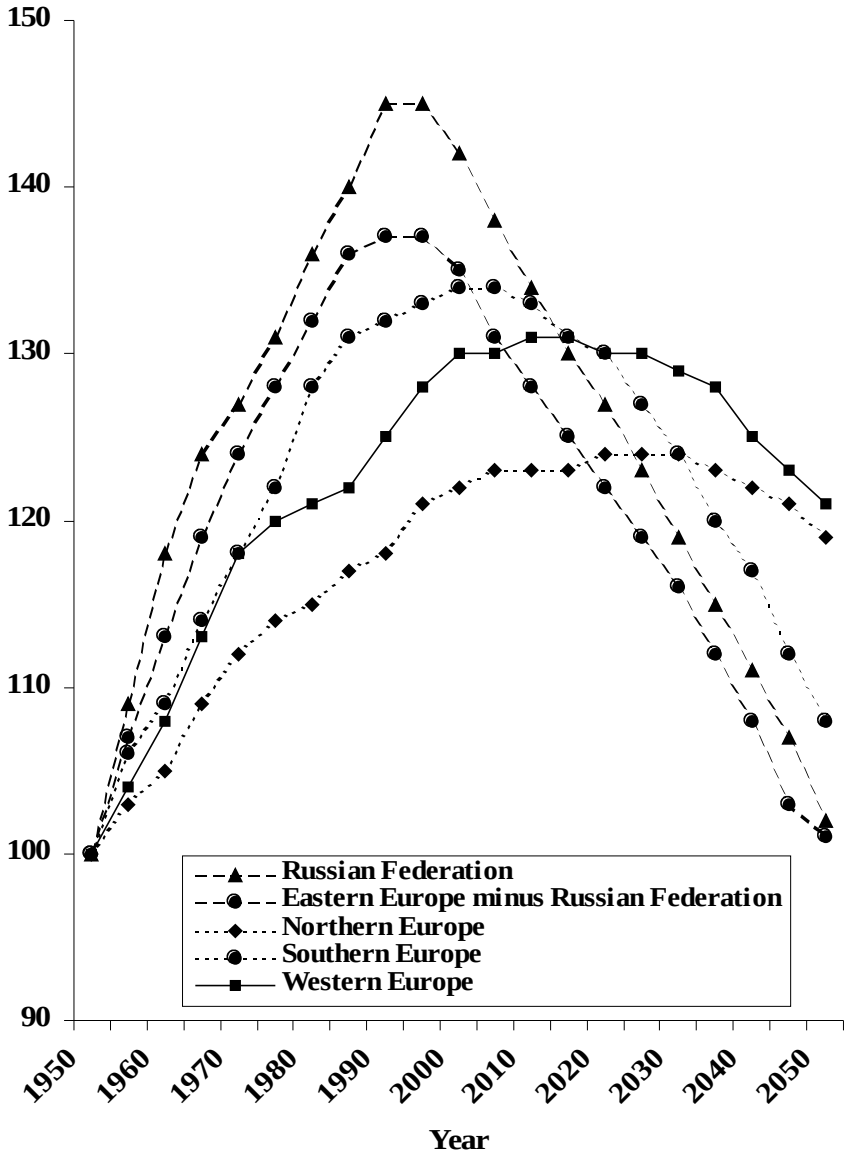


Source: Prinz/Lutz 1993
Scenario TFR = 1.3, Longevity = 90/95 ; Net immigration = 0
Scenario TFR = 2.1, Longevity = 90/95 ; Net immigration = 0

Below-replacement fertility will, at least in the absence of immigration, also lead to excessive population decrease, eroding the cultural and biological heritage and identity of its carriers. This is particularly an issue in small countries.

In the Russian Federation and in Eastern Europe, population started already to decline at the turn of the 20th century. According to the medium population projection variant of the United Nations, this is also expected to happen in Southern Europe in a few years, followed by Western Europe after 2010 and finally by Northern Europe after 2030. The decrease is expected to be very strong in the Russian Federation, Eastern and Southern Europe, and more moderate in Western and particularly in Northern Europe (Figure 5).

Figure 5. Development of population size in the major regions of Europe, 1950-2050 (Index 1950 = 100)



Source: own calculations based on the United Nations classification and medium variant population scenario (United Nations, 2001)

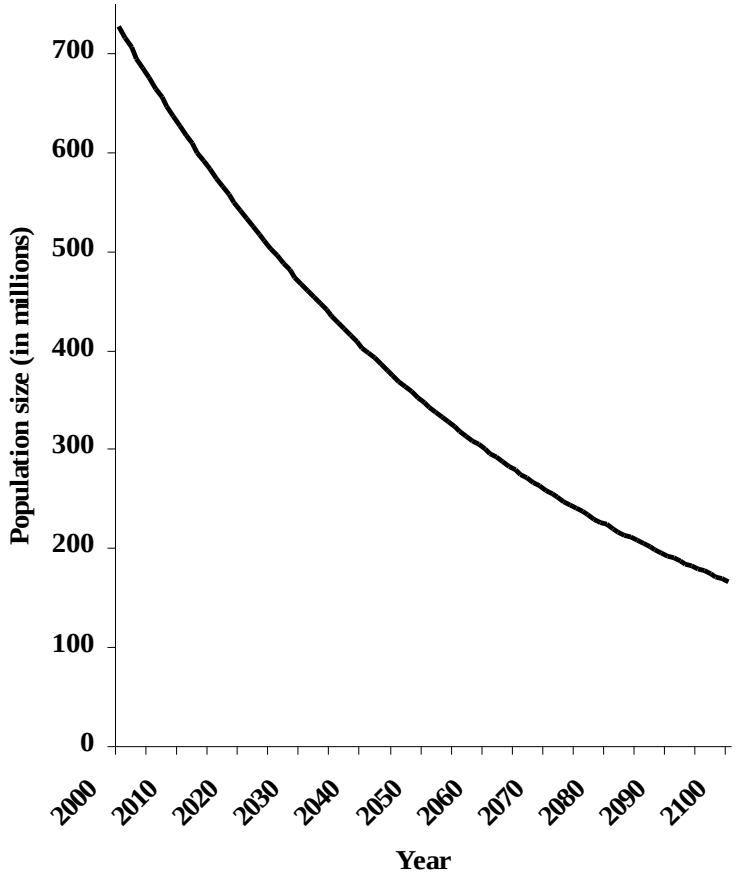
The data for the major European regions obviously mask differentials for some individual countries that are ahead or behind in particular demographic processes. For instance, Germany – West as well as East – experienced already in the mid 1980 a population decrease. By contrast, Ireland will, due to its sustained relatively high fertility in the past decades, continue to grow in the first half of this century.

The medium variants of international population scenarios usually hypothesize that fertility will partially recover and slightly increase, although not necessarily to replacement levels. This is by no means self-evident. Research shows that without substantial policy changes to underpin behavioural changes, fertility levels may be expected to remain low, and in some countries even fall to the levels observed in some Southern European countries that are 40 percent below

replacement. The medium variants of most population projections or scenarios may be an underestimation of the expected population decrease.

The effects of a continuous population decline under persistent strong below-replacement fertility, over one century are much more important than is usually imagined. The population of Europe as a whole (including the Russian Federation) would decrease from its 727 million in 2000 to 167 million in 2100, on the hypothesis that the total fertility rate of Europe, nowadays averaging 1,37, would remain constant at that level and that also the current life expectancy would not change and no in- or out-migration would occur (Figure 6) (Demeny 2003).

