

*Research Paper 2000-01*

**LOW FERTILITY AND  
POLICY RESPONSES  
TO ISSUES OF  
AGEING AND WELFARE**

**KOREA INSTITUTE FOR HEALTH AND SOCIAL AFFAIRS  
UNITED NATIONS POPULATION FUND(UNFPA)**

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The views expressed in this report are those of the authors and do not imply the expression of any opinion on the part of the Government of the Republic of Korea and the United Nations Population Fund(UNFPA).

## Preface

The final quarter of the twentieth century witnessed rapid demographic change in the majority of Asian countries. Most notable was the decline in fertility to near replacement and even below replacement levels at a remarkably rapid rate in many instances. Worldwide, by 1997, over fifty countries had total fertility rates below 2.1 children per woman, and although the majority of these societies were European, increasing numbers of Asian countries have reached this level over the preceding decade and several others are likely to do so soon.

Low levels of fertility and rising life expectancy has resulted in the ageing of these populations. With smaller numbers of children, family dynamics are changing and this trend is exacerbated by increasingly independent behaviour of individuals of all ages. This situation raises important issues such as whose responsibility is it to provide for the needs of the more vulnerable members of society – the children, adolescents, needy mothers and older persons, all with distinctive but pressing needs. What are the appropriate roles and responsibilities of the government, the community, the family and the individual? These are issues familiar to many researchers, particularly in Europe, but the circumstances, the dynamics, the political and social contexts differ from those of contemporary East and South-East Asia. To what extent and in what respects are the learning experiences, the policy responses and the consequential impacts in Western societies relevant to Asia?

With the issues above in view, the Korea Institute for Health and Social Affairs (KIHASA), and the United Nations Population Fund (UNFPA), jointly planned and facilitated an International Symposium on Population and Development Policies in Low-Fertility Countries in Seoul, from 7 to 12 May, 1998.

The overarching objectives of the Symposium were to contribute to the successful implementation of the International Conference on Population and Development (ICPD) Programme of Action, and to assess the progress made five years after the ICPD Conference, in advancing the ICPD Programme of Action as it relates to the needs of older persons in the regions countries of East and South-East Asia.

The more immediate objectives of the Symposium focused on current efforts at policy formulation to address the critical issues involved in this process and to benefit from the relevant experience of low-fertility societies in other parts of the world. One objective was therefore to raise awareness of policy-makers, programme managers and researchers of the consequences and implications of rapid fertility decline. A second objective was to exchange and share knowledge and experience of societal responses to demographic changes and their impact on labour markets and employment, family welfare, the elderly population, adolescent sexuality and the prevention and management of abortion.

The Symposium also offered opportunities to discuss experiences and strategies on ageing and the appropriate directions for integrating policies, plans and programmes to address the issues of population ageing. Finally, the organizers perceived the Symposium as offering an opportunity to elaborate on the conceptualization and development of comprehensive, integrated and sustainable population policies and programmes within the broader context of the ICPD Programme of Action.

Some thirty-seven international experts from fifteen countries, with interests in a range of specialist fields centred around policy issues of population and development in low-fertility societies, attended the Symposium in various capacities. The sessions covered five major themes: new population and development policies in the context of rapid fertility changes and the ICPD Programme of Action; consequences of low fertility and policy responses; social responses to rapid demographic changes; policy issues of population ageing; and programmes and policy challenges. Twenty-three substantive papers were presented and there were further contributions by discussants and participants at each of the sessions. In the final session, a synthesis of views was achieved and some conclusions were advanced, integrating the diversity of experiences and observations from the preceding sessions. The substantial number of contributed papers and the wide range of the discussions meant that not all contributions could be included in this final volume. In the event, three broad integrating themes were identified (Parts II-IV) and a representative range of thirteen papers on these themes was assembled and edited for the present volume. The organizers wish to express their appreciation to all contributors, including those joint authors who did not attend the Symposium

and to all who contributed in various ways, whether or not their papers or comments are explicitly acknowledged in this volume.

In particular, KIHASA wishes to show its appreciation with the contribution of UNFPA for providing financial support. We would like to acknowledge and thank Dr Iqbal Alam, Adviser in Population Statistics, United Nations Statistics Division and Dr Richard Leete, Senior Technical Officer, UNFPA Technical and Policy Division, for their efforts in providing valuable advice and technical assistance in helping to facilitate the Symposium. We also acknowledge with gratitude the role of Dr Warwick Neville, of the University of Auckland, as the editor of the present volume. We also wish to acknowledge and thank both the Vice President Dr Namhoon Cho and the staff of the Population Research Team of KIHASA for their efforts in helping to ensure the successful implementation of the Symposium.

The dissemination of these studies is undertaken in the hope that other researchers, policy makers and programme managers may also benefit from the experiences and insights shared by the participants in the Symposium.

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30 June 2000

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## I . Introduction<sup>1</sup>

Warwick Neville

The International Symposium, entitled *Population and Development Policies in Low-Fertility Countries*, had as its main focus the rapidly changing demographic structures occurring in many Asian countries, the emerging issues consequential on the accompanying economic and social changes, and the experience of other countries that had already been obliged to confront these issues. To address these fundamental issues, the programme was divided into five substantive sessions in which contributors spoke to the designated themes, and a sixth and final session integrated the themes and reached some conclusions, as follows –

1. New Population and Development Policies in the Context of Rapid Fertility Changes and the ICPD Programme of Action.
2. Consequences of Low Fertility and Policy Responses.
3. Societal Responses to Rapid Demographic Changes.
4. Policy Issues of Population Ageing.
5. Programme and Policy Changes.
6. Synthesis and Conclusions.

The twenty-three papers presented were amplified and critiqued by discussants, and these findings, together with abstracts of the papers, were published as the *Proceedings of the International Symposium on Population and Development Policies in Low Fertility Countries*, (1998. 5., Symposium Report 98-01), by the Korea Institute for Health and Social Affairs (KIHASA), Seoul.

In the present selection of thirteen of these papers, the structure has been collapsed into just three overarching themes which subsume those of the Symposium. They are –

1. Population Policy Development and the ICPD Programme of Action.

## 2. Country Case Studies of the Demographic Path to Low Fertility.

## 3. Thematic Case Studies of Societal Responses to Low Fertility.

These themes have been brought together under the present title, *Low Fertility and Policy Responses to Issues of Ageing and Welfare*, in order to make a representative selection of the studies presented at the Symposium more accessible to researchers, policy makers and programme managers concerned with the issues these contributions address.

A backward glance from the vantage point of the turn of the century reveals a series of unprecedented demographic events of a nature and dimension previously unparalleled. The twentieth century was a demographic watershed. It witnessed increments in population numbers on a scale and at rates unlikely to be replicated. From about 1,650 million people worldwide in 1900, population numbers escalated, mainly in the second half of the century, to more than 6,000 million. Average annual growth rates, which had remained at 0.5 percent per annum or less for centuries, surged above two percent per annum in the 1960s, and net increments in numbers exceeded 85 million per annum in the 1980s.

## **Demographic processes and outcomes**

Twentieth-century fertility rates in the large populations of many developing countries remained relatively high while mortality rates declined and life expectancy rose, partly emulating the earlier experience of many low-fertility populations in more developed countries. Medical intervention, preventive and therapeutic, made a significant impact for the first time in history, and differential impacts reflecting contrasting stages in the process of adjusting high fertility to declining mortality, resulted in major spatial redistribution of population concentrations by continent and country.



At the onset of the twenty-first century, many countries, some not for the first time – but for the first time on such a collective scale and to such a marked degree – were undergoing fertility decline to levels far below replacement, and many others were moving in that same direction. The worldwide population growth rate had fallen to about 1.3 percent per annum and net annual increments were estimated to be less than 75 million per annum and still falling.

While such major modifications to these vital demographic processes were in themselves quite exceptional, the repercussions for demographic, economic and social structures were fundamentally transforming. The high birth rates and steadily declining infant and general mortality rates characteristic of very youthful societies and still a feature of some developing societies, gave way progressively in most others to declining birth rates and low death rates, setting in train the trend towards more demographically mature populations. In this context, the heavy burden of child dependency was reduced and an enlarged working-age adult population created a favourable balance between the notionally active and dependent ages – both young and old.

The full benefit of this favourable population structure has not always been realized, however, because the expansion of the labour supply (at ages beyond the more youthful bottleneck of “never-worked” unemployment) has frequently not been matched by the creation of job opportunities or comparable growth in labour demand. With persistent reductions in the total fertility rate in most Western societies (including Japan), but particularly in Europe, this incipient ageing developed into a major trend, producing ever-larger proportions of older persons in low-fertility populations (Golini 1997). This phenomenon was compounded by improving life expectancy not only at younger ages, but more recently at older ages as well.

With fewer children being born and progressively larger numbers of adults moving into the older age groups, older aged populations are the fastest growing component in the overall structure of most low-fertility populations. Not only so, but whereas population growth of those 60 years of age and over is rapid, the growth in numbers aged 80 and over is more rapid still. Furthermore, the greatly expanded numbers of older citizens in these societies appears to have encouraged an attractive leisure culture among older people to the point that many now seek early retirement, and labour force participation rates are relatively low in populations aged 60 and over.

Although commonly designated simply “the aged” or “the elderly” this, like any other large category within the population, is a heterogeneous grouping when analysed on the basis of characteristics other than age. For example, in late middle age, the persistent predominance of males in the younger population gives way to an increasing proportion of females, and this reversal in the sex ratio becomes increasingly pronounced with age. This trend has direct consequences for marital status, since the lower life expectancy of men combined with the disparity in age between spouses at marriage, means not only that there are large numbers of widows in older populations, but that surviving males have a higher probability of still being married than women of the same age.

In the long-term, ageing and aged populations are not the only radical outcomes occurring with persistent low fertility. Just as a *youthful* age structure provided the momentum for huge population increases in the recent past, an *old* age structure provides the momentum for decline in population numbers (McDonald: Chapter Six). Consequently, major reductions are to be expected in most Western populations if, as anticipated, low birth rates persist.

Because of the occurrence (and in some cases recurrence) of low fertility in more developed countries generally and in Europe in particular, there is a tendency to focus almost exclusively on these

examples. But there is a major deficiency in confining discussion of ageing and aged populations to societies with large proportions of elderly: *the majority of older persons live in developing countries*. Since the 1960s, the sheer weight of numbers has dictated that there were more people aged 60 and over in the developing world than in developed countries. At the end of the twentieth century, the ratio of aged persons in developing to developed countries was about 3:2 and the disparity continues to grow.

When the fact that the majority of the aged are located in developing countries is combined with the observation that a number of this category of countries have declining total fertility rates approaching (and in a few cases already below) replacement level, the resolution of issues pertaining to ageing and provision for the aged is as relevant to Asia as to Europe.

## **Economic and social issues**

### **Living arrangements**

The current demographic situation holds considerable significance for the living arrangements of older people. Steadily rising life expectancy is resulting in the increasingly common occurrence of four-generation families (Pennec 1997), but in practice, far from taking advantage of the potential benefits that mutual support within a single household could provide, most societies are recording a strong tendency for less coresidence by successive generations of the family. The trend in most societies where modifications are occurring to the established patterns of residence, is toward increasingly separate life styles and greater independence on the part of both the older family members and their adult children. Even where coresidence persists, the *form* of some type of extended family structure does not necessarily imply a

family *function* supportive of the elderly since the flow of wealth, unspecified in most data sets, may be in either or both directions.

Amongst the numerous examples of traditional coresidence in countries of Asia, most report declining levels of parents living with their adult children, even in contexts where adult-child obligations to parents are strong (Chung: Chapter Twelve). In situations where coresidence is based more on obligation than real parental need, the erosion of such values and practices is relatively easily justified, particularly if perceived to be in accordance with mutual preference and/or benefit.

For China, major adjustments still lie in the future as the Chinese family is enmeshed in processes for which impacts are still to be assessed (Bian, Logan and Bian 1998). The first cohort of the one-child family era is now reaching maturity, and parents and children will gradually begin to experience the consequences. Choices will have to be made as to whether parents live with their only adult child (irrespective of gender) or accept the contemporary trend away from coresidence, and live apart from their offspring. The adjustments to family arrangements for ageing parents are likely to be as fundamental as the economic and social adjustments to low-fertility levels achieved by the one-child family policy at an earlier stage (China Research Center on Ageing 1994).

Japan, while perceived to be sharing many demographic and economic features with the more developed countries of Europe and North America, in matters of family demography may have more in common with the newly industrializing societies of East Asia. Although increasing numbers of older men and women are living alone as couples or individuals, the tradition of support within the family home has not been entirely lost and attempts are being made to encourage the retention of this system (Atoh 1998). However, in Japan too, population ageing, the growth of the social security system, and the weakening commitment to family care of the elderly conform to a pattern common to all countries that

modernize and adopt a low-fertility regime (Ogawa and Retherford 1997; Kojima: Chapter Eleven).

The experience of many societies in Western Europe, although significantly different in the evolution of marriage practice and family structures from countries in Asia, is producing a somewhat similar outcome to some of the more affluent Asian societies with ever-larger numbers of older persons living alone, and with women much more affected than men at the oldest ages (Toulemon 1998).

### **Employment and retirement**

In more developed regions there appears to be a general consensus pointing to the desirability of increasing the effective age of retirement by removing barriers to working in later life, preferably by enabling withdrawal on a gradual basis, involving more flexible rules and more gradual transitions such as participation in the part-time labour force. Higher employment rates among older persons reduce fiscal pressures associated with the financing of pensions and health care while also increasing real incomes for the population as a whole, significantly contributing to the difficult policy trade-off between higher taxes and lower benefits (OECD 1997).

Many countries in more developed regions have recorded a significant decline in the labour force participation of older workers, particularly males. A major explanation for falling employment is the reluctance of employers to employ older workers on the grounds that their skills and competencies are obsolete, ageing impairs performance and reduces productivity, and seniority-based remuneration raises the cost of employing older workers. Although the evidence is not decisive, measures of productivity suggest that what older workers may lack in response to tests of complex memory and physical reaction may be more than compensated for by experience effects and work habits.

Another reason for the decline in participation rates of older workers is an increased preference for retirement, but other factors such as retirement policies, social security systems and labour demand are likely to be of greater fundamental importance as the underlying factors influencing retirement (Wise 1997).

Within the formal sector of the more highly urbanized societies in the less-developed regions, especially in Asia, issues of employment among older people are being met by official measures analogous to those invoked by countries in Europe and North America in recent decades. However, for most of Asia, the greater proportion of opportunities to remain in the labour force occur in a significantly different form: they are concentrated in services and agriculture, and rather than relying on the public sector or large corporations as in the cities, older workers are more likely to be self-employed or active in family businesses (Westley 1998). While official measures are largely geared up to the particular circumstances of urban employees, the majority of the actually or potentially economically active are in rural areas, in small family businesses, and in the informal sector in both its rural and urban manifestations.

Outside the modern and predominantly urban sector the concept of “retirement” may have little currency and family roles and economic activities merge. For older people, whether urban or rural, contributing to the collective needs of family (as distinct from continuing to follow a personal career or even pursuing individual employment outside the home) may not give rise to a need to differentiate between activities commanding remuneration and fulfilment of obligations and duties in the home. Child care and housework (more especially for women), and financial assistance and consultation on family or business matters within the household, may contribute just as significantly to family well-being as participation in productive processes identifiable as “economic activity”. This also provides a reminder that coresidence need not

imply dependence on the part of older persons but intergenerational support flowing from parents to children and grandchildren (Lillard and Willis 1997). This again raises issues, particularly for women but also for all older people, relating to the definition of work, and the value of activities undertaken without the recognition that remuneration provides.

### **Health and health care**

The health characteristics of most people in their sixties and seventies are broadly similar to the rest of the adult population, that is, there are enormous health variations within each older age group ranging from persons with virtually no impairment to those with severe disability. Although the majority of older people enjoy good health, ageing is accompanied by biological changes which increase the risks of illness, disability and the probability of dying. “Health expectancy” describes disability-free years of life and probabilities determined on the basis of decrement tables derived using a methodology similar to that of the life table.

Prevalence of chronic illness rises with age and, as one would expect in low-fertility countries where degenerative diseases prevail, comprises similar illnesses or disabilities in such contrasting cultures as England and Japan: musculo-skeletal conditions and disorders of the heart and circulatory system. While chronic illness may not amount to disability or frailty and have little inhibiting effect on the activities especially of the younger elderly, the prevalence of disabilities is strongly age related and reaches high rates at more advance ages among older persons (Grundy: Chapter 13).