Figure 6. Population decrease in Europe (including the Russian Federation) from 2000 to 2100, on the hypothesis of constancy of Europe's 2000 fertility and mortality rates and assuming no in- or out-migration.

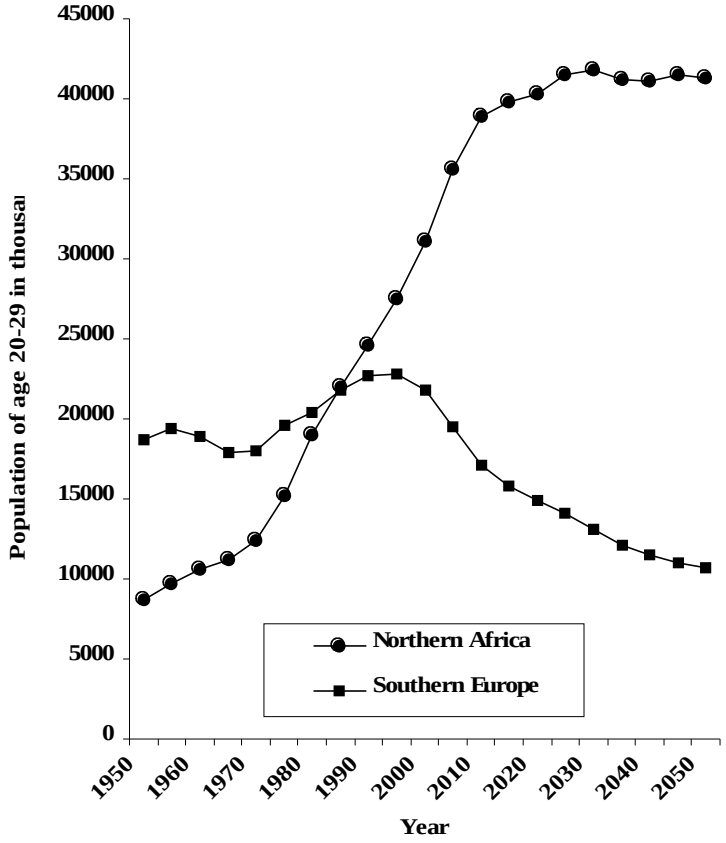


Source: own calculations on the basis of Demeny 2003

The third demographic effect of below-replacement fertility concerns need for immigration. Developing countries have a huge stock of potential emigrants because of the combination of their population and development imbalances and the lack of democracy and good governance in many countries, leading both to economic and political migration push factors (e.g. Golini 1999; Demeny 2003). In the presence of such a huge potential of possible future

migrants it can be expected that the vacuum of the younger active age groups created by below-replacement fertility in developed countries may be filled up by legal and/or illegal immigration. Whereas the population of Southern Europe, for example, is expected to decrease from 145 million in 2000 to 117 million in 2050, the population of Northern Africa is expected to increase from 174 million to 303 million and the population of Western Asia from 188 million to 424 million (medium variant population prospects United Nations 2001). The population increase in the developing countries will mainly affect younger age groups and consequently lead to a huge demand for jobs (Figure 7).

Figure 7: Population size of age group 20-29 in Northern Africa and Southern Europe, 1950-2050



Source: own calculations based on United Nations (2001), medium variant scenario

In view of the magnitude and strength of the push factors many researchers include in their future population scenarios for Europe variants with high immigration figures (e.g. Prinz/Lutz 1993; De Beer/van Wissen 1999; United Nations 2001).

Both the low and high net immigration variants in the population scenarios Prinz & Lutz (1993) produced for the Council of Europe show that migration can have a substantial effect on population size, but slows down the population ageing only to a minor degree. In the 20 European countries considered a continuous high net immigration of one million per year would result in 65 to 80 million people (ca. 17%) more than under zero immigration scenarios

by the year 2050. These figures would even be higher if also the effect of the reproductive contribution of the immigrant population would be taken into consideration.

Social effects

Dejuvenation

Although population dejuvenation decreases the general dependency ratio, i.e. the proportion of the number of inactive people on the number of people of active age, it contributes to the increase of the aged dependency ratio, i.e. the proportion of the number of aged people on the number of people of active age. Population dejuvenation is often thought to lower society's dynamism, competitiveness and adaptability (e.g. Chesnais 1989), to diminish its renewal of human resources (e.g. Chaunu 1975; Calot *et al.* 1990), and to decrease its possibilities to provide social security and health care, and other social benefits (e.g. Johanet *et al.* 1990).

Population decline

Population decline evokes different reactions. Two main types of reactions can be distinguished. The first is mainly inspired by ecological and/or global considerations and sees no harm in population decline. Some would even welcome such a development, especially in highly densely populated regions (e.g. Ehrlich/Ehrlich 1990). Advocates of low fertility are deeply convinced that population decline will alleviate the ecological pressures in the resource and energy consuming industrial societies and decrease the differentials in consumption volume between developed and developing countries.

The fear of a continuous population decline is related to the economic, cultural and especially political effects of decreases in sheer numbers (Teitelbaum/Winter 1985; Chenais 1990; Day 1992; Avramov 1993). Although it is acknowledged that in modern societies, sheer numbers no longer have the same weight in political, military and economic competition as previously, the population size is, especially with regard to the North-South demographic differentials, still considered as a pertinent factor in these respects (e.g. Chaunu, 1975; Tabah/Maugué 1989; Bizouard *et al.* 1990; Calot *et al.* 1990; Chaliand *et al.* 1990).

Immigration

Mass immigration can help to reduce the decrease in the size of particular age groups and of the population as a whole, but it is not a solution to demographic ageing, because the average age of immigrants is only a little lower than that of natives and the initially higher fertility of immigrants soon decreases to lower levels. On the other hand, mass immigration from developing countries raises many other societal problems, such as in-group/out-group conflicts, difficulties concerning socio-cultural and socio-economic integration, ethnic replacement, and creation of an ethnically stratified and residentially segregated society (Day 1992; Teitelbaum/Winter 1985). The total cost of the integration process, including education, health and housing needs of immigrants and their descendants, the net effects on social cohesion particularly in view of relations between the autochthones and allochthones need to be assessed in a comprehensive way and in a longer-term perspective (e.g. Coleman 2000).

Mass immigration evokes a variety of views among scholars and policy makers as well as among the European populations at large. Those views may be clustered around two key dimensions: one concerning positive versus negative attitudes towards immigration, and another opposing those who are in favour of ethnically pluralistic societies to those who favour integration and eventually assimilation of immigrants. However, the diverging views of pluralists and integrationists are often more of a theoretical and ideological nature than of pragmatic consequence. Virtually everybody agrees that immigrants need to learn the language(s) and abide by the laws of their host society. Thus little is left for fundamentally different values with respect to individual development, education, gender relations, human dignity, democracy and individuals' place in society in general.

Lack of interest for fertility issues

The current policy discourse and public debates about demographic issues largely concern population ageing and immigration, but rarely address below-replacement fertility. In some circles it has almost become politically incorrect to raise this issue as a societal problem. Probably there are several overlapping explanations for this. Obviously very few want a return to traditional familism. Traditional religious doctrine and pressures of clerics regarding reproductive issues have little, if any effect in Europe today. Among feminists there is a strong opposition to calls for the return to the three K's ('Kinder, Kuche, Kirche'). Aversion also exists towards earlier pronatalist policies of authoritarian regimes, both of the right and the left. Individual freedom and choice appear to be highly valued. On the other hand, ecological activists invoke global and environmental concerns in their opposition to fertility-enhancing policy measures. Moreover, many scholars and policy makers doubt about the possibility to influence the reproductive behaviour of people in a positive sense. Finally, it must be acknowledged that very few policy makers have any interest whatsoever in long-term population issues.

Effects of current family measures

None of the EU countries, with the exception of France has an explicit fertility enhancing policy (e.g. Hecht/Léridon 1993). Many European states, however, do have family- or child-oriented policies that support having and raising children or more general policies that facilitate the combination of work and parenthood. Most scholars are of the view that such measures have had only modest positive effects on the number of children people want and finally get, but at the same time acknowledge that absence of such measures might have resulted in even lower fertility levels than those that have been achieved (e.g. Leeuw 1984; 1986; Höhn 1987; 1988; 1989; Schwarz 1989; Vortmann 1992; Calot 1997). Fertility period (short-term) effects, due to changes in the localisation of births in the life course, do not always result in increased final descendence. Econometric research in France resulted in the calculation that a full compensation of the costs of a child would enhance the final descendence by approximately 0,5 child per women (Ekert 1986).

On the other hand, several scholars point to the striking differences in fertility levels between the Nordic countries and the Southern European countries and associate the higher Nordic fertility levels with the strong emancipatory policies towards women, flexible child-care and the generalised social protection policies (e.g. Hoem 1990; Sundström 1992; Chesnais 1998;

McDonald 2000; CBGS 2003). The number of children people want or get is partly dependent upon their individual needs and aspirations, but also on the socio-cultural, socio-economic and political context of their society that provides an enabling and risk-reducing social framework (Avramov/Cliquet 2003).

The two other demographic mechanisms by which below-replacement fertility can be compensated - immigration and increasing longevity - are usually only considered as short-term solutions. Increasing longevity only temporarily compensates deficit fertility to maintain population numbers, and is associated with accelerated population greying. Compensating deficit fertility by means of immigration may equally be of a temporary and partial nature: in the long run it would lead to considerable ethnic population change. Moreover, immigration seems also to be an inappropriate long-term solution to compensate for population ageing because immigrants contribute quite fast to the ageing process and consequently would have to be supplemented by ever growing numbers of new immigrants to keep the population age structure in balance.

All in all, acknowledging the limited results that have been obtained so far, it should be questioned whether policies have really addressed the fundamental causes of current reproductive patterns or whether they were rather symbolic in nature, fragmented in implementation and insufficient in terms of scope and population coverage.

In pursuit of policy strategies

In addition to the traditional family measures, several more performing strategies have been put to the policy fore and some are being implemented in view to facilitate parenthood. We cluster them into four groups:

- Gender equality and emancipatory policies;
- Societal coverage of financial costs of children;
- Creation of a more child-friendly environment;
- Rebalancing individual and societal values with respect to intergenerational continuity;

Gender equality and emancipatory policies

Research has shown that there is the need to eliminate existing inequities with respect to gender, both because women still have a higher parental investment in children than men, and also because modern society is overall largely designed to suit men (CBGS 2003; Avramov/Cliquet 2004). Policies in this field have to be of a structural nature, mainly to facilitate the combination of motherhood with other activities, in particular participation in the labour force, but will also have to address the prevailing male attitudes and behaviour regarding gender related task divisions with respect to child caring and rearing. Men will need to fully share family responsibilities with their partners on durable basis. This fact has been addressed in numerous standard-setting documents (e.g. United Nations 1975; 1984; 1994) but has yet to be translated into practice in a meaningful and not just symbolic manner (e.g. Avramov/Cliquet 2003). However, commendable as a step in the right direction, a measure introduced in Belgium in 2002 whereas fathers have become entitled to two weeks paid paternity leave is an example of a

symbolic measure, applicable in some but not all employment sectors and subject to many barriers stemming from the workplace culture.

Traditional attitudes concerning gender roles and power relations, gender based abilities and remaining forms of gender discrimination in the labour force regarding employment selection, wages, occupational positions and alike are still strongly present and impair both the conceptualisation and implementation of modern family- and population-oriented policies. Public policies need to combat traditional value orientations on gender differences, gender based (in)abilities and gender biased relations.

They need also to eliminate remaining forms of gender discrimination in the labour force regarding employment selection, wages and occupational positions. Public policies need further to strengthen measures reconciling labour and family life, more particularly in the fields of childcare facilities and legal provisions in the domain of parental leave and re-integration in labour force. Moreover, work time flexibility and variability, adapted to family needs, should be promoted. Furthermore, public policies should promote greater job stability for both men and women. Last but not least, family friendly and child related policies need to be universalistic and benefits granted irrespective of the type of family and household forms.

Policies and measures are also needed that may contribute to changing attitudes and behaviour of men with respect to household and child-caring tasks. In general, policies should concentrate more on changing attitudes and behaviour of men.

Gender equality in the domain of family-work relations might be favoured by a generalised reduction of working time. A promising field of action seems to consist of involving private firms in the development of work patterns which develop a family friendly labour organisation, enhance gender equality and facilitate workers to have the number of children they want.

Societal coverage of financial costs of children

The necessity to eliminate existing parent-linked financial inequities is often stressed. Children are not only to be seen as an individual gratification to their parent(s), but also as important for societal life and continuity. Some scholars are even of the opinion that societal efforts to be developed in this domain might prove to be of a dimension that is comparable to the one attained in the course of this century in the field of public policy for education, health and welfare care (Romaniuc 1990; Demeester-De Meyer 1993).

Other authors, moreover, argue that inequities with respect to parenthood not only concern the cost of children (including the opportunity costs), but also the costs of care, protection, and insurance of the adults. In pre-modern societies the welfare of adults and care they could expect at high age were largely dependent on the number of children one had raised. In modern culture, societal structures have largely taken over those protective functions. The idea of linking social security to fertility in modern societies, as suggested by several scholars (Schreiber 1955; Swidler 1986; Demeny 1987; Prinz 1992), aims at eliminating parenthood-linked inequity by levelling off the differences in self-investment and parental investment, and enhancing the status and value of children.

Creation of a more child-friendly environment

The organisation and functioning of modern society is in many respects child-unfriendly. In many urban environments more care and place is given to cars than to playgrounds and safe paths for children. Considerable work has to be done in creating a child-friendly town and country planning. Also much stronger childminding facilities should be provided in all kinds of social contexts – work, leisure, gatherings, etc. - so that it appears clearly that children are welcome and are a normal constituent in our societies (e.g. Demeester-De Meyer 1993).

Rebalancing individual and societal values with respect to intergenerational continuity

If all of the above-mentioned measures might contribute to eliminate inequities and, consequently, help people to have the number of children they want without having to be deprived of the privileges and advantages adults without dependent children can enjoy, they may, but will not necessarily increase the desired number of children to such an extent that long-term generational replacement at the population level is guaranteed. Indeed, as shown above, in most countries the frequency distribution of desired family size does not ensure long-term population replacement. Increasing the desired number of children in the population means the bridging of the gap between individual parental needs and societal reproductive needs. This is, however, largely a matter of value change, necessitating the extension of the principle of reciprocal altruism between individuals to the relationship between individuals and society. Low fertility might, consequently, also require the valuation of behavioural variation in reproduction. In the absence of substantial and continuous im-migration flows, long term generational replacement can only be guaranteed when quite a large number of women surpass the one or two child family size, in order to compensate for those who cannot or do not want to have children or who have only one child (Council of Europe 1985).