Ageing populations present a major challenge to systems of health and long-term care. In most societies, despite the relatively good health of many of the elderly, there is a heavy concentration of health problems and long-term care costs among older people,

particularly the very elderly and, in some more developed countries, as much as one-half of all health-care expenditure occurs in the last two years of life (OECD 1997). Whereas personal health care expenditure increases only moderately before the age of 60 when mortality is still relatively low, preliminary estimates indicate that per capita expenditures around age 70 are twice the average, peaking to four times higher for those aged 80 and over. The concentration of long-term care use among the very elderly is even more dramatic.

Other findings also indicate that the greater inability of some groups to function effectively during old age has less to do with ethnicity per se than the joint interaction of socio-economic status and health. Furthermore, irrespective of ethnic group, women record more functional limitations than men. These appear to reflect a relationship between parity and general health among women over 50 years of age; differences between men and women in how they report symptoms and health outcomes; and, given their relatively high mortality rates, a greater degree of selectivity in male populations, since only the more robust survive to older ages.

In the majority of less-developed countries governments provide very limited health services or medical care so that the needs of the lower and middle-income segments of the elderly population - preventive, curative, restorative and rehabilitative - remain largely unmet. Most older people have to depend on their limited savings, or on the support their children can provide, for treatment and general health care. State supported public health services are limited in their coverage and are mainly confined to urban areas. These facilities are often overcrowded, unevenly distributed and overstretched due to paucity of funding and qualified personnel, shortage of space, poor maintenance and indifferent services (Bose 1996).

Gradual improvements in most countries include separate access and consultation hours for the elderly; specialisation in geriatric



medicine and hospital wards; mobile facilities, and expanded facilities for treatment of health problems, such as cataract, which are a particular problem of the aged. The bulk of the population in less-developed countries is not covered by medical insurance which, in most instances, caters only to the more affluent sections of society and receives little or no support from the state. Even where available and accessible to older people, medical insurance generally does not cover preventive health measures, personal health care or domestic ancillary support services, aids or appliances.

Wherever they are provided, public health systems and health insurance schemes are facing funding problems partly because of the escalating numbers of older people who make more frequent use of health service provisions, but also partly because the elderly are more likely to require procedures based on the use of expensive technology. Whether in societies where the main responsibility for care of the aged is undertaken by the family, by the community, or by the state, the major costs relate to the long-term care of the frail elderly, and the main issue is balancing individual or private responsibilities against collective or public responsibilities.

In many societies, not confined to more developed regions, long-term care has become a normal risk in society and its financing requires some form of collective risk-pooling mechanism. Such mechanisms must take into account the major costs, such as long-term nursing care, as well as the more minor costs that now tend to be covered in a more comprehensive way. At present, most of these risk-pooling mechanisms are in the public rather than in the private sector.

### **Economic security and income support**

Adequate income support at older ages is a matter of primary concern for those who wish to ensure some degree of

independence; absence of a sufficient and reliable income reduces the elderly to varying degrees of dependence. The most vulnerable are those who have no productive assets, little or no savings or investments, no pensions or retirement funds, and either have no family to care for them or who are part of families with low or uncertain incomes.

For the majority of workers in less-developed regions who are in the unorganised, small-scale and informal sector in urban areas, or in agriculture and allied sectors in rural areas, the absence of pension schemes, provident funds or other suitable savings instruments, the lack of information and foresight with regard to problems of older ages, the irregular flow of income during their working lives and the constant pressures to meet current needs guarantee a high degree of dependence on their children (Bose 1996). Those without children run a severe risk of joining the indigent and homeless.

In all but the wealthiest societies in less-developed regions, the majority of aged people do not have the resources to support themselves and so children are the main means of support by default. Even then, the elderly are unlikely to receive cash directly from their children for personal spending. This problem of income security is far more acute in the case of elderly women since even in the normal course of events women have limited control of household resources. Women constitute a small proportion of the labour force in the organised sector and, therefore, only limited numbers have the benefit of an independent pension. While some may benefit from a husband's pension on his retirement or after his death, others lose their entitlement once their spouse is deceased. Women who are unmarried, widowed or divorced are particularly disadvantaged because of their longer expectation of life and period of widowhood, and their earlier withdrawal from economic activity, especially self-employment.

National provident or pension funds, in one form or another, constitute one of the most popular forms of social security<sup>2</sup>. They are popular with their members who identify with their “deposits”, and with sponsoring governments which perceive them as self-help vehicles for the provision of basic retirement income protection while at the same time mobilising substantial domestic savings for low-cost public use (Dixon 1995). However, because the funds are employment related and focus on wage and salary earners in the formal sector, those who have never undertaken economic activity as officially defined, who have worked in the informal sector, or comprise part of the very large and mainly self-employed work force in rural activities such as agriculture, are unlikely to be beneficiaries of such a system.

Even beneficiaries are unlikely to find their old age payments from the provident funds adequate to support them at anything like the level of lifestyle to which they have been accustomed. Furthermore, broadening of the basic functions of the provident funds to include funding for housing, health care and even, in the case of Singapore, investment in the stock market, has diluted the superannuitant function of the funds (Chan 1997; Yap: Chapter Four).

In other countries in more developed regions, government transfer payments and personal savings are the major pillars of income maintenance, and in contrast to many societies in less-developed regions, relatively little support comes directly from children. Expenditure on pensions has become a very significant proportion of government expenditure (and consequently of GDP) in most countries. Many rely heavily on pay-as-you-go schemes which operate effectively in the context of an expanding labour force that is producing a favourable balance between contributors and recipients. However, as populations age, the labour force stabilizes in size or even shrinks, and the ratio between the economically active and pensioners deteriorates - a trend

accentuated by the tendency to early retirement until very recently in countries such as the United States.

Increases in pension expenditures have been more affected by changes in beneficiary ratios than by demographic ageing alone, a consequence of early labour market exit for a range of reasons alluded to earlier. Government reactions tend to be mixed as specific provision for the recognised need of the older population is traded off against such issues as youthful unemployment and provisions for other types of beneficiary payments to adults of all ages.

In most low-fertility societies the real problem with maintaining old-age pensions at or above subsistence level is not the ratio of the working-age population to the elderly but the reluctance of modern populations to expend resources on the old rather than on the young (Caldwell, Caldwell and McDonald: Chapter Three). The notion of the old as dependents has largely been superseded at the family level, and increasingly there are intergenerational resentments when substantial increases occur in government expenditure on the aged. The obvious option, to cut the real value of pensions, is becoming progressively more difficult as the older population comprise an ever-larger proportion of the electorate. Such a measure is becoming an increasingly difficult option as many older persons who stand to benefit from pay-as-you-go systems consider that, having paid their taxes as employees, they have earned the right to receive pension payments as retirees. In the United States, “grey power” leverage has effectively influenced increased government spending on the old.

This trend can be made more palatable to the electorate at large by creating the illusion that the elderly are supporting themselves, an outcome which can be contrived, as in the United States, by separating normal taxation from social security payments and steeply increasing only the latter (Caldwell, Caldwell and McDonald: Chapter Three). Alternatively, individuals and their

employers may be required to contribute to private pension or superannuation schemes effectively as a form of tax, and others such as the self-employed may voluntarily contribute to such plans. The issue that then arises, particularly in the case of government funds, is making the appropriate investments with the huge sums involved.

### **Women and poverty**

For many of the elderly, particularly in less-developed regions, the greatest issue is poverty. The issue is more acute for women, not only because of their progressive predominance numerically with age, but also because women are disadvantaged in the predominantly patriarchal societies in which most of them live. It is when they become old that the consequences of gender roles (men as “breadwinners”, women as “housekeepers” even in instances where they have been economically active) is explicitly revealed.

In situations where pension schemes accrue mainly to employees, women who have not worked for most of their adult lives become even more heavily reliant on their husbands’ status and pensions. The large numbers of women who are single, widowed or divorced are especially vulnerable, receiving few or none of the entitlements of men and in some instances even lacking comparable status in the community and the family.

The status of women currently unmarried may also be different from that of those with husband present, and even in family situations where the senior woman has authority and respect, her position within the family is no guarantee of freedom from poverty. Approved gender roles, status in old age and limited opportunities during their lifetimes for asset formation, make women more vulnerable than men in the same society and more likely to be at the mercy of their families which may themselves be poorly resourced.

Provision of basic needs is an issue affecting many older persons but particularly the larger number of women at advanced ages. Housing especially constitutes a problem which has more serious connotations for the elderly than for most other groups, particularly in the urban areas of less-developed regions. Difficulties range from homelessness, to absence of adequate maintenance of housing stock and inappropriateness of design for those who are frail or partly immobilised.

In many of the more affluent societies, debate focuses more specifically on the desirability of institutionalisation of particular categories of the needy aged, and of the respective merits of retirement homes for the elderly and staged retirement villages which offer owner occupiers a wide range of lifestyle facilities and progressively more comprehensive services to cater for the escalating needs of residents as they age.

The particular issues facing women run the gamut of problems confronting all older persons. As noted earlier, deterioration in health may be a feature of advancing age and since some types of degenerative disease are strongly associated with age, incidence among women is inevitably high. Dementia is an example of one such illness, and osteoporosis, to which women are particularly prone, is an example of a sex-linked disorder that develops its most debilitating symptoms at older ages.

Similarly, problems of loneliness, isolation and abandonment tend to be more acute for women, as increasingly frail survivors of shrinking cohorts gradually withdraw even from active family roles. The acuity of these difficulties is accentuated during their advanced years by the constrained resources available to most women in their own right, because of the often limited time spent in the formal labour force or in the acquisition of assets independent of spouses or families.

The involvement of women with the ageing process is not confined to their own old age but often includes responsibilities as

care givers for their elderly parents even in societies where coresidence is declining in practice. Not only is a much greater share of aged care shouldered by women, but many women who have been economically active reduce their work participation or quit altogether in order to undertake such obligations.

With increased life expectancy worldwide, the elderly who are frail and in need of long-term care are likely to be drawing family support from women who themselves are already in middle age or early old age. The longer-term impact on them derives from loss of income and the consequent curtailment of the period of asset formation, and accumulated stress and deterioration in their own health. Since most of this support is provided within the family or through voluntary community agencies, the impacts on the care-giving women for their own prospective health and well-being in old age are largely negative.

### **Policy and programme implications**

A number of the more affluent countries in less-developed regions, particularly in Asia, have recognised from a relatively early stage the symptoms of incipient ageing in their own societies, and have responded by initiating research, conferences and consultation. Already the major declines in fertility and mortality have had a marked effect on the age structure of these populations, with significant implications for full employment and the provision of services such as education and health. These increasingly widespread demographic trends have occurred in the context of rapidly changing economic and social parameters which tend to exacerbate rather than ameliorate the impact of the continuing population transition.

The experience to date of countries in the more developed regions, as briefly touched upon in this Introduction, has been salutary. Most other countries are at pains to avoid emulating that

example, particularly in terms of the high cost and difficulties of effective delivery of official social welfare programmes for older populations.

There are marked differences in the national experiences of the process of population maturation which can be ascribed to contrasts in cultural and social mores, in levels of economic development, in the degree of government involvement, but above all to the speed with which fertility decline is already ageing the populations of many of the world's most populous nations. Approaches are therefore being sought which will accommodate such differences and deliver the requisite services at much lower cost, perhaps by melding modified versions of established support systems, improved infrastructures and modest publicly funded programmes.

As the proportion of the population in older age groups increases, the factors of development have, in most respects, consorted to compromise the status and viability of the aged. Technological and other changes trap them in traditional and less rewarding jobs, impede access to more desirable alternatives, necessitate early retirement from preferred careers or even withdrawal from the labour force altogether. Social change, economic success and increased mobility among the younger cohorts that have benefitted from opportunities unavailable to their parents, tend to distance older people from their families and deprive them of meaningful familial roles. It is therefore inevitable that the social, economic and health needs of vulnerable older persons should emerge as priority considerations for analysts and policy makers (Hermalin 1997).

Although the majority of countries in less-developed regions are already showing clear signs of ageing populations and this process is proceeding at a speed greater than that experienced in more developed regions, there is generally sufficient lead time before the emergence of the projected and greatly enlarged proportions of older persons, for policy and decision makers to adopt a nuanced approach in the development of appropriate policies and



programmes. While the changing *proportions* concentrated in older ages reflect the shifting age and gender balance within populations, with major implications for substantial adjustments in the resource base (especially for any effective fiscal measures), it is the huge *numbers* of older individuals with which governments, agencies, communities and families will have to deal that must command attention.

With the large number of surveys and research projects already completed or under way, particularly in Asia, the structural features of the aged component in society, and the circumstances and needs of older people in these societies have become increasingly apparent and will continue to do so as concerned funding agencies and research institutions persevere with investment of resources in these investigations (World Bank 1994). However, while the process of change in the *form* of social, economic and demographic structures these older people are experiencing in their societies is being comprehensively analysed and better understood, the underlying *rationale* for these adaptations and people's perceptions of what needs to be done in response is less well understood.

The fact of declining coresidence in many societies is well known, but is the motivation positive on the part of both the elderly and the family, is the goal greater privacy and independence for either or both, are the objectives, whatever they are, being achieved to the satisfaction of all, some or none?

Earlier withdrawal from the labour force is a recurrent phenomenon, but in their own particular societal contexts, is this expressing a real preference for opportunities other than employment for the older worker, a strategic response to government policy and programmes as the simplest way of achieving a particular lifestyle, a calculated preference for recreation and leisure rather than work, or simply an outcome by default rather than by choice? Identifying the underlying motivation for exercising choice in achieving change is equally appropriate,

not only for coresidence and economic activity but for most areas of human activity relating to the ageing phenomenon where such issues as poor health, disability or frailty are not the determinants of behaviour.

In attempting to develop new policies and programmes the real needs and preferences of older people need to be determined and both the direct and indirect consequences of their implementation (including the side effects of unrelated policies) evaluated. For such policies and programmes to be effective, adoption of an holistic approach will ensure that in dealing with one particular issue the broader needs of the elderly and of the wider society are recognised, that the influence of earlier life experiences of the currently aged are acknowledged, and that the prospects for meeting the needs of future older cohorts are not compromised.

## Notes

1. The Introduction attempts to integrate many of the elements and concerns expressed by contributors, and while drawing generally on most of the papers read at the KIHASA Symposium (whether published in this volume or not), explicitly acknowledges only a few of the more seminal concepts alluded to in the present chapters. The Introduction also draws extensively on Nizamuddin (1999).
2. The current and increasingly urgent preoccupation with these issues is reflected in a series of occasional articles entitled *Future Shock* appearing in the *Far Eastern Economic Review*. The pension systems covered to date are those of: Hong Kong (April 20, 2000); Japan (April 27, 2000); Singapore (May 25, 2000); and Malaysia (June 29, 2000).

## References

- Atoh, M. 1998. "Countries with substantially below replacement fertility: The case of Japan," paper presented at the Symposium on Population and Development Policies in Low-Fertility Countries, KIHASA, Seoul.
- Bian, F., J.R. Logan and Y. Bian. 1998. "Intergenerational relations in urban China: Proximity, contact and help to parents," *Demography* 35(1): 115-124.
- Bose, A.B. 1996. "Economic and social conditions of the elderly, with a special focus on women: Needs and capabilities of the elderly," in United Nations, *Implications of Asia's Population Future for Older People in the Family*, ESCAP, Asian Population Studies Series, No. 145, 82-95.
- Caldwell, J.C., P. Caldwell, and P.F. McDonald. "Consequences of low fertility and policy responses: A global perspective." Chapter Three in this volume.
- Chan, A. 1997. "An overview of the living arrangements and social support exchanges of older Singaporeans," *Asia-Pacific Population Journal* 12(4): 35-50.
- China Research Center on Ageing. 1994. *Report on the Implications of an Ageing Population on the Support Systems for the Elderly in Urban and Rural China*, Beijing.
- Chung, K. Chapter Twelve in this volume.
- Dixon, J. 1995. *Sustainable Development of Social and Economic Systems*, INIA Conference, Malta.
- Golini, A. 1997. "Demographic trends and ageing in Europe: prospects, problems and policies," *Genus*, LIII(3-4): 33-74.
- Goody, J. 1996. "Comparing family systems in Europe and Asia: are there different sets of rules?" *Population and Development Review* 22(1): 1-20.