Often the question is raised how modern, secularised states can influence norms and values. Some argue that an arduous task should be assumed in education, where nowadays population and family issues are usually totally out of the horizon. Much more can be done for creating a family and child friendly climate that reflects a high valuation of the presence of (several) children.

Rethinking the life course perspective of work, parenthood and retirement

If policy makers do chose at some point in the future to pursue fertility enhancing policies, at the European or at the national level, which is by no means self-evident, they will need a good knowledge-base. Much still has to come from the research community in terms of the policy formation analysis, policy impact analysis, and insight about deprivations, frustrations and expectations of citizens. However, there is evidence already available to stress that many of the measures introduced to support families with children and working mothers were introduced under social pressures for gender equity, that came mainly from women. Good measures helped women not to have to choose between work and motherhood, and enabled them to be less stressed and consequently to perform better as employees, but did not really contribute to facilitating any significant number of women to have more than one or two children and still remain in the work force and pursue a career. Up to date actions did not

correspond to the real scale of the problem but were in most cases symbolic political acts accompanied by the creation of institutions and facilities for the partial management of incompatibility at the time of the arrival of a child and in the early family formation years, but not in the life-course perspective.

The current toolbox of family-friendly measures as well as more comprehensive strategies used up to date are, in the end, insufficient to resolve the dilemmas facing individual women and men with respect to life chances, choices, opportunities, work, partnership, parenthood, and one's old age, on the one hand, and on the other hand, dilemmas of modern societies on how to deal with the redistribution of resources between generations, sustainability of institutions, social cohesion and trans-generational continuity.

It is necessary to rethink the entire life course perspective regarding education, employment and retirement in view to resort to public policies to allow for the redistribution of free time and resources in a more age-friendly perspective. More work-free time during the course of the day or over several years might be seen as a key asset for parents to be and for young families. By contrast, many years of duty-free time at higher age, long after children have gained autonomy, can be seen as an obstacle to active ageing that inherently entails opening more options for working at higher ages, as well as creating opportunities for flexibility to drop in and out of work according to individual abilities and preferences also at higher age. Obviously, if people are to make choices, risk reducing policies and social-security safety nets are necessary. Rethinking the life course redistribution of time, activities, and resource has to do with the quality of life of people and normative standards about the type of society we wish to live in. The prospect of fertility enhancement is only one, albeit significant potential benefit. In view of the limited scope of this contribution we will, nevertheless, discuss only fertility related issues.

Revisiting causes of low fertility

If the underlying causes of fertility decline are to be addressed in a comprehensive way it is inevitable that the social amelioration associated with income transfers and social services be conceptualised as part of the organising principles of the entire economy. The broad approach to social protection analysis pursued by Esping-Andersen (1990; 1996; 1997) in the analysis of pension schemes in the context of the triangle state/market/family and the relationship between state and economy and the capacity of political actors to forge alliances, proved particularly useful for the historical analysis and patterning of present days systems.

A comprehensive approach is needed also for the prospective analysis and consequently in the below-replacement discourse not only the targeted family/social policy measures need to be scrutinized but also the organising principles of the economy. Up to date this approach has been 'a no goer'. In the mainstream policy and research discourse, as has been shown by many social scientists (e.g. Bourdieu 2001; Bourdieu/Wacquant 1998), the underlying hypothesis is that there is no normative basis to the *fin de siècle* economic model, which is a self-regulating system that knows what is best for all, while the changing role of the state has frequently been misinterpreted as the 'weakening of the state functions and not as its re-structuring'.

In view to substantiate the need for change we will first look at the main features of the life-course dynamics in the last decades of the 20th century, decades, which *inter alia* coincide with accelerated fertility decline.

Key life course events

In developed countries, the major bio-social phases in human life – infancy, adolescence, adulthood and seniorship – have undergone more or less important changes in the course of the former century (Figure 8). The infant period has decreased a little bit due to the secular acceleration in the pubertal growth spurt. The adolescent period moved a little bit forward, but the period of education prolonged for many individuals far beyond the age of biological adolescence (Figure 9). Social adulthood consequently starts increasingly at a higher age, well beyond the age of biological maturation. Biological seniorship increased considerably due to decreasing mortality at higher age. Contrary to what one would expect, the social onset of seniorship did not simultaneously move upward, but, on the contrary, moved to younger age due to the fact that more and more people, mainly men, retired from active life at ever younger ages. In the second half of the former century biological ageing and social ageing evolved in an opposite direction (Figure 10).

Figure 8. Present trends in the major bio-social life course phases

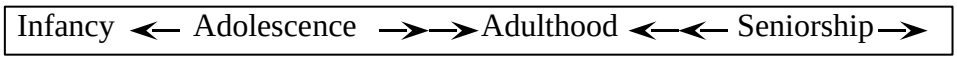
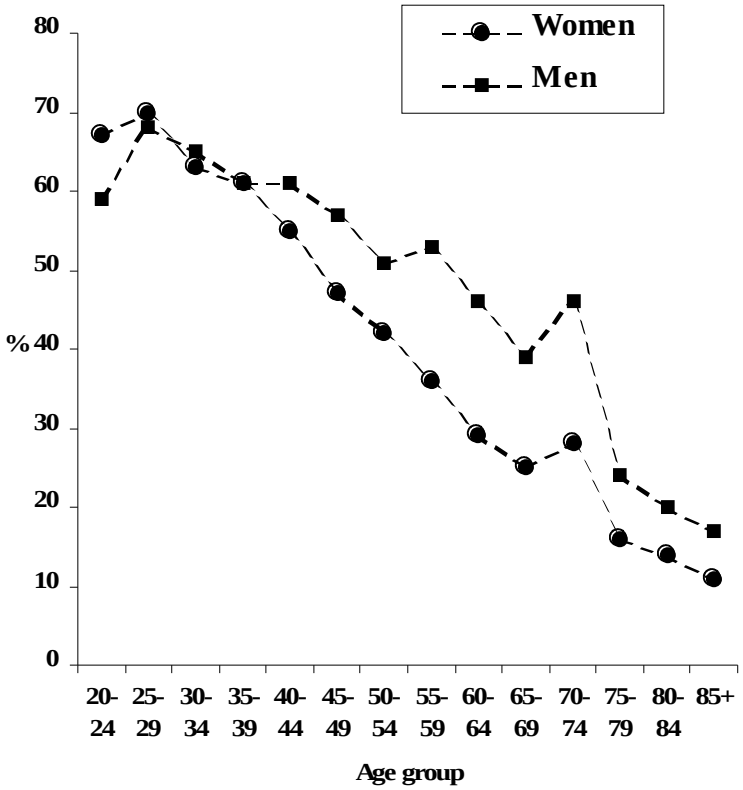


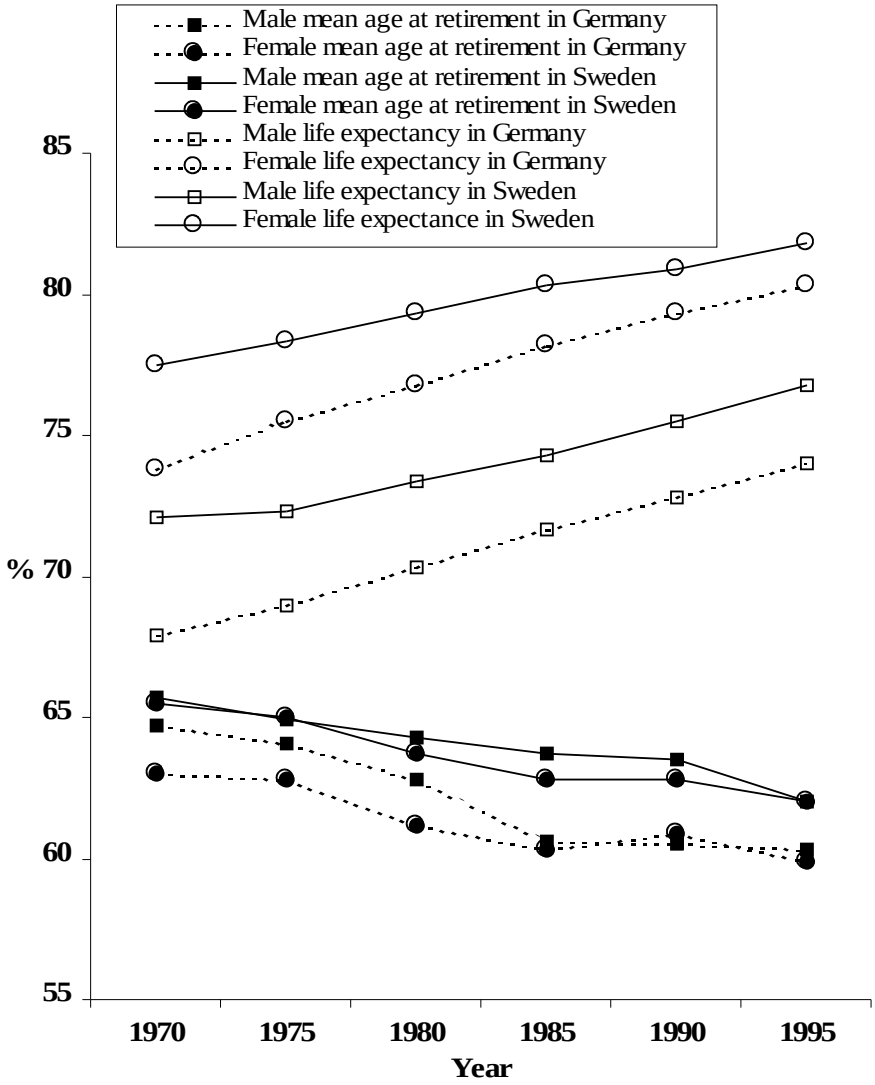
Figure 9. Percent of women and men with at least complete secondary schooling by age group, EU pooled data (ECHP 1996-1998)



Source: Avramov 2002

Concerning the timing of births, we observe that since the mid 1970s, both the mean age at first birth and the average age at childbearing increased continuously. In most countries, the age at first birth lies now between 25 and 29 years, and most couples get their last child before the woman is 35 years of age (Figures 11 and 12) (for data see: Council of Europe 2003). The postponement of births is one of the proximate reasons for the decreasing or persistent low fertility, since there is insufficient recuperation at higher ages, either because of increasing sub-fecundity or because postponement easily leads to renouncement once a particular lifestyle without children or with a small number of children has been adopted (e.g. Lesthaeghe 2001). The current very low total fertility rate probably underestimates somewhat the final descendence that may be expected because the postponement of births will be somewhat recuperated at higher ages. However, there is a general agreement that it is unlikely that the expected recuperation will redress fertility at replacement level (e.g. Bongaarts 2002).

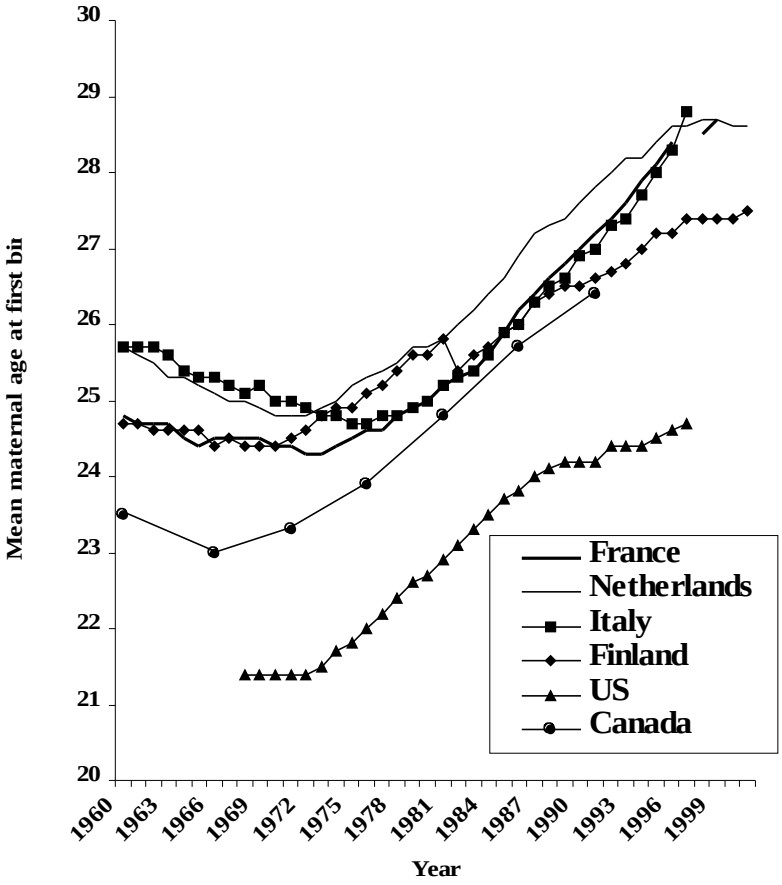
Figure 10. Development of life expectancy at birth and mean age at retirement in Germany and Sweden



Source: Avramov/Maskova 2003

On the hypothesis that, at some point in time, it would be desirable to redress fertility at or close to replacement level, i.e. an average TFR of 2,1 children per women, it would be useful if the maternal age distribution which now peaks in the age group 30-34 could be moved forward and broadened to the age group 25-34. In view of the development of modern prenatal diagnostics, selective abortion and, last but not least, increased longevity that gives parents ample time to see their children grow adult, it is reasonable to assume that childbearing can be spread over a much broader age range.