- Grundy, E. "Policy issues of population ageing: A United Kingdom perspective." Chapter Thirteen in this volume.
- Hermalin, A.I. 1997. "Drawing policy lessons for Asia from research on ageing," *Asia-Pacific Population Journal* 12(4): 89-102.
- Kojima, H. Chapter Eleven in this volume.
- Lillard, L.A. and R.J. Willis. 1997. "Motives for intergenerational transfers: Evidence from Malaysia," *Demography* 34(1): 115-134.
- McDonald, P. "Below replacement fertility in Australia: Trends and implications." Chapter Six in this volume.
- Nizamuddin, M. 1999. "Population ageing: An overview," in United Nations (UNFPA) and Population Family Study Centre (CBGS), *Population Ageing: Challenges for Policies and Programmes in Developed and Developing Countries*. Leuven, Belgium (3-27).
- OECD. 1997. *Ageing in OECD Countries: A Critical Policy Challenge*, Social Policy Studies, No. 20, Paris.
- Ogawa, N. and R.D. Retherford. 1997 "Shifting costs of caring for the elderly back to families in Japan: will it work?" *Population and Development Review*, 23(1): 59-94.
- Pennec, S. 1997. "Four-generation families in France," *Population: An English Selection* 9: 75-99.
- Toulemon, L. 1998. "Demographic trends and family policy in France," paper presented at the Symposium on Population and Development Policies in Low-Fertility Countries, KIHASA, Seoul.
- UNFPA. 1995. *National Perspectives on Population and Development*. New York: UNFPA.
- Westley, S.B. 1998. "Asia's next challenge: caring for the elderly," *Asia-Pacific Population and Policy* 45(2).

- Wise, D.A. 1997. "Retirement against the demographic trend: More older people living longer, working less, and saving less," *Demography* 34(1): 83-95.
- World Bank. 1994. *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, World Bank Policy Research Report, New York: Oxford University Press.
- Yap, M.T. "Low fertility and policy responses in Singapore." Chapter Four in this volume.

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## **II . Population Policy Development and the ICPD Programme of Action**

### **1. The Impact of the ICPD on Population and Development Policies in East and South-East Asia**

*J. Krishnamurty*

#### **Information sources for identifying policy changes**

##### **National population policy documents**

In the past, official population policy documents were barometers for measuring changes in population and related policies. It was widely recognised, however, that many existed only on paper and did not provide a guide to current policies and programmes. While some countries like the Republic of Korea have prepared new population policy documents, several others have made changes in the focus and scope of policies without attempting to revise existing documents. There are yet others, like the Lao People's Democratic Republic (PDR) and the Philippines, where a draft document has been prepared but the process of securing consensus or high level approval is as yet incomplete.

##### **National development plans**

National development plans were often the place to locate the current set of national population and development policies. Unfortunately, development planning documents nowadays tend to focus on relatively short-term macroeconomic policy issues. They

propose solutions in the form of employment creation, poverty eradication and education and human resource development, often without considering the underlying causes which may lie in the area of population.

In some countries annual plans are in operation, but the documents do not deal with key medium-term and long-term issues like those associated with population. Such issues are not forgotten, but it is necessary to search elsewhere to find them. Some indications may be drawn from sectoral plans and other policy documents that examine longer-term issues and set out policies. Unfortunately it is very difficult to put together the material available on policy issues in the different sectoral policy and plan documents of even one country, not to speak of an entire sub-region.

### **Other sources**

Useful documentation of national policies and positions on population and development issues may be obtained from the country reports prepared for the International Conference on Population and Development (ICPD). However, these reports predate the ICPD Programme of Action (ICPD-POA) and are therefore not useful for assessing its impact. In March 1998, ESCAP and UNFPA arranged a "High-level meeting to review the implementation of the Programme of Action of the International Conference on Population and Development and the Bali Declaration on population and sustainable development and to make recommendations for further action".

The event provided an excellent opportunity for countries of the region to take stock of what had been done in implementing the ICPD-POA. This chapter draws on the material prepared for and presented at this meeting. Particularly useful were the Country Reports, prepared by different countries participating in the ESCAP meeting, and a note by the secretariat, entitled: "Implementation of

the Programme of Action of the International Conference on Population and Development and the Bali Declaration: Constraints and Challenges - Analysis of Country Questionnaires" (ESCAP-ACQ).

In at least two countries, Myanmar and Malaysia, National Plans of Action to implement the ICPD recommendations have been prepared. These are useful guides to current national population and development policies and the extent to which the policies reflect ICPD thrusts and concerns. Proposals are under discussion to conduct a similar exercise in Viet Nam in the near future.

### **Assessing "causes" of policy changes**

No single international conference can be held to be solely responsible for major changes in population and development policies within a sub-region. This is true even when one looks at the undoubtedly large impacts of the ICPD. Some of these impacts have origins in the earlier United Nations Conference on Environment and Development held in Rio de Janeiro in 1992. Others reflect the cumulative impact of the succession of UN conferences, including their preparatory activities, held between 1992 and 1997. Yet others can be attributed principally to national responses to nationally perceived problems and issues.

The approach followed in this chapter is to look at the changes in population and development policies since the ICPD in 1994 and assess the extent to which they now reflect ICPD issues and concerns. Questions of where, in each case, governments actually drew their source of inspiration can never be fully resolved. Also, in many respects, it is more important to know what the policy changes are and whether they are in line with ICPD, rather than to be able to pinpoint the source of the change.

This chapter examines the impact of ICPD in respect of changes in the manner in which population growth and distribution issues



are addressed; the degree of shift in focus towards reproductive health and reproductive rights; the growing importance assigned to the social agenda; the extent to which concerns on gender equity and equality are reflected in policies; the acceptance of sustainable development as an objective; and whether civil society and NGOs are increasingly being involved in population and development policies and programmes.

## **Addressing population growth and distribution issues**

### **Demographic goals**

It is now generally accepted that measures to improve reproductive health (RH), including family planning (FP) and sexual health and to make available a wider range of good quality services contribute to long run national demographic goals like the achievement of replacement fertility or population stabilization. However, the short-run impact of the ICPD package of RH/FP and socio-economic measures (including gender equity and equality) on demographic variables remains a source of concern for many policy makers.

The ICPD-POA's emphasis on the rights of individuals and couples resulted in a clear statement (UNFPA 1996) against coercion in family planning programmes: *Demographic goals, while legitimately the subject of government development strategies, should not be imposed on family planning providers in the form of targets or quotas for the recruitment of clients.* [Para 7.12.]

This should be read alongside another statement: *...the objective is to facilitate the demographic transition as soon as possible in countries where there is an imbalance between demographic rates and social, economic and environmental goals, while fully respecting human rights.* [Para 6.3].

The countries of the sub-region may be broadly, but not

exhaustively, placed into three groups, in terms of where they are in respect of fertility levels and commitment to fertility reduction objectives:

1. Countries where time-bound achievement of replacement fertility is not an explicit goal. In this case, the ICPD recommendations may be quite acceptable in principle, provided adoption is phased and takes account of national sensitivities about specific elements, e.g., sexuality education or adolescent RH services. Countries like Cambodia, the Lao PDR, Myanmar, Mongolia and the Philippines fall in this category. In these countries there are influential groups who advocate pronatalist policies including incentives towards high fertility.

2. Countries committed to achieving replacement fertility within a set time frame, but which still have some distance to go. Policy makers and planners in these countries may be concerned that adoption of the ICPD package would require changes in the structure of ongoing programmes and that this may result in predefined goals not being reached in time. Viet Nam is a good example.

3. Countries which have already reached replacement fertility or are approaching that level. The adoption of the ICPD recommendations may be easier to achieve as fears about its short-run impact on demographic performance may be less threatening from the standpoint of policy makers and planners. However, even in such countries there may be fears among some policy makers and planners that any change in the "winning formula" may adversely affect outcomes. Examples may include China, Indonesia and Thailand.

The position of some countries in the sub-region warrants further discussion. In some countries serious thought has not yet been given to population stabilization or, for that matter, achievement of replacement level fertility within a couple of decades. In Mongolia, for example, the Population Policy published in 1996 represents

some shift from strong pronatalism but does not address population stabilization issues. It aims "to create conditions for maintaining the average annual population growth rate at no less than 1.8 percent...". It further states: *Creation of favourable conditions for spacing births in the interest of child and maternal health, shall be viewed as the major factor in ensuring population growth.*

The wording indicates acceptance of the freedom of couples to decide, but still reflects hopes of maintaining the population growth above a predetermined level. No measures to persuade couples to have more children are envisaged; hence it is difficult to understand how the population growth objective can be achieved in the face of the manifest desire of couples to have fewer children, once they have access to the means to do so. In fact the current growth rate (1.4 per cent) is already below the level set in the policy.

Again, in both Myanmar and the Lao PDR, the aim is to keep population growth in line with social, economic and environmental conditions, but population stabilization and/or replacement level fertility are not explicit objectives. In the Lao PDR, the Sixth Congress of the Communist Party in 1996 called for the active implementation of policies to make population growth correspond to the level of economic development. The draft Lao Population and Development Policy seeks to encourage the people to determine family size taking into account their own social and economic conditions, so that they can have a better quality of life and the country's population growth would be compatible with socio-economic development goals.

In both these countries, the focus is on meeting current levels of unmet need for services and enabling couples to effectively determine the number of children they wish to have. Myanmar claims its policy is indeed pronatal, but that it is manifested less by active pronatal measures and more by the absence of antinatalist ones. According to the ESCAP-ACQ, Myanmar was one of the few countries which did not agree that high fertility and population

growth adversely affected development. This may also be seen in the use of the term "birth spacing", rather than family planning in both countries and the avoidance of strong prescriptions regarding the number of children a couple should have. The health rationale for family planning remains strong in both countries. In the Lao PDR the national birth spacing programme was introduced "primarily to improve the health status of mothers and children and to reduce maternal and infant mortality resulting from high risk pregnancies." Myanmar also takes a similar view, that high fertility is detrimental to the health of mothers and children.

In the Philippines, while the consequences of population dynamics and its implications to development are clearly appreciated, population stabilization per se is not part of the goal set out in the Directional Plan of the Philippine Population Management Program (PMP), 1998-2003, prepared by the Population Commission. The goal, in line with ICPD, is improved quality of life defined in terms of a better balance between population, resources and the environment. This may have been found to be a more acceptable formulation given local sensitivities.

In most of the other countries, population stabilization/attainment of replacement level fertility was an explicit aim of population policy. In Viet Nam, for example, the population policy set out in 1993, prior to the ICPD, visualized achievement of replacement level fertility by the year 2015. Based on recent trends, it now expects to achieve this level by the year 2005. At the same time, some effort is being made to shift the programme from quantitative issues to issues of quality, and away from targets to helping to meet needs, improving access and widening choice. In the face of strong unmet need, the programme does not appear to face a problem of reconciling population stabilization objectives with the adoption of the ICPD package in a phased manner.

In China, population stabilization remains a key goal. The government hopes to maintain a total population of 1.3 billion in

2000 and 1.4 billion for the year 2010. This is to be achieved by continuing to encourage couples to have only one child. In the case of minorities and rural couples, the constraints are less stringent.

### **Population distribution**

Population distribution, according to ESCAP-ACQ, ranked fifth out of 15 issues among which countries were asked to indicate relative priorities. The results are provisional and may undergo revision, but they do help to bring out the importance accorded to migration and related issues. Partly, but not solely, in response to declining fertility, issues relating to population redistribution including rapid urban growth are now given much greater importance by policy makers.

Countries vary in respect to the importance placed on population distribution. In Thailand, for instance, recent attention to this issue may be regarded as a correction of a tendency in the past to focus almost exclusively on fertility reduction in the population field and rapid economic growth in the economic field. The Lao PDR, which does not have a problem of overall high population density, nevertheless finds it necessary to consciously plan resettlements of population to reduce slash-and-burn cultivation and improve settlement patterns. In a number of other countries, like Indonesia and Viet Nam, for quite some time population distribution and migration have been conscious concerns of policy makers who planned major movements of population to relatively underpopulated areas. The Philippines has a clear policy objective to "minimize the overwhelming repercussions of migration and rapid urbanization on human settlements".

The construction of major dams and electricity generation projects in several countries has created major resettlement problems for indigenous people and local populations with respect to their traditional land rights and access to traditional livelihoods.

While environmental impact assessments are being increasingly undertaken, often in response to pressures from international and national non-governmental organizations (NGOs), much more needs to be done to accommodate the concerns of indigenous and local people in the process of development.

### **Rapid urban growth**

The ICPD-POA reflects current thinking that "the process of urbanization is an intrinsic dimension of economic and social development" and that for "individuals, migration is often a rational and dynamic effort to seek new opportunities in life." It also stresses the need to respect "the right of individuals to live and work in the community of their choice."

The consequences of the rapid growth of urban settlements and the severe problems of large urban agglomerations or megacities are receiving much more attention today. In most countries in East and South-East Asia, while some ameliorative measures are being adopted, the long-term problems which will be created in terms of environmental factors and quality of life of the people are not being adequately addressed. This reflects the continued emphasis of governments on rapid economic growth as the primary goal. This is evident in the continued belief that economies of agglomeration accruing to entrepreneurs, in terms of infrastructure, market size, and availability of raw materials and factors of production, far outweigh the diseconomies to consumers in terms of environmental pollution and poor quality of life.

Policy makers in the sub-region find it difficult at times to reconcile the needs of individuals with what are seen as the imperatives of state policy. In Viet Nam, for example, policy makers tend to think that migration can be "controlled" or fine-tuned by state policies, even though they are aware that so-called "spontaneous" migration is in several instances at least as important

as "assisted" migration in determining urban growth patterns. Still, in most countries there is a growing realization that migration is part of the growth process and can be influenced to some extent by having consistent social and economic policies.

### **International migration**

The ICPD-POA accorded great importance to international migration as a key population and development issue. It stressed the differences between documented and undocumented migrants in terms of the treatment to be accorded them. The former have several rights acquired under ILO Conventions and other instruments, while the latter have basic human rights. A third category of asylum seekers and displaced persons was added to reflect recent political realities and to advocate their rights in terms of international law.

The policy environment on international migration in the sub-region is generally rather hostile. There has always been considerable mobility across space in East and South-East Asia, due to wars, cultural affinities, the relative recency and porousness of borders and the perception that opportunities are not equally divided. International migration is a sensitive issue and governments are reluctant to accord refugee status to arriving migrants. Better-off countries facing labour shortages regard labour inflows as a short-term necessity. Distinctions between documented and undocumented migrants are often blurred in the minds of policy makers and the idea that both documented and undocumented migrants have rights is viewed with some surprise.

Several countries are both senders and recipients of labour, but they would not like to see inflows of international migrants except on their own terms. The reasons are partly economic: when labour demand is growing, migrants are often welcome, provided they can be made to leave when they are not needed. There are also several

real and imaginary fears about in-migration: it may affect the ethnic composition of the population; it may lead to political demands; and it may lead to the spread of infectious and contagious diseases. In countries like the Lao PDR and Mongolia, which have relatively low population densities, and Cambodia, for historical reasons, there are fears about large streams of migrants arriving from (or not returning to) their more populous neighbours.

The problem of return migrants has been a serious issue in several countries. Until the onset of the financial and economic crisis in 1997, many countries were interested in importing highly skilled professionals and, in some countries, cheap relatively unskilled labour to plug gaps in their domestic labour markets. Following the economic downturn, there has been a concerted effort in many countries to send back migrants as soon as possible. Countries like Indonesia, Thailand, Myanmar and the Lao PDR may now face a serious problem of providing for returning migrants. In Viet Nam and the Philippines policies and programmes already exist to deal with reintegration of migrants. In the context of the economic downturn return migration is likely to become a more serious problem in relation to migration flows within East and South-East Asia.

At the level of policy, enough attention has not been given to international migration taking into account the human rights dimension, and hence the rights of migrants remain somewhat insecure. Countries like Malaysia and possibly Thailand, may need to give more attention to this issue now. In Mongolia, the Population Policy gives some importance to human rights of migrants when it states: *The Government will regulate the issues pertaining to the size and structure of the body of foreign citizens and stateless persons permanently residing in Mongolia, to the import and export of labour, as well as the emigration of Mongolian citizens in keeping with the current needs of national security, population growth and socio-economic development, and in*



*conformity with the principles of respect for human rights and mutual benefit.*

Issues of labour migration are particularly important in countries like the Republic of Korea, where labour force growth deceleration is taking place. Hence the new population policy focuses on labour migration as one of the key issues facing the country. This may, however, be viewed more as a national response to a nationally identified problem, rather than as an effort primarily directed towards implementing the ICPD recommendations.

Movements, often undocumented, of population within the greater Indochina region, including Thailand, frequently relate to international trafficking in women and children and result in violations of basic human rights and in the transmission of HIV/AIDS. The ICPD-POA states that one of its objectives is: "To prevent all international trafficking in migrants, especially for the purposes of prostitution." [Para 10.16 (c)]. Specific measures to deal with this problem are needed and this calls for special efforts by the governments of these countries to work together in developing information sharing arrangements, consistent and mutually reinforcing policies and programmes, and mechanisms for policy and programme coordination.