Figure 11: Mean maternal age at first birth

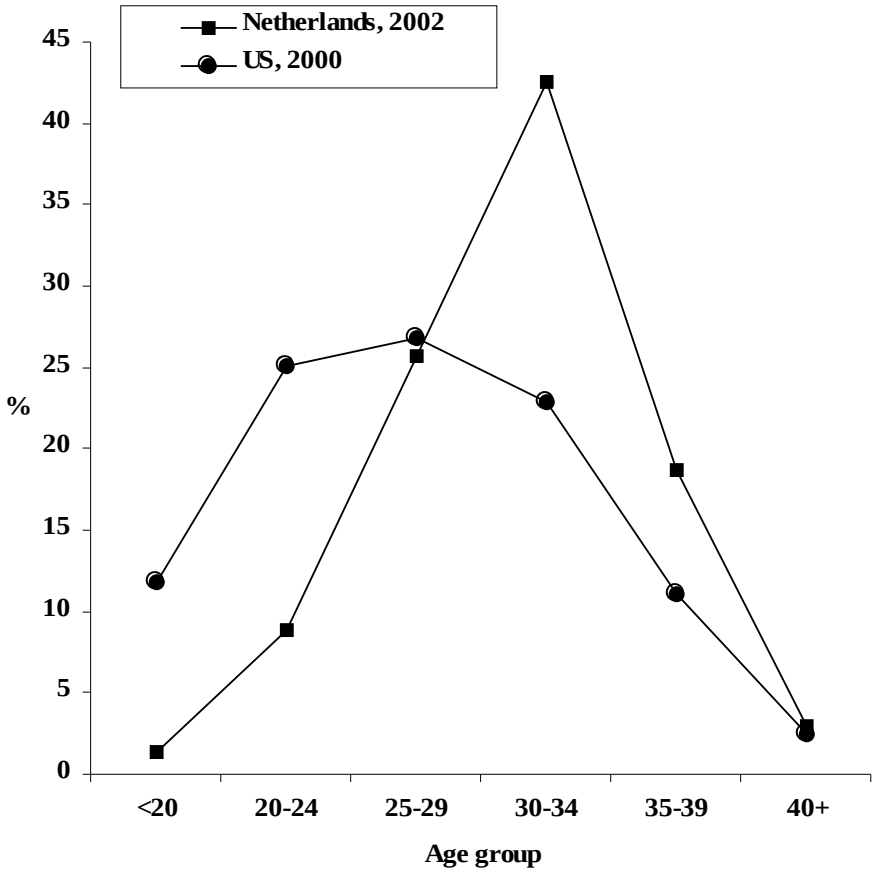


Sources: own calculations based on Council of Europe, 2003; National Center for Health Statistics; Zheng Wu, 1999.

Although it would be incorrect to assign low fertility only to the postponement of births to later ages in the reproductive life course of women, the way is which people in modern societies organise their life course is certainly a factor which contributes to low fertility, or at least leads to a situation in which people encounter more difficulties – biological, psychological or social – to realise the number of children they want.

Granted that a policy aimed at redressing fertility at or close to replacement level will require a multidimensional strategy, involving all policy domains – establishing more equitable gender relations, making work and family building more compatible, covering financial costs of childrearing, rebalancing individual and societal reproductive values, creating a more child-friendly environment – the acceptance and implementation of such policies might prove to be more feasible if the current stress accumulation young adults, and more in particular young women, experience in their optimal reproductive phase (20-30) of life, could be relieved or at least be diminished.

Figure 12. Percentage of births by maternal age in selected developed countries



Source: own calculations based on Netherlands STAT LINE; US: National Center for Health Statistics

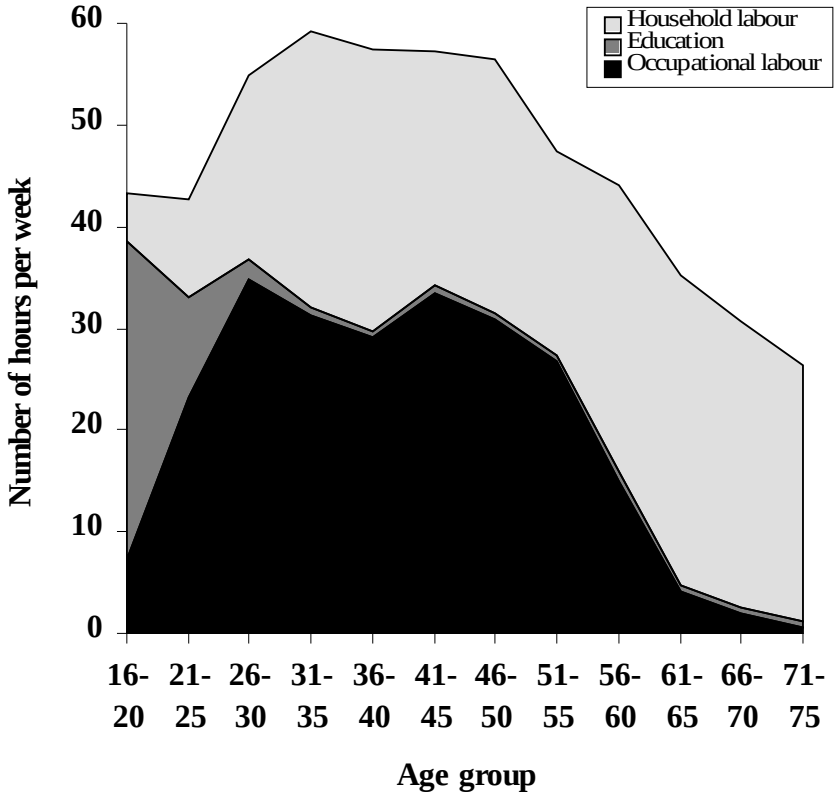
Indeed, in modern culture young adults are more and more confronted with the necessity/desire to prolong their formal education in their early twenties. Next, they are struggling to find and secure a job on the labour market. In the meantime they want to acquire a decent accommodation, as well as enjoying the rich variety of leisure modern culture tends to offer nowadays. Finally, they are to build up a family with a few children. All in all, the twenties are becoming a quite crowded phase in the life course.

The stress young adults experience in the early reproductive stage of their life (20-30) not only appears from the fast succession and factual accumulation of different essential life activities (Figure 13) as well as of the avoidance, postponement or strong limitation of childbirth, but also from data on evaluation of time use or satisfaction about available time for leisure (Figure 14) and desired number of working hours (e.g. van Dongen *et al.,* 1995). The least satisfied with the amount of leisure time are women and men in their peak childrearing and career building years.

In order to decrease the stress of people in their twenties, modern societies may need to reconcile formal education and employment in such a way that young adults have more time to acquire their education, have more secure employment opportunities but less working

hours, so that both education and work can be more easily combined with building up a family and parenthood.

Figure 13. The number of hours per week spent on education, occupational labour and household labour by Flemish men and women during the life course



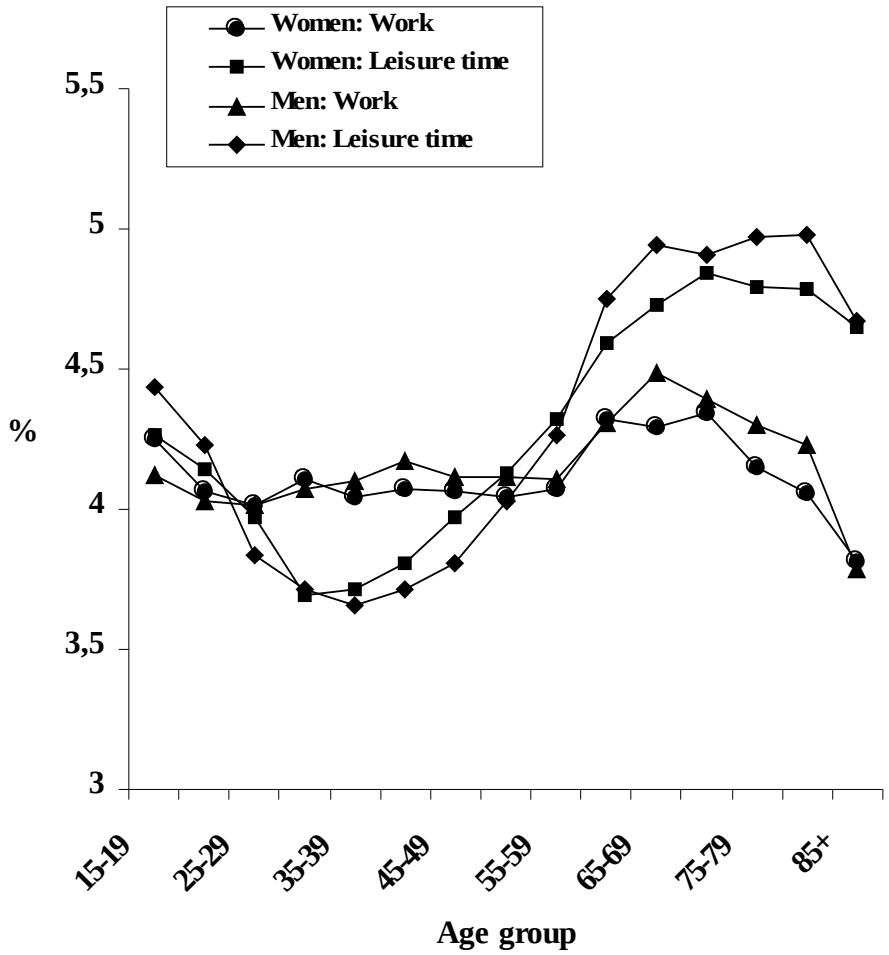
Source: Glorieux et al., *2000 ; van Dongen* et al., *2003*

Life-long education is part of a politically correct discourse but in effect the initial education is what really counts and higher education is currently concentrated among people in their early 20s. Research shows that continuous education has not produced any significant change in the overall educational attainment of the population (Figure 15). Such improvement is attained mainly by means of initial education. The increase in the educational attainment has been the result of inter-generational changes, namely the arrival of successive generations with higher educational attainment (EDEX, 2001).

Judging from the time use survey data for Belgium (Flanders), elderly workers spend on average half an hour per week and retired people 12 minutes per week on education. However, there is no reason to assume that it is impossible to spread formal education over a larger age range, leading to an easier combination of education and childbearing and –rearing and employment and education/employment/partial retirement. Much could be done in the domain of employment of young adults: more secure jobs, lower number of working hours, more facilities to combine work with studies and childbearing and –rearing. Young adults should also be provided with larger range of financial facilities to equip an accommodation

and, possibly even acquire a dwelling. Society should, in other words direct considerably more resources to this phase in the life course of their citizens.

Figure 14. Satisfaction with work and leisure time among women and men in the EU (15-EU pooled data, ECHP 1996-1998)



Source: Avramov, 2003

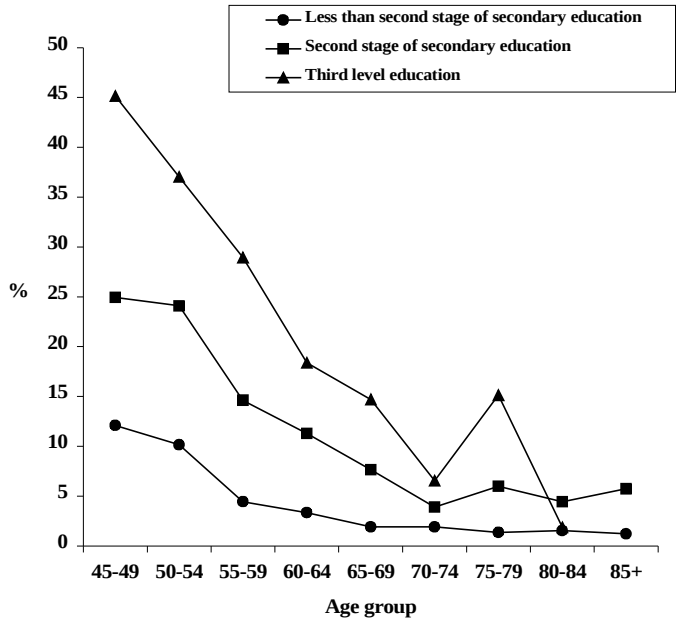
The question where to find the required extra resources to invest in people in their family building life stage is not an easy one but in the longer-term perspective people would at a higher age, when the child-rearing phase is largely over be compensating for benefits they had at younger age.

As can be seen from the Figure 10 in the second half of the former century biological ageing and social ageing evolved in an opposite direction. Not all the generations had same opportunities to profit from the overall social, economic and technological development.

Indeed, since the 1970s the average age at retirement has been decreasing continuously throughout Europe. For women, the picture is more heterogeneous due to their increasing

labour force participation from considerably lower levels than those for men. The proportion of people aged 60 or more who are still in the work force is extremely low. Data for the European Union countries show that in the northern countries 15 percent of men and 4 percent of women are working; in the southern countries the proportions are 12 percent and 3 percent respectively. In the western European countries the share of economically active people slumbered to as low as 7 percent among men and 2 percent among women. Almost all people are retired by age 65 and those who are close to the statutory age of retirement, aged between 60 and 65 who are still in the work force account for the minority of that age group. Between 60 and 65 only 26 percent of men and 9 percent of women are still working (Table 2; Figure 16).

Figure 15. Percent of people at higher ages in education according to educational level, 15-EU pooled data



Source: own calculations based on the ECHP database (Avramov, 2002).

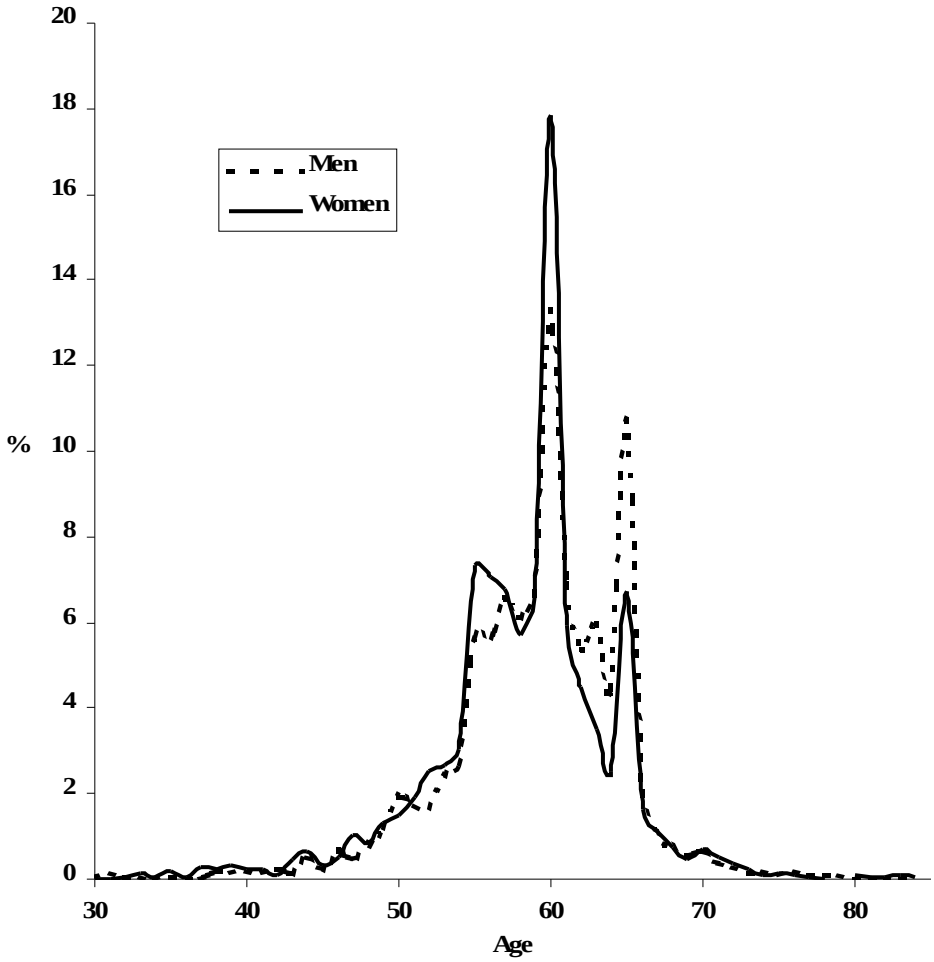
Table 2. - Percent of working men and women in the European Union countries, by regions, and by age group