### **Reflecting reproductive health issues and reproductive rights in population policies**

The present situation in the sub-region regarding the move from family planning to a broader RH/FP approach has been thoroughly discussed in a recent UNFPA/Country Support Team (CST) Occasional Paper by Atiqur Rahman Khan. The main issues relevant to the impact of ICPD in the sphere of policy are discussed briefly below, drawing heavily on this CST Occasional Paper.

### **Freedom of method choice and expanded coverage**

Freedom of choice, on which the ICPD-POA places considerable emphasis, is constrained in the sub-region due to limited contraceptive options being made available. In several countries, including China, Indonesia and Viet Nam, coverage is good but there is a need to broaden contraceptive options. Evidence from these countries suggests that informed choice as an element of quality of care was not given enough attention earlier and some constraints still exist in individual choice of methods.

In countries like Cambodia, the Lao PDR and Myanmar, the more fundamental issue is to expand coverage as large segments of the population do not have access to contraceptive services. At the same time, in these countries, inadequate provider skills may be having an adverse impact on quality of care. The difficulty here is that quality of care concerns are often not appreciated by policy makers who may feel they are irrelevant or meaningless where access to basic services is poor and resources are lacking.

In most of the countries of the sub-region, recent interventions reflect a desire on the part of governments to improve at least some aspects of quality of care. However, other elements in the ICPD package have not yet been readily or widely adopted. For example, the need to address reproductive health needs over the life of the individual has not yet been taken into account in policies and programmes in most countries. This is particularly serious when several countries are having to cope with the problems of population ageing. Again specific policy direction is needed to ensure that RH and FP service delivery are suitably integrated, keeping in mind the country context and the alternative modalities of integration available.

### **Reproductive rights**

Perhaps the most difficult issues relate to acceptance by

governments of the reproductive rights of individuals and couples, and yet this is a cornerstone of the ICPD-POA. It is also linked to the question of the demographic goals of population policies, discussed earlier. A key issue here is the interpretation of the principle laid down at the World Population Conference in Bucharest in 1974, stating that: *All couples and individuals have the right to decide freely and responsibly the number and spacing of their children and to have the information and means to do so.*

Many countries do not provide this right for individuals in their policy statements as they feel this relates to sex outside marriage. In Indonesia, for example, Article 18 of the Population Law of 1992 clearly states: *Every husband and wife couple may make its choice in planning and regulate (sic) the number of children and the spacing of childbirth based on awareness and responsibility to the present generation and to future generations.*

Similarly the draft National Population Development Policy for the Lao PDR seeks to: *Motivate and assist the people to improve their quality of life by making it possible for couples to freely and responsibly decide on the number and spacing of their children, taking into account their social and economic conditions.*

The Chinese policy in relation to family planning recognizes the right of individuals, but draws attention to responsibilities when it clearly states that: *...couples and individuals must take into account their responsibilities and duties to state and community.*

In the China Country Report this is elaborated as follows: *...while couples are encouraged to have one child, those rural couples who want to have the second one will have to do so with proper spacing; the minority nationalities are also to practice family planning, with specific practice subject to the local autonomous government.*

In Viet Nam the official position, embodied in the resolution of the fourth meeting of the Party Central Committee in June 1993, makes no reference to rights. It sets out the objective of: *implementing a family with few and healthy children to facilitate a*

*prosperous and happy family*. The target was one or two children per family. While newer approaches to reproductive health, including meeting the needs of adolescents, are being promoted, the situation cannot be described as one where there is free choice, as several incentive/disincentive mechanisms appear to remain in force.

The Population Policy of Mongolia is somewhat silent on the issue of reproductive rights and has no reference to the right to choose "freely and responsibly". In Myanmar, the Draft National Population Policy, prepared in 1992, refers only citizens' responsibility in respect of reproductive behaviour. However, the Draft Report of the Myanmar National Plan of Action, produced in 1998, states that it is intended to incorporate the following into the National Plan of Action: *assisting couples to meet their reproductive goals in a framework that promotes optimum health, responsibility and family well-being and respects the dignity of all persons and their right to choose the number, spacing and timing of the birth of their children; providing safe, effective, affordable and acceptable reproductive and family planning services to all eligible couples; promoting reproductive health over the life cycle; tackling the reproductive and sexual health problems of adolescents*. If indeed this is incorporated in the final document, it would represent a significant advance over the 1992 draft population policy.

At the other end of the spectrum are the Philippines and Malaysia. The Philippine PMP has an objective to assist *couples and individuals in meeting their reproductive health goals*. In Malaysia, according to the Country Report: *there is no coercion or discrimination and individuals are free to choose the contraceptive method of their choice and the timing, spacing and numbers of their children*.

A related issue in respect of reproductive rights and method choice is the progressive elimination of targets, quotas and incentive systems. These exist in one form or another in several

countries and, as discussed earlier, reflect governmental concern that population growth or fertility reduction targets at the aggregate level cannot be achieved without corresponding targeting at the service provision level. As the CST paper argues, the intended goal of fertility reduction in such countries as China and Viet Nam does not necessarily require setting targets for individual service providers; these results could be achieved by providing broader contraceptive options and promoting free choice, and by improving the skills, including interpersonal communication skills, of service providers.

### **Focusing on the social agenda**

As a result of the recent round of UN conferences, especially the World Summit for Social Development in Copenhagen in 1995, the social agenda has come to the forefront of discussion among policy makers in the sub-region. This has included efforts to raise public spending on the social sector to at least 20 percent of the budget in countries where current levels are relatively low. The evidence to assess the extent to which governments have succeeded in achieving, or in some countries exceeding, this target is not yet fully available.

There is a feeling in many countries that economic growth has been given pride of place for too long and that social problems, which were neglected or exacerbated by rapid economic growth, are urgently in need of attention. One of the clearest examples of this shift in emphasis is Malaysia.

Since October 1996 a high level Cabinet Committee chaired by the Deputy Prime Minister has met regularly to address issues of social concern and problems affecting communities, families, youth and adolescents, and to suggest appropriate approaches for intervention and prevention. Issues that have been addressed by this Committee include reproductive health and sexuality of youth and

adolescents in such areas as: unwanted pregnancies and abandoned babies; drug use; HIV/AIDS; moral decadence; and the weakening of the family institution and parental responsibilities.

In Thailand the Eighth National Economic and Social Development Plan, 1997-2001, recognizes the limitation of past efforts when it states its overall objectives as aiming: *to deal effectively with the challenges of social change, as well as the present unbalanced pattern of development - characterized by economic success combined with social problems and threats to sustainable growth.*

In Mongolia, policies related to the family and social groups are assigned importance in the Population Policy. They cover development of the family, protection and development of the child, youth, women, elderly persons and persons with disabilities. Similarly, the Indonesian Population Law No. 10 of 1992, predating ICPD, stresses the goal of happy and prosperous families, which relates to the social agenda and is not narrowly focused on either economic growth or family planning.

As a result of the recent economic crisis, the social agenda is likely to become even more important and some countries may need to consider packages of measures to deal with large scale unemployment and accompanying social distress. At the same time there are likely to be pressures to give primacy to economic growth once again at the cost of social development. There is a real danger that the healthy trend to focus more on social issues may get reversed or set back by structural adjustment policies which focus on remedying the economic situation, without due consideration of the social implications.

### **Poverty eradication**

The ICPD-POA drew pointed attention to the problem of poverty as a population and development issue. While many countries have

special programmes to eradicate poverty, the links between poverty and demographic factors continue to be relatively neglected in the design and implementation of social sector programmes. Also care has to be taken to ensure that no element of coercion creeps in when family planning is linked to poverty eradication.

It is significant that socio-economic disparity is seen as a key issue in several Asia-Pacific countries. According to ESCAP-ACQ, after high infant/child mortality and adolescent issues, socio-economic disparity was the third most important issue in the concerns of governments. In some countries, e.g., Indonesia, poverty eradication programmes are being carried out by the agency responsible for both family planning and family development. The policy in China is "to adopt a holistic approach in addressing population and development in poor areas, including the integration of poverty alleviation with family planning". The PMP in the Philippines acknowledges that "slowing down population growth will not solve the poverty situation, but can contribute significantly to alleviation of the problem".

The gender aspects of poverty do not appear to be adequately reflected in the population policies of the countries of the sub-region. This is certainly an important area for development. The ICPD-POA emphasized the gender dimension of poverty and argued that: *As women are generally the poorest of the poor, and at the same key actors in the development process, eliminating social, cultural, political and economic discrimination against women is a prerequisite of eradicating poverty.* [Para 3.16.]

Many issues highlighted in the ICPD package like reducing fertility and mortality, providing education, improving reproductive health and reproductive rights, dealing with internal and international migration, and promoting sustainable development cannot be addressed adequately without introducing both gender and poverty dimensions. The recent economic downturn in several countries and the policies to deal with it are likely to create or

intensify poverty and deprivation among several different groups and this process is not going to be gender-neutral in its impact.

### **Special problems of adolescence and youth**

As a result of population growth, in many parts of the world the number of young persons and their proportion in the population is rapidly rising. In the sub-region, policy makers are being forced to realize that adolescents and youth form a distinct and growing group whose social and economic needs are being inadequately met. This may also be seen in the priority accorded to adolescent issues by the governments of the Asia Pacific region. Responses to the recent ESCAP Questionnaire indicate that adolescent issues were regarded as the second most important set of issues to which governments had to devote attention.

A critical issue is the provision of RH/FP services to this group, as many of its members are or may soon be sexually active. Governments have been slow in responding due to real or imagined sensitivities on the part of their constituents. At times they have even been reluctant or unwilling to make required policy changes that would provide a conducive environment for NGOs to step in. In the social and economic sphere governments are beginning to see that adolescents and youth are numerically significant and politically important, and the recent emphasis on policies for education and training and for job creation in the formal and informal sectors reflect this concern. However, the idea of adolescents and youth being full participants in the process of designing policies and programmes is still a novel one which has not gained much ground.

According to ESCAP-ACQ, most countries have some policies regarding adolescent reproductive health. These are to be found in national population policy or health policy documents. There seems to be a general lack of information on adolescent needs and



sexuality and this is partly responsible for the limited channels of provision of services to this group. In several countries, governments find it politically difficult to provide services to unmarried adolescents and hence may not wish to include a recommendation on this in policy documents. They may prefer other agencies, particularly NGOs to take on this task. At the same time, they may be reluctant to provide them with an explicit mandate to do so.

A recent study by Suman Mehta et al., based on documentation available to the UNFPA/CST in Bangkok, found that the majority of countries within the East and South-East Asia sub-region do not have explicit policies on adolescent reproductive health (ARH). These include Cambodia, China, the Democratic People's Republic of Korea, the Lao PDR, Malaysia, Myanmar, the Philippines and Viet Nam. By contrast, the Republic of Korea has policies under the Ministries of Health and Welfare and Education; Indonesia has policies in the Ministry of Health and in the Office of the State Minister of Population/BKKBN; and Mongolia claims to have policies but details are not provided.

The situation may not be as bad as appears from the above account. While the governments of the Philippines and Mongolia accord importance to the needs of adolescents and youth, RH/FP issues are not highlighted. One of the five major objectives of the Philippine PMP is to "address adolescent health and development issues and prepare them for responsible adulthood." The Population Policy of Mongolia devotes a fair amount of space to problems of children and youth, but again has little to say specifically on RH/FP.

A somewhat ambivalent situation at the RH/FP policy level appears to exist in China. In its Country Report to the High Level Meeting in Bangkok in March 1998, the Chinese government is quite frank in stating that there is "intolerance of the mainstream culture with premarital sex" and fears that counselling and services "might encourage more adolescents to have sex."

In Malaysia, the situation appears to be much better and the policy situation may improve greatly in the near future. The findings of a National Study on Reproductive Health and Sexuality of Adolescents has led to a Cabinet decision to formulate a Reproductive Health Service Package for Adolescents and Youth.

Meeting the RH/FP needs of adolescents and youth (irrespective of marital status) in terms of information and services should be a high priority among all countries of the sub-region. It should be reflected at the policy level at least in terms of the creation of an enabling environment where NGOs can handle the problem. There is however a danger that the root causes of adolescent and youth RH problems, which often lie in the social and economic sphere, may not get adequate attention. Social and economic policies relating to adolescents and youth, who are a burgeoning segment of the population in several countries, are badly needed and these should take into account such cultural factors as changing roles of the family and the growing influence of the media.

### **Special problems of the elderly**

The growth of the elderly population worldwide is reflected in the importance accorded by the ICPD-POA to addressing their needs. Few countries in the region have national policies for the elderly, or have elderly issues properly reflected in population and development policy documents. In China, the Republic of Korea, Japan and Thailand the problem has engaged the attention of policy makers and planners.

In terms of policy focus, it is interesting that a country like Mongolia, which does not have an ageing problem, still attaches importance to addressing the needs of the elderly. Its Population Policy not only seeks to provide them welfare benefits, but also wants to strengthen bonds and the sharing of knowledge between different generations. Indonesia is another country where there is an

early recognition of the importance of the problem, and policies for the elderly will be developed in the near future. In Viet Nam, mechanisms are proposed to increase the self-reliance of the elderly, their health care and social security, and to encourage older people to contribute to society. A refreshing feature is a reference to "older women's needs", which reflects gender aspects of ageing which are often ignored by policy makers.

China is a good example of a country where the government sees population ageing as a key issue for the first half of the twenty-first century. According to the Country Report: *To address this issue, a social security system for the aged will gradually be established with the involvement of state, society, family and the individual.* However, in China, Korea and Japan, the challenge of providing adequate social security on a sustainable basis to growing numbers of the elderly has been an issue for quite some time. It has not yet been fully resolved and it is not clear how vitally needed levels of family support for the elderly can be maintained in the face of social and economic change.

### **Stressing gender equity and equality issues**

Given the centrality of the goal of gender equity and equality in the ICPD-POA, and the fact that the Programme of Action of the Beijing Conference reiterated and elaborated several of the issues, governments of the region have responded in some measure and attempted to address gender issues within national policies and programmes.

A good example is Malaysia where in the current, Seventh Malaysia Plan, 1996-2000, the government explicitly commits itself to *implement, where relevant, programmes under the Programme for Action for the Advancement of Women to the year 2000 as agreed at the Fourth World Conference on Women held in Beijing in 1995.* This is reflected in specific plans to go beyond eradication of

poverty, illiteracy and inequality in education, training and employment, to focusing more on relatively newer areas of concern like *increasing access to comprehensive and affordable health care, eradication of all forms of violence against women, and creation of more flexible and convenient work environments.*

In Viet Nam, the new emphases placed on improving women's status, the welfare of the girl child, and on male responsibility in the recent review and assessment exercise on population policies, may be seen as an ICPD impact. The Population Policy of Mongolia enacted in 1996 has a whole section on women, though it has nothing specific on male participation. The draft Population and Development Policy for the Lao PDR has several strategies outlined for raising the status of women. These include promotion of "equality in roles between men and women in decision making concerning the family and development of society."

The Philippine PMP has, as one of its five objectives, to "improve the overall status of women and enable women to gain equal rights and access to opportunities with men". The need to empower women and to obtain the support of men is clearly identified in this document. In China, in the wake of ICPD and additional to the existing laws and policies to protect women's rights, the government has formulated the Maternal and Child Health Care Law and Program for Women's Development and is making efforts to ensure greater male participation in reproductive health and contraception.

### **Promoting sustainable development**

The concept of sustainable development, which came into common parlance following the Rio Conference, was endorsed in Bali and was strongly reflected in the ICPD-POA. Most countries today set sustainable development as a goal and consciously seek to achieve a better balance between population and natural resources.

In many countries of the sub-region, this goal is strongly evident in the policy area.

The Indonesian Law of 1992 concerning population development and the development of happy and prosperous families, places emphasis on policies *based on harmony, proportion and balance between the total number of persons with what the environment can support and accommodate*. It also envisages *guidance for population mobility in harmony with what the environment can support and accommodate*.

The ICPD National Plans of Action in Myanmar and Malaysia clearly place strong emphasis on environment-related issues. In the Philippines, environment issues and concerns have been seen as intimately related to population growth and distribution, and the objective is promoting a better balance between population and sustainable development. The Philippine PMP assigns central importance to achieving a better balance between population, resources and the environment.

In China, the current strategy seeks "to achieve a coordinated development between population growth on the one hand and the productivity, resources and environment on the other". The concern of the Chinese government for population and environmental issues has recently been described as "consistent, unambiguous and energetic". In the Republic of Korea, population issues are no longer regarded as purely demographic; their relation to sustainability of economic growth and ecological balance for environmental protection is given greater emphasis.

### **Involving civil society and NGOs**

The idea that population and development policies and programmes occur in a context where there are several key players outside of the government has been strongly propagated in the ICPD-POA. This is not a new idea. For example, part of the

responsibility for programmes that led to fertility decline in the Republic of Korea and Thailand lies with non-governmental organizations, which worked in close concert with the government.

In countries like the Lao PDR and Myanmar, where family planning/birth spacing programmes are of recent origin, organizations outside the formal government sector have been given important roles. This has been the case in Viet Nam too for some time. Many of these organizations involved in programme activities, especially in the Lao PDR and Viet Nam, are mass organizations which have a semi-government character.

In Indonesia, several NGOs are now involved in the population programme, including professional bodies as well as religious organizations. In Cambodia, Malaysia and the Philippines, NGOs are actively involved in population and development programmes and work in concert with the government. In China too, several NGOs are reported to be working in the population and development field.

The strength and role of civil society institutions in moulding policies and programmes cannot be judged merely by their number. The experience in the sub-region is that in many countries NGOs still lack the capacity to be effective and independent advocates of population and gender concerns at the stage of national policy making, and many are not in a position to undertake programmes on a countrywide basis. Several measures are needed to strengthen the independence and technical capacity of civil society institutions, to give them an effective say in the policy field and in the implementation of programmes.

## **Conclusions**

From this brief survey it should be clear that the ideas embodied in the ICPD-POA did have a significant impact on population and development policies in the sub-region. While these are presented

in some detail in preceding sections, major impacts may be identified as follows.

### **Adopting the language of the ICPD**

It is easy to dismiss this development as unimportant. It is nevertheless true that as governments increasingly engage in dialogue within themselves, with civil society and with other governments and international agencies, they tend to adopt the language of the ICPD. With the passage of time, this results in increased acceptance of the ideas behind much of the ICPD-POA.

### **From “population” to “population and development”**

With the ICPD-POA, there has been a further impetus to the process of placing population issues and concerns on the development agenda. This is reflected, at the verbal level, in the frequent references to population and development policies and, at the substantive level, in the increased acceptance of poverty, environment, education and employment as population-related issues.

### **Acceptance of population growth as a factor in determining sustainability of development**

As a result of the Rio Conference and its echoes in subsequent conferences, countries now set their overall goal as sustainable development. This has the immediate consequence of encouraging assessment of development trends in terms of the balance between population and natural resources.

**Linking health with family planning concerns through the concept of reproductive health**

As a result of the ICPD, the focus on health (especially primary health care) as a development issue has been strengthened. Many governments are beginning to realize that fertility reduction goals are not ends in themselves but the means for achieving good reproductive and general health as well as social and economic well being. The introduction of reproductive health issues in the discussion has not only helped to convey to governments the importance of RH, but has also enabled them to recognise that it is both a part of basic health provision and a bridge between health and family planning.

**Bringing the gender dimension into policies**

Some progress has been made at least in terms of wording. Documents increasingly reflect the differential impact of problems and solutions by gender, and the problem of the girl child has received mounting recognition. It is not yet true, however, that gender concerns are being systematically taken into account in all major policy areas or that policies reflect fully the needs of both men and women at different points in the life cycle or in different social and economic situations.

**Understanding and appreciating human rights issues**

This is necessarily a slow process, especially when pressures are placed on governments to change policies that are not in line with the human rights perspective. There continue to be political and cultural obstacles to the acceptance of certain rights and a tendency to focus on duties and responsibilities, rather than rights. Also, in certain cases, governments view arguments about human rights as violations of their sovereign right to govern their country.



### **Tackling the problems of young people**

Reflecting changing age structures and the process of development, most governments find that they have to address the problems of adolescents and youth in different spheres of their economic and social participation. In terms of meeting their RH/FP needs the responses have been somewhat varied, reflecting the sensitivities involved.

### **Accepting that several actors are involved in policy making**

This has not been easy, as policy making has traditionally been the preserve of governments. However, there is now an increasing willingness at least to consult, if not to involve different parties when making policy decisions on major issues.

## References

- ESCAP-UNFPA Country Reports on Implementation of ICPD-POA. 1998. *Cambodia, China, Indonesia, Lao PDR, Korea, Malaysia, Myanmar, Philippines, and Viet Nam*. Reports presented by the respective governments at the ESCAP-UNFPA High Level Meeting to Review Implementation of the Programme of Action of the International Conference on Population and Development and the Bali Declaration on Population and Sustainable Development and to Make Recommendations for Further Action. Bangkok.
- ESCAP and UNFPA. 1998. Implementation of the Programme of Action of the International Conference on Population and Development and the Bali Declaration: Constraints and Challenges - Analysis of Country Questionnaires. Bangkok (mimeo).
- Government of China. 1995. *Family Planning in China*. Beijing.
- Government of Indonesia. 1993. *Law of the Republic of Indonesia: No. 10 of 1992 Concerning Population Development and the Development of Happy and Prosperous Families, State Ministry for Population/National Family Planning Coordination Board*. Jakarta.
- Government of Lao PDR. 1997. *National Population and Development Policy of the Lao PDR*. Vientiane (draft, mimeo).
- Government of Malaysia. 1996. *Seventh Malaysia Plan (1996-2000)*. Kuala Lumpur.
- Government of Mongolia. 1996. *Population Policy of Mongolia*. Ulaanbaatar.
- Government of Philippines. 1997. *The Directional Plan of the Philippine Population Management Program, 1998-2003*. Commission on Population. Manila.
- Government of Thailand. 1997. *The Eighth National Economic and Social Development Plan (1997-2001)*. Bangkok.
- Government of Viet Nam. 1996. *Report on the Review and Assessment of Population Policies in Viet Nam*. Hanoi: National Committee for Population and Family Planning.
- Khan, Atiqur Rahman. 1998. *Reorientation of National Family Planning Programmes Towards a Broader Reproductive Health, including*

*Family Planning and Sexual Health, Approach in East and South-East Asia*. Occasional Paper No.5, UNFPA/CST. Bangkok.

Mehta, Suman, Riet Groenen, and Francisco Roque. 1998. *Adolescent Reproductive Health: Adolescents in Changing Times --Issues and Perspectives for Adolescent Reproductive Health in the ESCAP Region*. Paper presented at the ESCAP-UNFPA High Level Meeting to Review Implementation of the Programme of Action of the International Conference on Population and Development and the Bali Declaration on Population and Sustainable Development and to Make Recommendations for Further Action. Bangkok.

United Nations. 1997. *Government Views on the Relationships between Population and the Environment*. New York: Department of Economic and Social Affairs, Population Division.

\_\_\_\_\_. 1995. *Results of the Seventh United Nations Population Inquiry Among Governments*. New York: Department of Economic and Social Information and Policy Analysis, Population Division.

\_\_\_\_\_. 1974. *The World Population Plan of Action*. Bucharest.

UNFPA. 1996. *Programme of Action Adopted at the International Conference on Population and Development*. Cairo, 5-13 September 1994. New York: UNFPA.

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## 2. Low Fertility and Population Policy in Europe

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### **Introduction: adjustment or intervention?**

Any foreseen event or trend, such as the significant ageing of many national populations, can trigger two different kinds of policy responses. Policies can either try to influence the trend itself, i.e., the course of population ageing, or they can try to focus on the possible impacts of this trend, i.e., develop strategies to cope with a given ageing path of the population.

In practice, many policies include both aspects, but it is important to distinguish between them because the political instruments to achieve these two distinct goals may be very different. Think of climate change, another hotly-debated international long-term policy issue. To change the trend itself requires significant diminution of CO<sub>2</sub> emissions by cutting back on energy consumption; some people even suggest by slowing economic growth. Others, who think that this trend can no longer be changed by human action (or who consider the scientific uncertainty as still too great) consider it best to prepare the population to be able to cope with changing climate conditions by building dams, developing the infrastructure and similar measures. To this end economic development (heavily dependent as it is on the burning of fossil fuel) can never be rapid enough. One policy solution in this complex situation, which is aggravated by scientific uncertainty about the real trends, is to aim at so-called “no-regrets” strategies, measures that diminish emissions while not negatively impacting on economic growth. Although climate change is not involved in this instance, the “no-regrets” concept (or the more positively-labelled “win-win strategy”) is relevant in the context of the social

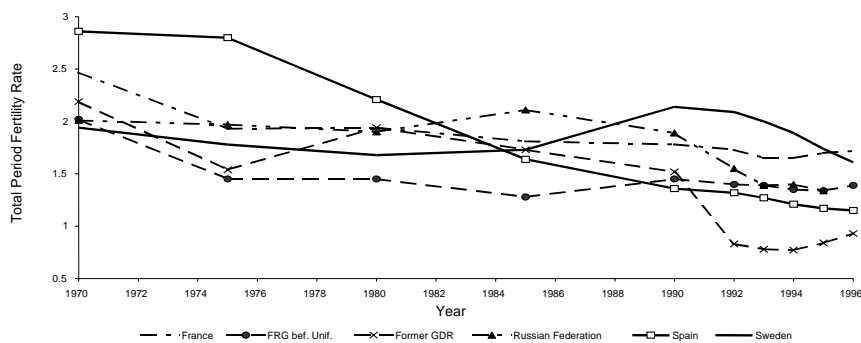
and population issues that arise in a discussion of low fertility and population policy.

It should also be clear from the beginning that this introductory survey chapter deals only with the ageing trend itself, its determinants and possible ways to influence the trend. It does not discuss the various ways that societies can adjust to a given ageing trend which are discussed elsewhere in this volume.

### Long-term subreplacement fertility

At least among European demographers there is little doubt that subreplacement fertility is a significant and lasting phenomenon which is unlikely to disappear soon. This view has replaced earlier assumptions that subreplacement fertility would be a short-term anomaly and that fertility trends would soon converge toward replacement level. The “magic hand” to pull fertility back up has not come to Europe. On the contrary, the phenomenon is spreading and currently more than one-third of the world population has period fertility rates below replacement level, and there are many indications that cohort fertility will follow the same trend.

**Figure 2.1 Trends in period total fertility rates for selected European countries**



Source : Council of Europe 1997.

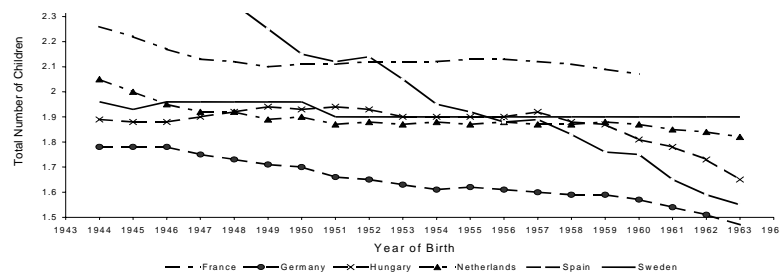
In this chapter the empirical evidence of past decades is examined briefly before making assumptions about the future. The focus is largely on Europe because, except for Japan, this continent tends to have the longest low-fertility records.

All of the 35 current member states of the Council of Europe that have complete fertility time series available for the period 1970 to 1996 show clear declines in the total fertility rate (TFR; Figure 2.1 shows these trends for a selected number of countries). In 1970, 25 of the 35 countries still had fertility above replacement. At that time period TFR was lowest in Finland (1.83) and Croatia (1.80). But within five years, by 1975, the number of countries still above replacement had declined to 15. In 1996, only three of these 35 countries were still above replacement, namely Cyprus (2.08), Iceland (2.12) and Turkey (2.55). In 1996 the lowest fertility rates were observed in Spain (1.15), Latvia (1.16), the Czech Republic (1.18), Italy (1.22 in 1994), Bulgaria (1.24), Slovenia (1.28), Germany (1.29), Romania (1.30), Estonia (1.30), Greece (1.31) and the Russian Federation (1.34 in 1995). It is remarkable that the lowest fertility can presently be found in Southern and Eastern Europe, regions that 15 years ago were not in such vanguard positions. This raises the question as to whether part of this rapid decline may be explained by changes in the timing of births, rather than by completed cohort fertility.

Since completed cohort fertility can be measured only after women have fully passed through their reproductive phase 15-20 years after their prime fertility ages, such information does not reflect the most recent fertility trends. Therefore, the recent strong fertility declines in Southern and Eastern Europe cannot yet be expected to fully show up in completed cohort fertility (Figure 2.2 plots these trends for a selected number of European countries). But despite this fact the data show that the female birth cohort of 1951 (which was 45 years of age in 1996) had fertility below replacement level in 20 out of the 28 Council of Europe member countries for

which data are given. In a large number of European countries cohort fertility has been consistently below replacement level even for the female cohort born before the Second World War. New data from the Russian micro-census (Scherbov 1998) indicate that even in this large country, cohort fertility has been below replacement at least since the completed reproductive period of the female cohorts born in 1930.

**Figure 2.2 Trends in completed cohort fertility for selected European countries**



Source : Council of Europe 1997.

Another way to determine whether the recent strong declines in period fertility are likely to reflect short-term changes in the timing of births, is to look at the trend in mean ages at childbearing. Here, the European time series do not exhibit a uniform pattern. Generally, the mean ages of women at childbirth have increased somewhat since the early 1980s, but typically not more than 1.0 to 1.5 years over the whole period. In some countries, such as Portugal, the mean age has even decreased from 28.7 years in 1970 to 28.0 in 1996, while simultaneously period fertility declined from 2.76 to 1.44. In Italy, fertility declined from 2.43 (in 1970) to 1.45 (in 1985) with the mean age also declining somewhat. In several other

countries fertility declined strongly with virtually constant mean ages. In sum, there are no indications that these recent fertility declines to well below replacement level are predominantly a timing phenomenon.

On this basis, subreplacement fertility is clearly not a temporary short-term phenomenon. Rather it appears to be a long-term or even semi-permanent feature of the reproductive pattern of an increasing group of industrialized countries.

### **Projections**

By definition, policies are never concerned with the past but only with the future. The past has already happened and no policy can influence it (although it may influence the way we think about the past in the future). Any change a policy is intended to bring about can only happen in the future. In order to determine today the possible impact of a policy to be implemented tomorrow on the situation the day after tomorrow, it is necessary to have projections that describe what would happen without that policy, so that the impact of that policy can be assessed. In this sense, *no policy is meaningful without a projection*, but few policies make this explicit. Typically the assumption is made that without any change in policy the future is going to be the same as the present. For many policies this naive assumption may suffice. For the study of long-term changes, however, especially when changes in conditions are inevitable, such an assumption may be very misleading.

In the case of population trends significant age-distributional changes are certain. Almost independent of future fertility, mortality and migration trends (within a plausible range) the age structure of many low-fertility countries will become older because much of the future change is already pre-programmed in the current age structure of the population. For this reason, no population policy can be meaningfully discussed and its possible impact



evaluated without population projections. In the past, population projections have been used for policy formulation in many countries, but generally they do not play a very important role. The population policy community and the demographic community at large need to give much more attention to population projections.

While it is true that an analysis of the past is needed in order to project the future, most demographers stop short of developing projections and assessing their impact – an important additional step which the public and the policy community can reasonably expect.

In addition to the present population structure there are only three factors that determine future population dynamics: fertility, mortality and migration. Any population projection must make explicit assumptions on these three factors, and any set of projections that attempts to go beyond one “most likely path” and provide a *range* of uncertainty must consider alternative assumptions for *each* of these three factors. Unfortunately, the official United Nations population projections give alternative assumptions only for fertility. For mortality and migration they assume identical paths in all variants. For this reason, and because alternative mortality and migration paths do have a major impact especially in the context of ageing, the short analysis which follows refers to the International Institute for Applied Systems Analysis (IIASA) projections (Lutz 1996), which provide the user with uncertainty variants for all three components of population change.