Age group	Northern countries		Southern countries		Western countries		EU	
	Men	Women	Men	Women	Men	Women	Men	Women
60-64	39.8	14.2	33.2	9.5	17.4	6.9	26.4	9.0
60+	15.4	4.3	12.1	3.4	6.7	1.9	10.1	2.8
65+	6.3	1.6	4.2	1.5	2.4	0.5	3.7	1.0

Source: Avramov, 2003

Once people retire the home-centred leisure activities predominate and as time use studies show the additionally freed time after retirement is not used actively. Data illustrate that self-care that includes personal care, sleep or rest and (passive) leisure, mainly TV watching, takes the bulk of people's life at higher age (Avramov/Maskova 2003).

Figure 16. Age at retirement in the EU , by sex (ECHP 1996-1998)

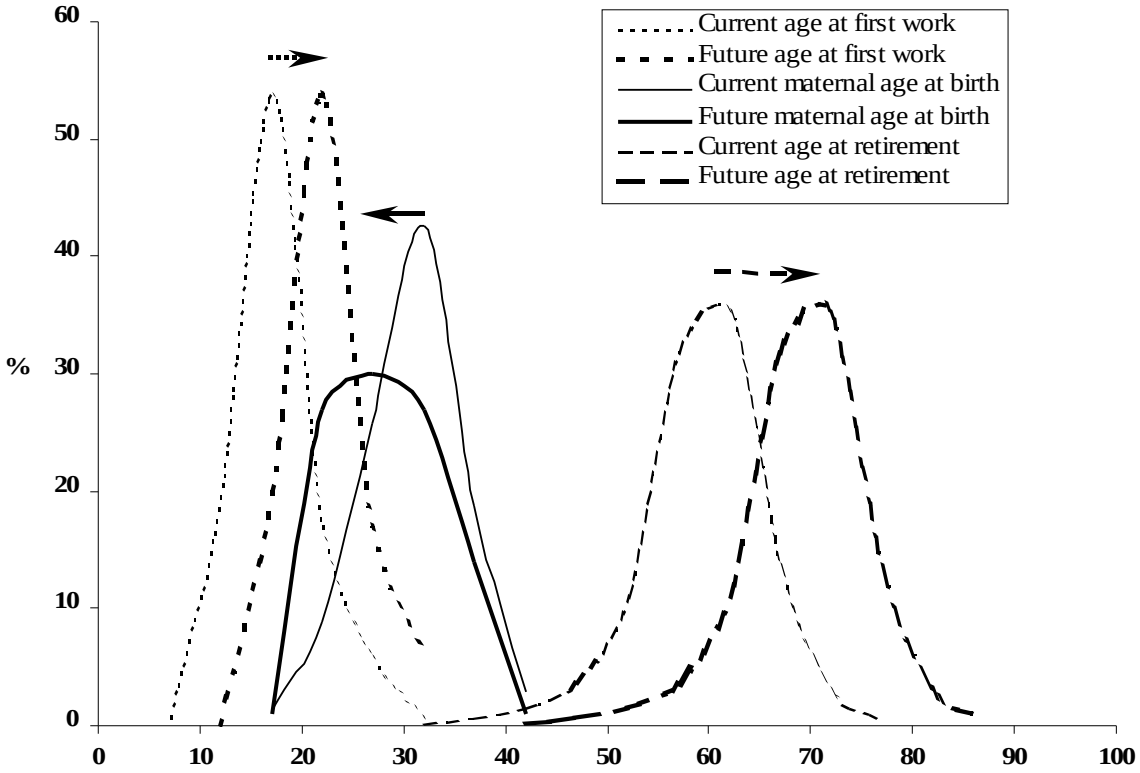


Source: own calculations based on the ECHP database (Avramov, 2002).

By activating younger elderly people huge resources in terms of time, human capital and finances could be activated. More people could continue occupational activities up to higher age than the present formal retirement systems foresee and early retirement could be considerably scaled down. The current formal retirement threshold should be gradually increased, albeit in a variable and flexible way. Indeed, these reforms should be introduced taking into account intra- and inter-individual variability with respect to needs and abilities. While the average age at retirement should be increased, the variation at retirement age should also be increased and flexibility in retirement schedules (part-time/full-time) should be introduced (Figure 17). This policy would not only alleviate the burden on pension budgets but would also all for more resources to be channelled towards young adults. It would also

contribute to eliminating social exclusion of older adults who are now more and more excluded from work and social life as a whole.

Figure 17. Possible changes in life course events concerning work, childbearing and retirement



Source: own calculations

By redistributing the studying and working time over the life course a general redistribution of other resources would inevitably occur, all contributing to increasing the potential for the life-long quality and satisfaction, bringing about a meaningful reconciliation between education, work and parenthood, and creating a population friendly climate conducive to greater gratification of parenthood and possibly redressing fertility close to replacement level.

By way of conclusions

Our proposal is that the life course distribution of time for the main activities that relate to studies, paid work, domestic activity, partnership, parenthood, care provision, and active and passive leisure be reshuffled by means of active welfare policies so as to enable individuals to spread more innovatively paid and unpaid work and duty-free time over the entire life course. We refer here to the pivotal role of the welfare regime as a system of public regulation that aims at assuring the well being of individuals and securing social cohesion by means of legal measures and the redistribution of material and non-material resources. Obviously, the reshaping of the welfare regime in view of the diversification of the budget of time requires the rethinking of the organising principles of the entire economy and in particular the normative basis of the labour market policies.

For the time being we seem to be both philosophically and practically locked in the logic of the 'power of the market'. The dominating role that entrepreneurs plays in determining the boundaries of social policies today builds on the rationale that the institutional pressures in favour of family and age-friendly policies are low, that the market forces *per se* are strong, and that the economic benefits of social and fertility enhancing policies, and activating-the-elderly policies, are low.

With high unemployment and easily replaceable workers fearful of loosing their job, enterprises are not strongly dependent on their employees and thus are not inherently interested in their overall quality of life or the time constraints outside the workplace. The mainstream logic goes along the line of the reasoning that enterprises may become more open to family-friendly measures only if legal pressures become strong, its market power low and that they perceive high economic benefits from these measures (see for example Ingram and Simon 1995). If we pursue this logic there is a long way to go both in enforcing and motivating entrepreneurs to think long-term.

In this contribution we have argued that the public policies have rather badly managed the economy of time of individuals and families in the life-long perspective. The highest burden of duty is on people during early years of family formation. There is much free time after statutory retirement - time that is being spent unproductively by the overwhelming majority of elderly people.

We consider that our hypothesis about the need to reshuffle the main activities in a life-course perspective by means of active public policies is grounds for future research. Only future research in the direction of the 'economy of time paradigm' based on a variety of approaches and methods can substantiate or disprove the feasibility and desirability of reshuffling the time use in the life course perspective. In our view, there is already much proof of need.

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