For reasons of utility the study focuses on the region of Western Europe. The scenario results are based on the following alternative assumptions which were defined by a group of experts and are extensively discussed in a substantial volume on the subject (Lutz, 1996). For fertility, a TFR of 1.3 (low), 1.7 (central) and 2.1 (high) is reached by 2030-35. For mortality, life expectancy increases by 1 (low), 2 (central) and 3 (high) years per decade. For migration, a

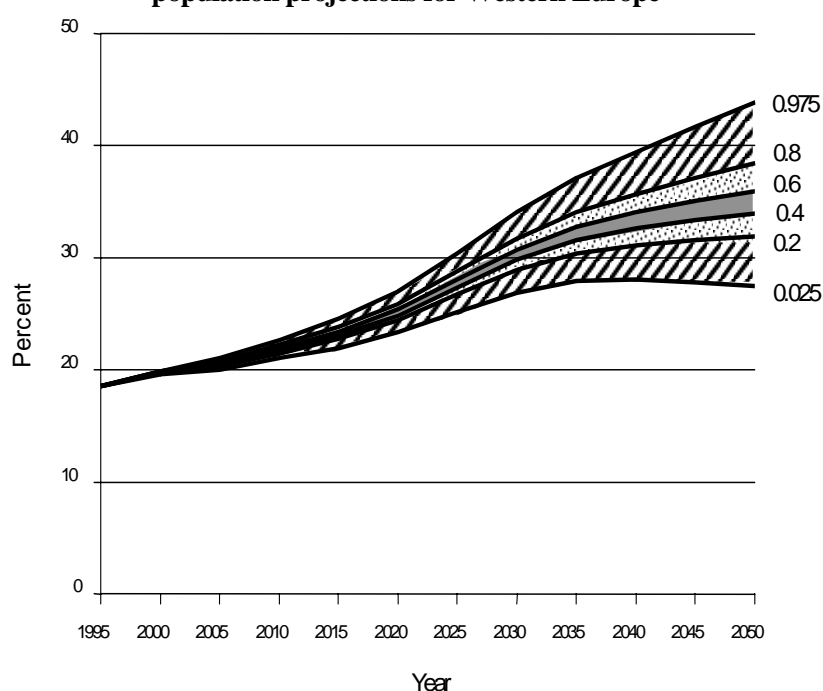
constant annual net migration gain of zero (low), 500,000 (central) and 1,000,000 (high) was assumed for Western Europe.

Since combining three values for three variables results in a confusingly large set of 27 different scenarios, this study focuses on probabilistic projections which adopt the assumption made by the group of experts that the intervals between the low and high values cover approximately 90 percent of all likely future paths of fertility, mortality and migration. The method, described extensively elsewhere (Lutz 1996; Lutz et al. 1997; Lutz et al. forthcoming) is not discussed here. Suffice to note that extensive sensitivity analyses showed that this additional assumption of 90 percent may be taken as a rather fuzzy range (e.g., 85-95 percent) and indicates that only a small number of rather unlikely extreme events do not lie inside the given range. The method then performs one thousand simulations by randomly choosing different fertility, mortality and migration scenarios from the given distributions and combining them in a thousand independent cohort component projections. This method requires rather intensive number crunching, but can be managed reasonably well due to the rapidly increasing speed of computers.

The results of such probabilistic projections for Western Europe are depicted in Figure 2.3. To the users of projections they give a lot more relevant information than the traditional variants. Those variants can only give the policy maker non-committal if-then statements. They do not tell whether, for example, the result of a given low variant resulting in a high old-age dependency is something the policy makers should worry about because it is rather likely, or if it can be ignored because it has a probability of less than five percent. These probabilistic projections for Western Europe can tell the politicians that with an 80 percent chance the proportion aged 60 and over will reach the 35 percent mark before 2040. The projections also demonstrate convincingly that significant population ageing is virtually certain. In 95 percent of all

cases the proportion of the population in Europe over age 60 will increase from 18 percent to 28 percent over the next four decades.

**Figure 2.3** Uncertainty intervals for the future proportion of population aged 60 and over derived from probabilistic population projections for Western Europe



Source: Lutz 1996.

Probabilistic population projections provide policy makers with essential information about likely future trends on which to base their policies. In the case of policies that aim primarily at adjustment this information is also sufficient. If the probabilistic information on trends is combined with a cost function (e.g., how much a one percent increase in the old-age dependency ratio costs the social security system) this can be a basis for cost-benefit analysis on social security reforms and many other important policy issues.

If politicians, however, aim at influencing the trends themselves, they need additional information about the relative impacts of certain shifts in each of the three determinants of population change on the relevant output parameter, which in this case (in addition to total population size) is assumed to be the proportion aged 60 and over. To do this it is necessary to perform alternative scenario calculations which single out the effects of changes in one parameter while the others remain unaffected.

Scenarios were calculated according to the high, central and low assumptions defined above for Western Europe. Table 2.1 presents the results of combinations of the three high and low values to 2050, which can of course result in rather extreme and unlikely outcomes.

**Table 2.1 Effects of alternate fertility, mortality and migration scenarios on total population size and population aged 60 and over in 2050**

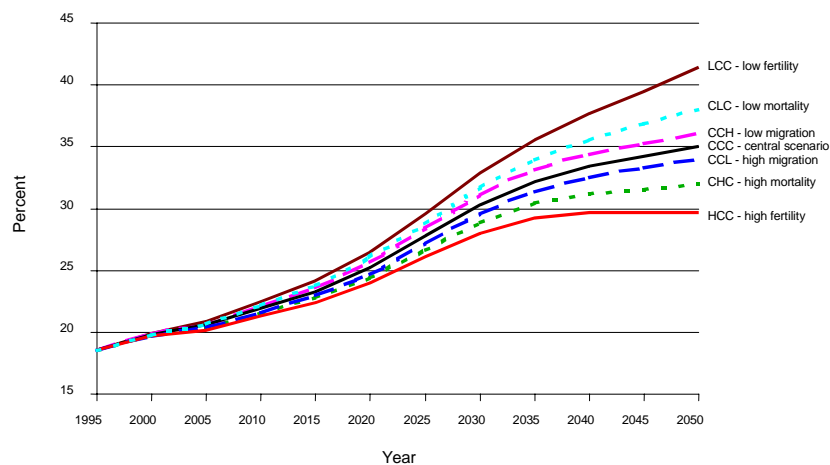
<b>Fertility</b>	<b>Mortality</b>	<b>Migration</b>	<b>Population size in millions</b>	<b>Percentage aged 60 and over</b>
Central	Central	central	469	35.0
Low	Low	low	391	46.3
Low	Low	high	457	43.2
Low	High	low	340	39.7
Low	High	high	402	36.8
High	Low	low	541	33.4
High	Low	high	622	31.7
High	High	low	487	27.7
High	High	high	564	26.3
1995 value for comparison			447	18.3

Source: Lutz, 1996.

While the combination of central assumptions yields a moderate increase in the total population to around 470 million, a combination of high fertility with low mortality and high migration gains results in 622 million, which is higher by about one-third and

even falls well outside the 95 percent uncertainty interval given by the probabilistic projections. At the low end a combination of low fertility, high mortality and low migration results in a total of only 340 million which is also outside the 95 percent uncertainty interval. As to the percentage aged 60 and over, the highest value of 46.3 percent in 2050 is reached through the combination of low fertility, low mortality and low migration assumptions. Not surprisingly, the lowest value of 26.3 percent (which is still a significant increase from the present 18.3 percent) is reached by a combination of high assumptions for all three factors. Again, both extremes fall outside the 95 percent uncertainty interval.

**Figure 2.4 Independent effects of alternative paths of fertility, mortality and migration on the proportion of the population aged 60 and over in Western Europe, 1995-2050**

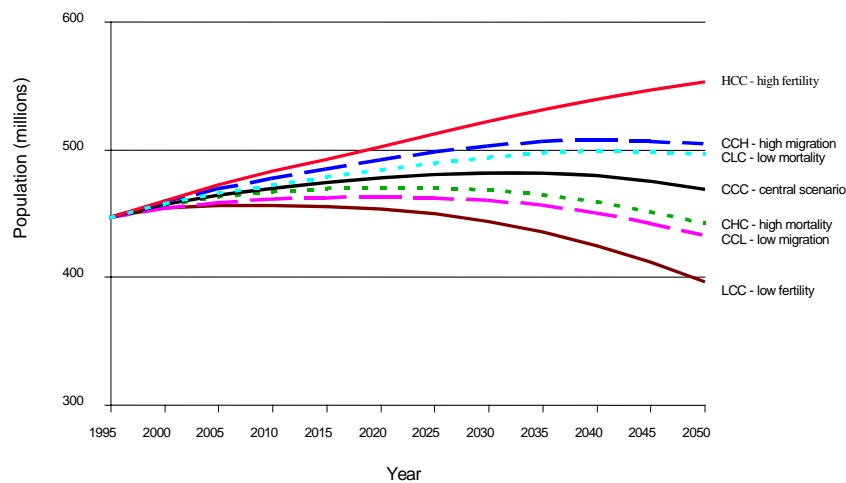


Source: Lutz 1996.

Figures 2.4 and 2.5 demonstrate the independent effects of alternative assumptions in fertility, mortality and migration on

population size and structure. They show that all three factors have significant independent effects. While fertility is most important for population size and ageing, migration is more important than mortality for size but not for ageing.

**Figure 2.5 Independent effects of alternative paths of fertility, mortality and migration on total population size in Western Europe, 1995-2050**



Source: Lutz 1996.

More specifically, this analysis indicates that with respect to the proportion of the population aged 60 and over, of the assumed alternative ranges (of approximately equal probability) migration has the lowest impact (a change by two percentage points in 2050) followed by mortality (six percentage points) and fertility (almost 12 percentage points). This has important implications for possible policies aiming at slowing the growth in the proportion of elderly.

Migration is an unlikely candidate to remedy the presumed ageing problem for several reasons, including aspects of cultural

homogeneity. Also, it has been demonstrated that quantitatively massive immigration does not make much difference in terms of long-term population ageing if it is assumed that migrants immediately adopt European fertility levels. For example, an annual migration gain of one million would increase the total population of Western Europe in 2050 by 13 percent (to 505 million) as opposed to a three percent decline (to 433 million) in the case of no migration. But it would only reduce the increase in the proportion aged 60 and over from 17.8 percentage points to 15.7 percentage points. The main reason for this weak effect is that, unless they return to their country of origin, migrants also get older and eventually comprise part of the population aged 60 and over.

Slower improvements in mortality conditions and especially in life expectancy at old age would have a three times stronger effect on the proportion aged 60 and over than massive immigration. Yet it is a very unlikely candidate for intentional government policies. In fact, political changes, such as the recent changes in Eastern Europe, actually retarded mortality improvements, but this was clearly the undesired side effect of other measures. Although “mortality policy” is a difficult topic for public consideration, the question of the speed of future mortality declines at old age cannot be entirely off limits if significant public expenditures are involved. It should be possible at least to discuss the question of whether the money used to artificially extend the life of a severely sick, very old person in Europe should not rather be spent on saving a large number of young lives in some poorer countries. But “mortality policy” is not an issue for discussion in this chapter.

This leaves fertility as the only serious candidate on which government policies may significantly impact to affect the demographic ageing trend. But before assessing the possible impact of direct or indirect government policies on fertility it is necessary to have a more comprehensive picture of the overall determinants of future fertility trends in low-fertility countries.

## **What determines future fertility levels?**

An account of the forces that drive future fertility levels in countries that already have below replacement fertility is a prerequisite for determining at which points possible national policies could potentially be effective and impact on the path of future fertility trends. Lutz (1996) summarized the most important arguments found in the literature that suggest either further fertility declines or recoveries. The following summary gives a brief account of these arguments.

### **Arguments suggesting a further decline in fertility**

***Trend toward individualism.*** According to the sociological theories of Durkheim (1902) and Tönnies (1887) the process of “modernization” is characterized by a transition from “community” (*Gemeinschaft*) to “society” (*Gesellschaft*). While “community” refers to a living arrangement that is lasting and complete under a relatively stable structure, “society” implies a mere proximity of persons who are independent of one another living within relatively open structures. In this process of transition, an increasing number of needs that were once met by the family are taken over by anonymous institutions. This means an increase in equality and personal freedom, but also an increase of individualism and a weakening of interpersonal bonds.

With respect to the future of the family, Hoffmann-Nowotny (1987) assumes that the trend of increasing differentiation as well as multiple and partial integration will continue, especially for women. From a sociological point of view, he concludes that there is little reason to believe that the family as we know it can and will survive as the mainstream model for future living patterns. This view is not too different from the notion of a “second demographic transition” put forward by Lestaege (1983) and van de Kaa (1987) to characterize a new phase of demographic behaviour that expresses



itself through lower marriage propensities, higher instability of unions, increased extramarital fertility, and lower total fertility.

Another psychological aspect of this supposed trend toward individualism is that men and women are increasingly reluctant to make decisions that have long-term consequences and clearly limit their future freedom of choice. The decision to have a child predetermines many choices for the following two decades, and makes second thoughts impossible once the child is born. If the trend toward greater mobility in all aspects of life continues, this might well mean fewer responsible men and women daring to become parents.

There is little empirical basis to evaluate the validity of these hypotheses for the future, but they seem to be powerful arguments and plausible explanations of recent trends. In the future it might well happen that, if this trend develops to an extreme, counterforces will be mobilized to compensate for some of the negative aspects of this trend. But a return to traditional patterns of "community" with their restrictions on individual freedom is very unlikely. Most of the following arguments are related to this general "continued modernization" argument.

***Economic independence of women.*** One recent trend that has often been singled out as a dominating feature of societal change is the increasing economic independence of women. Female labour force participation has been steadily increasing in virtually all industrialized countries over recent decades. The increase has been strongest in Scandinavia, where labour force participation is almost universal among adult women below age 50, but female activity rates in North America are not much lower. In Italy, female labour force participation increased by more than one-third in the 1980s. This fundamental change in economic activity of women is obviously connected to changing reproductive patterns. Increasing economic independence of women also tends to result in a

postponement of marriage, which typically is associated with lower fertility.

One must be cautious, however, in pointing out female economic activity as a major determinant of declining fertility. It may also be that the lower desired number of children motivates women not to stay at home but rather to enter the labour force, or there may be another driving force behind both trends. This last possibility is supported by evidence from several countries that are experiencing improvements in fertility rates, despite very high and still increasing female labour force participation. The key question in this multifaceted issue seems to be: How can women combine parenthood with participation in the labour market? This may be a decisive question in determining future European birth rates. Nevertheless, even with flexible regulations and good child-care systems, working women, on average, will not have very large families.

***Instability of partnerships.*** As noted previously, marital stability has been declining in all industrialized countries. Part of the reason for this phenomenon clearly lies in the increasing economic independence of women. Women are no longer economically obliged to stay in an unsatisfactory union if they earn an independent income. Other reasons may lie in the general increase in mobility in modern industrialized societies and in a decreasing threshold in the level of dissatisfaction necessary to attempt to change conditions. Whatever the social and psychological reasons may be, the chances of a young couple today staying together for 20 years, the minimum time required to raise a child, are slimmer than they were in the past.

Increasing evidence from empirical studies (Kiernan 1992) shows that the separation of parents actually does more harm to children than had been assumed in the past. Such harm is measured by studying a child's social behaviour, intellectual performance,

and feelings of happiness and security. Thus, responsible prospective parents may decide not to have children if they have doubts about the stability of their partnership. This may be a very important factor in the decisions of couples in consensual unions, which seem to have much lower stability than marital unions (Prinz 1995).

One possible counterargument would be that remarriage (or formation of new nonmarital unions) may actually be an incentive to have an additional child to strengthen the relationship with a new partner. Empirical analysis on data cross-classified by marital status and number of children for Finland (Lutz 1993) shows that a slight effect of this kind exists, but it does not have a significant impact on total fertility.

***Consumerism and use of time.*** Commentators often mention the increase in consumerism as a basic underlying cause for the recent fertility decline. The argument is that people would rather invest in pleasures for themselves than in children; they would rather buy a new car than have another child; they would rather spend their time watching TV than changing diapers. Children are considered work and not fun. As pointed out by Keyfitz (1991), in earlier times couples had to work harder and more hours to earn a living and still found the time to have many children. The extra leisure time couples have today is not being spent on having children. Having children is defined as work and therefore one talks about its opportunity cost. In the words of Keyfitz (1991: 239): “No one complains about the opportunity cost of having sex. Thus to talk about opportunity cost of children indeed highlights the problem of non-childbearing.” He suggests thinking of a work-fun continuum and trying to move childbearing toward the fun end of that continuum.

Whether childbearing and, especially, child rearing will become favoured leisure-time activities of men and women will depend on

the trade-offs between fun and burden. Some European cities already have more dogs than children. Obviously in these areas the work-fun balance is more favourable for pets, which require less of a commitment and in the worst case can always be given away. This argument clearly suggests that unless the burden of having children is diminished or the rewards from children are enhanced, the balance will continue to be negative for childbearing.

***Improving contraception.*** The final argument in this series is less concerned with changing values but is at a more mechanical level. It is an empirical fact that, in all industrialized societies, a significant number of pregnancies are unplanned. Demographers often distinguish between timing failure (early pregnancy) and quantum failure (unwanted pregnancy). Both could be reduced by more efficient contraceptive use: for the latter this would clearly imply lower fertility; for the former this would theoretically have no effect on fertility. In practice, one can assume that a certain number of the births categorized as timing failures may not be realized at a later point in time because of changing living conditions, such as disruption of a union, a more demanding job, or physiological reasons. With respect to unwanted pregnancies, Westoff et al. (1987) estimate that for a number of low-fertility countries, completely efficient contraception would bring down fertility rates by somewhat less than 10 percent, as well as significantly lowering the number of abortions.

Currently, we are still far from a perfect contraceptive that requires no effort to use and has no negative side effects. An increasing number of women report being tired of using the pill, yet sterilization is not acceptable to all men and women (especially in continental Europe) because of its irreversibility. New empirical data suggest that the number of risk-takers or couples practicing less reliable natural methods may have increased because of higher awareness of the side effects of the pill. A hypothetically perfect

contraceptive without any side effects, which is taken once and then requires some reverse action for a woman to become pregnant, certainly would change the situation. This hypothetical contraceptive would clearly inhibit unplanned pregnancies which currently are still quite numerous. It will make quite a difference for future fertility levels whether one must go the doctor to have a child or not to have a child; currently the latter is the case.

### **Arguments suggesting some future increase in fertility**

*The homeostasis argument.* The usual interpretation of the demographic transition theory is that an initial equilibrium between high birth rates and high death rates is disturbed by declining mortality which in turn triggers a fertility decline that brings birth and death rates back to an equilibrium at low levels. However, history has shown that fertility declines with all their irregularities and national particularities generally do not stop at replacement level, but continue to decline further. The homeostasis argument would stress that this is simply an overshooting that will be reversed after some inevitable societal adjustments. Most explicitly this has recently been expressed by Vishnevsky (1991) who does not see fertility levels as the sum of individual behaviour, but rather sees them as one aspect in the evolution of a system that determines behaviour.

Vishnevsky believes that the development of the demographic system is directed by a proper, inherent goal. In the process of self-organization the system aims at self-maintenance and survival. For human beings at a certain stage of evolution, a new and higher goal is assumed to appear that goes beyond pure population survival – namely, that of maintaining homeostasis in the population's reproduction, even in the face of considerable fluctuations in external conditions (Vishnevsky 1991: 265).

It is not yet possible to empirically test this hypothesis. Trends such as the recent fertility increase in Sweden, which has been a forerunner of many other social changes, may be taken as evidence by supporters of this hypothesis. But the hypothesis is not specific enough to be tested (e.g., it does not state by how much fertility should increase over a period). Since studies have not addressed the mechanisms and motivations that induce couples to have more children, it remains largely a philosophical argument. Nevertheless, this hypothesis seems worth considering at this general level even though it is highly controversial. For example, authors such as Westoff (1991) criticize the assumption of a “magnetic force” toward replacement.

*Assumption of fertility cycles.* Cycles can either be assumed as resulting from the timing of fertility within cohorts or from intergenerational differences in the quantum of fertility. While the issue of period versus cohort fertility has already been discussed above, here we focus on the second type, which involves longer-term cycles. The argument says that the fertility level of the parents’ generation is a determinant in their children’s reproductive behaviour. Best known in this context is Easterlin’s relative income hypothesis (Easterlin 1980). In short, it assumes that fertility is determined by income relative to aspirations, with cohort size determining income. Generation one has low relative income and low fertility. Generation two grows up with low aspirations for wealth but finds advantages in labour-market conditions because of few competitors, hence it has high relative income and high fertility. Generation three is large and has high aspirations resulting in low relative income and low fertility.

Empirically, this model fits the US baby boom in the 1960s and the subsequent fertility decline. But this is not a complete cycle. A new baby boom has failed to materialize. For other countries the historical long-term cycle argument is even less applicable. There

are also a number of conceptual problems such as the fact that within a generation fertility is unevenly distributed among families – some families have many children, others only one (Lutz 1989) – and that women have children at different ages which soon smoothes out any cycles based on intergenerational dynamics. But even if this assumed mechanism is not a dominating factor for fertility trends, it may play some role.

*National identity and ethnic rivalry.* National identity may have an important influence on individual reproductive behaviour. Fears related to the ethnic composition of the population and ingroup/outgroup feelings can be powerful emotional forces that may directly influence fertility. Examples of this may be found in Israel, Northern Ireland, and the Baltic states (before 1991). In these areas there is clear rivalry between two groups of the population, which may attempt to outnumber each other. This rivalry may be an important reason why fertility levels are higher in these countries than in other countries under similar socio-economic conditions. One possible hypothesis is that through international migration such rivalry may also affect other industrialized countries. But there are strong counterexamples, such as francophone Canadians, non-Hispanic Californians, or Germans living in cities with many Turks, where ethnic-linguistic rivalry is carried out by means other than reproductive behaviour.

*Pronatalist policies.* This final argument assumes that in addition to all of the other factors mentioned, government policies can make a difference in increasing fertility levels in countries where fertility is very low. The motivation for such policies would stem from worries about the long-term implications of subreplacement fertility together with increasing life expectancy at higher ages on the pension system and other social-security aspects such as health care. Because the baby-boom generation is currently

in its main productive ages, the economic dependency burden is still quite favourable. But the projections shown above indicate that in Western Europe, the proportion of the population aged 60 and over will increase significantly over the next few decades.

This situation poses an especially serious threat to present forms of pay-as-you-go pension schemes, where the active people pay for the pensioners. For this and other reasons, several European countries have tried to stimulate fertility through policies that make it slightly more profitable to have children. It must be stressed, however, that most countries that provide extensive child-care benefits do this for reasons of social policy rather than population policy (Höhn 1991).

The picture is also very uneven across countries. As indicated by Höhn (1991), government views on whether the fertility level is considered as satisfactory or too low do not correlate well with actual fertility levels. In France, government concern about low fertility clearly has been the strongest (it is also the only major European country to say explicitly that fertility levels should be raised), while it still has one of the highest fertility levels in Europe. On the other hand, governments of countries with some of the lowest fertility rates in Europe do not explicitly consider fertility as being too low. Since this issue seems to be so strongly embedded in different ideological positions in which family policy often is seen in direct conflict with policies for women's empowerment, actual fertility trends seem to play a subordinate role among the determinants of official government positions on this issue.

Can pronatalist policies actually have any effect? There is no clear answer to this yet. Because there are hardly any explicitly pronatalist policies that can be unambiguously identified, and the indirect effects of other government policies (ranging from the education system to support of poor families, to the whole structure of the social security system) tend to be much more relevant, it is extremely difficult to evaluate whether in the past, policies have



made any impact on the level of fertility. There are only a few clear cases from socialist countries, such as the 1976 pronatalist measures taken in Eastern Germany, that are estimated to have increased fertility by about 20 percent (Büttner and Lutz 1990) partly due to the fact that having a child was the only way for young men and women to get an apartment of their own. This only worked in the absence of an open housing market. As to the impact of financial benefits to families in Western Europe there have been several studies. The most recent study is based on econometric time series methods applied to 22 industrialized countries for the period 1970-1990 (Gauthier and Hatzius 1997) which indicates that a 25 percent increase in family allowances would increase fertility by four percent or 0.07 children per woman on average. The authors call it a modest but statistically significant effect. Given the present restricted budgetary situations of most industrialized countries it seems rather unlikely that financial incentives of such a magnitude can be provided that are strong enough to bring fertility back up to replacement level.

### **Possible new policy priorities in the ICPD process**

#### **“Population balance” and “intergenerational solidarity”**

Given that there is no doubt that subreplacement cohort fertility is a real phenomenon in an increasing number of countries and is unlikely to disappear soon; that this, together with increasing life expectancy, will result in very significant population ageing producing serious challenges to the social system at various levels; and that today, already more than one-third of the world population has below replacement fertility: it is clear that the ICPD process must give these issues a very prominent place, since it is likely to affect larger and larger segments of the world population in the foreseeable future.

Although reference to these issues can be found in the “Cairo Programme of Action,” it must be understood that accepting the above statement would imply a major change in the dominant policy paradigm of ICPD in which macro-level considerations will again take a prominent place equal to that of the presently overwhelmingly dominant individual rights perspective.

Population policy has always had these two competing levels: individual rights and individual decisions versus the aggregate level consequences of the sum of individual decisions that change the population in a way that subsequently feeds back again into individual quality of life and options for future individual choices. The pendulum of international population policies tended to swing to the side of over emphasizing the aggregate level aspect during the 1970s and early 1980s. Since Cairo, it has gone a long way towards the other extreme, at least in the public perception which largely equates population policy with individual reproductive rights and reproductive health, leaving little room for aggregate level considerations. But without diminishing the clear importance of reproductive health, it is fair to note that the dimension of aggregate level population dynamics and their socio-economic and environmental consequences that ultimately affect the individual, cannot be left out of any international population policy. This argument was raised after Cairo (without very much success so far) concerning the effects of still very rapid population growth in some parts of the world. Perhaps stressing the aggregate dimension from the other side, namely that of rapidly ageing populations, can help to put population dynamics back on the agenda.

Some people say that there is a conflict, that one cannot be concerned simultaneously with too high fertility in some parts of the world and too low fertility in other parts of the world. There need be no contradiction. This synthesizing view may be described as the notion of *population balance* which simply refers to the commonsensical observation that too rapid change of a complex

social system carries significant costs and dangers. This may be due to the imbalances caused by a doubling of the population within less than a generation (i.e., 25-30 years) in some African countries, as well as those caused by a 50 percent increase of the proportion aged 60 and over within the same time period in some low-fertility countries. In both these instances, existing social, economic and political institutions are likely to have serious problems in absorbing these very rapid changes in a way that does not diminish the welfare of individuals.

The purpose of introducing this notion of population balance into the discussion is simply to assess whether it is a candidate for adequately capturing the genuine concern about the macro level of population policy in both hemispheres. More specifically, for the low-fertility countries, there is an additional notion that may gain an increasing political dimension, namely, *intergenerational solidarity*. In short, this notion can equally be applied to the macro and micro level.

On the macro level, intergenerational solidarity refers to the relationship between different age groups in one population. It refers to the fact that traditionally the working age population has supported both the young and the elderly population through taxes and social security payments as well as through the provision of a functioning infrastructure. With significant changes in the relative size of these age groups, this whole system of intergenerational solidarity (which is sometimes referred to as the “contract between generations”) is in danger. When a young person today must expect to pay two or three times the lifetime contribution to the pension fund as compared to an already elderly person in order to receive the same real benefit, this is politically difficult to accept. Also, in most democratic systems the leverage of the elderly increases significantly while children and adolescents do not have the right to vote. In several European countries, those retired or expecting to retire over the next five years, will soon have an absolute majority

among the electorate. These are all macro-level issues due to changing age distributions that pose serious challenges to the intergenerational solidarity in an increasing number of countries.

At the micro level, intergenerational solidarity mostly refers to family ties and may often – but not always – be more appropriately called love instead of solidarity. At this private level of family support (not only financial but mostly in terms of unpaid services) intergenerational cross-dependencies tend to be much stronger than at the macro level. No society would ever be able to pay for all these freely provided services across generations. The families are involved in those recent demographic changes in two ways. First, they are the agents of change mostly through their fertility decisions; but secondly, they are themselves affected by changing demographic patterns mostly in terms of greater burdens to be carried. Most European countries are aware of the social importance and also of the fragility of this kind of micro-level intergenerational solidarity, and therefore have more or less explicit family support policies.

The effects such policies actually have on the well-being of the different family members (here we need to distinguish between the perspectives of children, women and men who tend to be affected in different ways) and on demographically relevant events (such as marriages, divorces, births and deaths) is not yet well understood. Several years ago, at the level of the European Union, an observatory of national family policies was installed to record, compare and evaluate different national family policies. In Europe, this is typically not considered as being part of the field of “population policy.” But if the micro-level focus on “reproductive health” is considered part of international population policy, why should the micro-level focus on the family and the well-being of their members not be considered as part of international population policy?

To address the issue of intergenerational solidarity both at the micro and macro levels, the European Union under Austrian presidency, planned to hold a major meeting entitled “A Society of All Ages” in October 1998 in Vienna. The questions to be addressed at this EU-level meeting were the same as the issues addressed at the 1998 KIHASA meeting. Yet the Vienna meeting is considered to be completely independent of the ICPD process. Presumably, most European governments assume that ICPD (and UNFPA as well) should primarily be concerned with developing countries. Perhaps this unifying notion of population balance introduced here and which equally concerns both hemispheres, could contribute to paving the way toward a truly global understanding of the ICPD process. This will include high as well as low-fertility concerns on the macro level, and reproductive health as well as family-support concerns on the micro level. Much more discussion will be needed on these issues, but it is a goal worth aiming for.

## References

- Büttner, T. and W. Lutz. 1990. "Estimating fertility responses to policy measures in the German Democratic Republic", *Population and Development Review* 16(3): 539-555.
- Council of Europe. 1997. *Recent Demographic Developments in Europe 1997*. Strasbourg, France: Council of Europe Publishing.
- Durkheim, E. 1902. *De la Division du Travail social*. Paris, France: Felix Alcan.
- Easterlin, R. A. 1980. *Birth and Fortune: The Impact of Numbers on Personal Welfare*. New York, NY: Basic Books.
- Gauthier, A.H. and J. Hatzius. 1997. "Family benefits and fertility: An econometric analysis", *Population Studies* 51(3): 295-306.
- Hoem, J.M. 1990. "Social policy and recent fertility change in Sweden", *Population and Development Review* 16(4): 735-748.
- Hoffmann-Nowotny, H.,-J. 1987. "The future of the family", in *Plenaries. European Population Conference 1987: Issues and Prospects*. Helsinki, Finland: Central Statistical Office of Finland.
- Höhn, C. 1991. "Policies relevant to fertility", in W. Lutz, ed., *Future Demographic Trends in Europe and North America: What Can We Assume Today?* London: Academic Press.
- Keyfitz, N. 1991. "Subreplacement fertility: The third level of explanation", in W. Lutz, ed., *Future Demographic Trends in Europe and North America: What Can We Assume Today?* London: Academic Press.
- Kiernan, K. 1992. "The impact of family disruption in childhood on transitions made in young adult life", *Population Studies*, 46.
- Lestaege, R. 1983. "A century of demographic and cultural change in Western Europe: An exploration of underlying dimensions", *Population and Development Review* 9(3): 411-435.
- Lutz, W. 1993. "Effects of children on divorce probabilities and of divorce on fertility: The case of Finland 1984", *Yearbook of Population Research in Finland*, 31: 72-80.
- Lutz, W., ed. 1996. *The Future Population of the World. What Can We Assume Today?* London: Earthscan (revised edition).

- Lutz, W. and S. Scherbov. 1989. "Modellrechnungen zum Einfluß regional unterschiedlicher Fertilitätsniveaus auf die zukünftige Bevölkerungsverteilung in der Sowjetunion", *Zeitschrift für Bevölkerungswissenschaft* 15(3): 271-292.
- Lutz, W., W. Sanderson, and S. Scherbov. 1997. "Doubling of world population unlikely", *Nature* 387: 803-805.
- Lutz, W., J. Vaupel and D. Ahlburg, Eds. Forthcoming. *Rethinking Population Projections, Population and Development Review Special Issue*. New York, NY: The Population Council.
- Prinz, Ch. 1995. *Cohabiting, Married, or Single: Portraying, Analyzing and Modeling New Living Arrangements in the Changing Societies of Europe*. Aldershot, U.K: Avebury.
- Scherbov, S. and H. van Vianen. 1998. *Marital and Fertility Careers of Russian Women Born Between 1910 and 1935*, Working Paper 98-1 (March). Groningen, The Netherlands: University of Groningen, Faculty of Spatial Sciences, Population Research Centre.
- Tönnies, F. 1887. *Gemeinschaft und Gesellschaft: Grundbegriffe der reinen Soziologie*. Darmstadt, Germany: Wissenschaftliche Buchgesellschaft.
- van de Kaa, D. 1987. "Europe's Second Demographic Transition", *Population Bulletin* 42(1). Population Reference Bureau.
- Vishnevsky, A. 1991. "Demographic Revolution and the Future of Fertility: A Systems Approach", in W. Lutz, ed., *Future Demographic Trends in Europe and North America: What Can We Assume Today?* London: Academic Press.
- Westoff, C.F. 1991. "The Return to Replacement Fertility: A Magnetic Force?" in W. Lutz, ed., *Future Demographic Trends in Europe and North America: What Can We Assume Today?* London: Academic Press.
- Westoff, C.F., R. Hammerslough, and L. Paul. 1987. "The Potential Impact of Improvements in Contraception on Fertility and Abortion in Western Countries", *European Journal of Population* 3: 7-31.

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### **III. Country Case Studies of the Demographic Path to Low Fertility**

#### **3. Consequences of Low Fertility and Policy Responses: A Global Perspective**

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The consequences of low fertility depend on just how low fertility has fallen and how long it has been at that level. Table 3.1 lists *very low-fertility countries* (total fertility rate (TFR) below 1.5) and *moderately low-fertility countries* (TFR 1.5-2.0), together with their TFRs in 1997 and the period that the TFR had been continually below 2.1. In the West, fertility began to fall widely after 1965, at first because of a reduction in the proportion of high-parity births (Prioux 1990). Japan followed in 1973 (Retherford et al. 1996). By the 1990s, the TFR had fallen below one in several northern Italian provinces and in the area that had previously been East Germany (Cliquet 1991: 136; Witte and Wagner 1995: 389; Conrad et al. 1996: 349).

Very low fertility is still largely confined to countries that were part of the USSR and its Eastern European satellites, the southern tier of Europe, and Germany and Austria (although Japan may have just moved into this category). Moderately low fertility extends further to include nearly all the rest of Europe, the English-speaking countries of overseas European settlement, parts of the Caribbean and, in ESCAP Asia, Japan, Armenia, Singapore, South Korea, Taiwan, Thailand, Kazakstan and probably China, although in the

last case there is some controversy about whether fertility is as yet quite down to long-term replacement level (cf. Zeng 1996). If China is below that level, then four-ninths of both the world's population and that of ESCAP Asia live in countries with below long-term replacement level fertility. None of these countries are found in Africa or South and Central America: even Uruguay and Argentina, early trail-blazers in the Latin American fertility decline, now have TFRs of 2.3 and 2.8 respectively.

**Table 3.1 The low-fertility countries, 1997**

Country	Region	1997 TFR estimates	Period TFR below 2.1 up to 1997
<b>1. Very low-fertility countries (total fertility rate below 1.5)</b>			
Latvia	Eastern Europe	1.2	50 years
Bulgaria	Eastern Europe	1.2	15 years
Czech Republic	Eastern Europe	1.2	30 years
Italy	Southern Europe	1.2	20 years
Spain	Southern Europe	1.2	15 years
Georgia	Western Asia	1.3	5 years
Estonia	Northern Europe	1.3	50 years
Germany	Western Europe	1.3	28 years
Belarus	Eastern Europe	1.3	20 years
Romania	Eastern Europe	1.3	35 years
Russia	Eastern Europe	1.3	25 years
Slovenia	Southern Europe	1.3	15 years
Portugal	Southern Europe	1.3	15 years
Greece	Southern Europe	1.4	15 years
Austria	Western Europe	1.4	25 years
Ukraine	Eastern Europe	1.4	33 years
<b>2. Moderately low-fertility countries (total fertility rate 1.5 – 2.0)</b>			
Barbados	Caribbean	1.5	15 years

(Continued)			
Country	Region	1997 TFR estimates	Period TFR below 2.1 up to 1997
<b>2. Moderately low-fertility countries (total fertility rate 1.5 – 2.0)</b>			
Cuba	Caribbean	1.5	16 years
Japan	East Asia	1.5 <sup>a</sup>	27 years
Lithuania	Northern Europe	1.5	15 years
Belgium	Western Europe	1.5	27 years
Netherlands	Western Europe	1.5	26 years
Hungary	Eastern Europe	1.5	15 years
Switzerland	Western Europe	1.5	25 years
Slovakia	Eastern Europe	1.5	10 years
Canada	North America	1.6	26 years
Armenia	Western Asia	1.6	5 years
Sweden	Northern Europe	1.6	5 years
Poland	Eastern Europe	1.6	9 years
Bosnia-Herzegovina	Southern Europe	1.6	15 years
Croatia	Southern Europe	1.6	32 years
Singapore	Southeast Asia	1.7	22 years
South Korea	East Asia	1.7	15 years
Denmark	Northern Europe	1.7	30 years
United Kingdom	Western Europe	1.7	25 years
France	Western Europe	1.7	25 years
China	East Asia	1.8	7 years
Taiwan	East Asia	1.8	10 years
Finland	Northern Europe	1.8	30 years
Moldova	Eastern Europe	1.8	5 years
Malta	Southern Europe	1.8	20 years
Yugoslavia	Southern Europe	1.8	7 years
Australia	Oceania	1.8	20 years

(Continued)

Country	Region	1997 TFR estimates	Period TFR below 2.1 up to 1997
<b>2. Moderately low-fertility countries (total fertility rate 1.5 – 2.0)</b>			
Bahamas	Caribbean	1.9	7 years
Thailand	Southeast Asia	1.9	5 years
Ireland	Western Europe	1.9	5 years
Norway	Northern Europe	1.9	20 years
USA	North America	2.0	25 years
Dominica	Caribbean	2.0	5 years
Martinique	Caribbean	2.0	5 years
Trinidad and Tobago	Caribbean	2.0	5 years
Kazakhstan	South-Central Asia	2.0	5 years
Macedonia	Southern Europe	2.0	8 years
New Zealand	Oceania	2.0	20 years

<sup>a</sup> new estimate: 1.4.

Source: Population Reference Bureau 1997 for present estimates;

United Nations 1995 for period TFR below 2.1.

### The demographic impact of low fertility

Such low fertility has caused surprisingly little reaction outside academic circles which have held a number of conferences on the subject usually resulting in books (Berelson 1974; Campbell 1980; Davis et al. 1986; Cliquet 1991; Nimwegen et al. 1993; Casterline et al. 1996). One reason for the slow government reactions is population momentum, the fact that age structures are still adjusting to the relatively new low-fertility levels and in most cases will not fully adjust for decades. Even Germany, which has been below long-term replacement fertility for the unusually long period of 25 years, still has a rate of natural decline of only 0.1 percent per annum, and will probably not reach 0.5 percent for another 20 years or 1.0 percent for 40 years (United Nations 1995; Population Reference Bureau 1997). These are time horizons beyond most

politicians and their electorates. In some cases very low fertility may not be maintained. Eastern Europe may stabilize at fertility levels above the recent very low levels if the present political, economic and social upheavals prove transient. The first contemporary political reaction, although muted, was the adoption in 1983 by the European parliament of a French motion expressing the need to be concerned about population trends (Gauthier 1992: 149).

**Table 3.2 Contrasting stable populations with different fertility levels**

	(1)	(2)	(3)	(4)
Fertility level approximating:	Europe 1960	United States 1990-95	Just under South Korea or Singapore	Germany 1997
Gross reproduction rate (per woman)	1.25	1.00	0.80	0.65
Total fertility rate (per woman)	2.56	2.05	1.64	1.33
Population 1-19 years (percent)	30	24	18	14
Population 20-64 years (percent)	52	53	52	50
Population 65+ years (percent)	18	23	30	36
Population 65+ years as percent of population aged 20-64 years	35	44	58	74
Retirement age (years) required to achieve ratio of retired (65+) to working age (20-64) = 35 percent (as in column (1))	65	69	72	75
Population 15-19 years (percent)	7.1	5.9	4.8	3.8
Population 60-64 years (percent)	4.8	5.7	6.5	7.0
Percent population 15-19 years forms of population 60-64 years (i.e., percent entrants to labour force comprise of retirees over the next quinquennium)	148	97	74	54
Annual rate of natural increase (percent)	0.75	-0.02	-0.79	-1.49
Period for population to halve (years)	-	3,476	88	46

Source: Coale and Demeny 1966, West Model Life Tables, Level 23.

If fertility remains low, the ultimate demographic impact will be severe (Table 3.2). Column (1) represents the typical European

situation around 1960, which was widely felt at the time to represent demographic stability; column (2) represents slightly higher fertility than in the contemporary United States; column (3) slightly lower fertility than in South Korea or Singapore; and column (4) Germany. They are all based on a life expectation at birth of 75 years which should be attained fairly widely in industrialised countries in the near future. An age of 20 years has been taken to represent that of entrance to the workforce in rich, low-fertility, highly educated countries. It should be emphasized that Table 3.2 portrays the stable situation, still decades away in the countries named in columns (2)-(4). There will be transitional situations before then which will impose severer age burdens where the preceding fertility decline has occurred over a short period.

### **The main effects of low fertility**

Table 3.2 demonstrates the main effects of low fertility. They are as follows.

1. The main workforce age range (20-64) of these affluent, highly trained countries remains remarkably similar at all levels of fertility. In the actual workforce, the proportion of women working outside the home has not yet reached its maximum (perhaps 80-85 percent) in many low-fertility countries. Therefore, there is still potential for a further rise in income-generating and tax-generating population. The present situation is that the economies of many of these countries cannot keep even the 20-64 age range in employment: Germany has an average retirement age under 60 years and an unemployment rate of 13 percent.

2. If the young (the first 20 years of life, mostly as students) and the old (65 years of age and over) were both equally dependent on the workforce and cost on average as much per person, then there would be no macroscopic dependency problem. The real problem is the way politics and societies are organized. Wage earners are

typically taxed by the state to support the old (although families also contribute to supporting the old in retirement homes), while a large proportion of private income is spent by parents on their children. In effect, they tax themselves continually to support the young by their expenditure on their children – usually not resenting it because of the emotional returns.

This was once the position everywhere with regard to the old as well, and remnants of this older system persist in some of the high-income East Asian countries, for example Japan or Taiwan. This may not be a socially stable situation, since the old in contemporary industrialized countries typically prefer to believe that they are rightly being repaid by society for work already done – in contrast to older societies with an upward wealth flow where the old felt that they had the right of support from their dependents in return for the gift of life (cf. Caldwell 1982). It should be noted that the annual total private and public cost of supporting an old person is almost certainly greater than supporting a child. Ryder (1997: 12) estimates the cost ratio to be 5 to 3.

3. If the support of the old has to depend largely on taxation and hence on the ratio of the tax-paying workforce to the retired, then the situation of Europe around 1960 can be replicated by delaying retirement in countries with TFRs as low as 1.6 to 72 years of age, and with TFRs of 1.3 to 75 years of age. With the vast diminution of heavy agricultural and industrial labour in the occupational structures of the richer countries, and with the extension of disability-free life, a retirement age of 70 years is by no means unattainable provided that there is an adequate demand for labour.

The real problems are social and political. The social problem is “lifestyle” and an increasing desire by many to spend more flexible years of travelling or just tasting alternative ways of life after the working life is over, and hence to retire earlier rather than later. The solution here may be to offer different levels of pension payment according to the age of retirement and perhaps also to offer



different levels of social insurance payments during a person's working years (a form of optional taxation). It may well be that our increasingly efficient economies can provide adequately for the old even with a retirement age of 65 or perhaps even 60, the real problem being political competition to offer unrealistically low taxation levels.

4. Stabilizing at 1960 European fertility levels would have meant one-and-a-half times as many people entering the workforce each year as retiring from it. In fact, because of the "baby boom", by the 1970s some Western countries experienced an intake more than double the outflow. In contrast, very low fertility levels can mean the reverse of this, with half as many entering as leaving. This will mean a relatively smaller supply of "new blood" and an older, but more experienced, workforce. The young can expect to have faster promotion during their earlier years because a smaller proportion of the total workforce is ten or even twenty years older than them. Ultimately it will be found that structuring a workforce with fewer entrants than persons leaving is no more difficult than it was in the opposite situation a quarter of a century ago.

5. Ultimately, the greatest problem of declining numbers may be just that. National and individual pride may be at stake. Once the issue would have been one of military might, but an increasing reliance on technology, a tendency towards federations of the European-Union type, and the present global politico-military situation, have made this a less significant issue. It is, indeed, remarkable how little soul searching there has been from Europe since 1950 as its proportion of the world's population has fallen from 22 to 12 percent.

The explanation may be that even Europe's population has increased by 180 million or almost one-third (United Nations 1995). The United Nations medium variant projection shows Europe declining over the next half century to seven percent of global population with an absolute reduction of 50 million people (back to

its 1975 population). Such a decline could well give rise to a spurt of cultural nationalism especially in the most affected countries like Germany where population is projected to fall by almost one-quarter from over 80 million to a little above 60 million. Even here, annual decline is not expected to exceed a quarter of a million people until after the year 2020.

### **Lessons from history**

History provides many examples of feared relative or absolute population decline and, indeed, these examples make the calm acceptance of the present situation surprising. Most of the stratagems for raising fertility or coping with the consequences of low fertility have also been identified and tested.

The ancient Babylonians, Greeks and Romans all attempted to raise fertility by means of laws encouraging marriage and strengthening the family (Glass 1967: 86-90). In modern times, the French who, starting in the late eighteenth century, had experienced the first national fertility transition, had pronatalist movements from the late nineteenth century and introduced family allowances in the form of payments to families graduated by the number of children successively into various sectors of society starting from 1900 (Bourgeois-Pichat 1974: 548; Gauthier 1993: 145ff.)

Elsewhere, although there were pronatalist movements in Britain, France and Germany during the First World War (Wall and Winter 1988: 372-452), policies to augment fertility did not come into being until the economic depression of the 1930s when TFRs fell below long-term replacement levels in a range of countries in Western and Central Europe. The political reaction in Europe at that time had been conditioned by the Eugenics Movement which, from the end of the nineteenth century, had been deploring the small family size of the better educated, by books in the 1920s such as Spengler's (1926) *The Decline of the West*, and in the 1930s by

faulty population projections based on cross-sectional fertility rates, such as Charles's (1934) *The Menace of Under-Population*. Nevertheless, cohort fertility was below replacement level in both Sweden and England and Wales for all women born between 1900 and 1920, and subsequently was not to return to these levels until the cohorts born around 1950 (Bourgeois-Pichat 1986: 9).

The depression policies provide an interesting forerunner to contemporary political reactions. The dictatorships of both right and left identified falling fertility with loss of military manpower and national enfeeblement and accordingly attempted direct methods to raise the birth rate, while Germany alone moved towards "racial hygiene" and selective breeding. There were in Germany, Italy and the USSR exhortation and prizes for large families, and a tightened control of family planning and abortion (Glass 1967: 219ff; David et al. 1988; Ipsen 1996; Quine 1996: 129ff). In Italy, as early as 1926 and with shades of the Emperor Augustus, a bachelor tax had been instituted.

In contrast, the liberal democracies identified low fertility with the difficulties of the family. Indeed, it is difficult to determine whether politicians or even governments were primarily concerned with low fertility or with helping the disadvantaged family, a circumstance which allowed collaboration between right and left wing politicians. The ambiguity is compounded by the fact that programmes mooted or begun in the 1930s often did not reach fruition until after the Second World War and then were folded into the fabric of the new welfare states. France had formulated its Family Code by 1939 but this was not fully enacted until 1945. It embodied family allowances, premiums for first births, and assistance with housing and with loans for establishing households (Bourgeois-Pichat 1974; Gauthier 1993: 145-149). Sweden was stirred in 1935 by the publication of Alva and Gunnar Myrdal's *Kris: Befolkningsfrågen* (Crisis in Population Policy).

Here, again, it is difficult to distinguish between fertility policy and that directed at family welfare, and both were decades later to be intertwined with policies aimed at gender equality (Chesnais 1996: 732ff). Two important points should be made about the policies of the democracies. The first is that their lack of proscription did not extend to the practice of contraception and induced abortion; in these matters restrictions which date back to the nineteenth century were tightened in the 1930s, but pronatalism is in this case confounded with issues of sexual and religious morality. The second point is that these family and welfare policies were invoked in Northern and Western Europe and in such overseas settlement countries as Australia and New Zealand; they were almost absent in the United States.

The next phase of population policies is more recent but in conditions that have almost disappeared. They were manifested in the early stages of the present fertility decline in Eastern Europe where very low fertility levels were first reached; but they are history in the sense that the political regimes that were able to take such actions, and most of the programmes they instituted, have now been dismantled. The programmes are of interest to us because they probably did raise fertility, at least for a time, by incentive systems that transferred a larger proportion of the national income (as much as one-quarter of disposable income, McIntyre 1975: 367; or 10 percent of all government expenditure, Frejka 1980: 70-71) to this purpose than any democratic government would be likely to achieve. The nearest parallel in the West is the French system and that was finally put in place by an all-party government straight after the Second World War during a period when the electorate was accustomed to central decisions involving massive resources.

The early Eastern European fertility decline was apparently triggered by the liberalization of abortion laws, first in USSR in 1955 and subsequently in all of Eastern Europe except East Germany and Albania. This occurred in conditions of housing

shortages and with a very high proportion of women in the workforce. The measures included most of the positive ones that have ever been suggested: child-care allowances, taxation deductions for children, paid maternity leave, shorter working hours for mothers of young children, paid leave to care for sick children, lump sums at birth, large loans for setting up a home with fractions of the loan cancelled with each birth, rent reductions following each birth, subsidized nurseries, free school meals, subsidized school books, paid holidays for families, and, of course, free health services as part of the welfare state.

Policies were not aimed at encouraging women to leave the workforce and, except in Romania, only mild reversals of abortion liberalisation occurred. In contrast, Romania outlawed abortion in October 1966 thus doubling the birth rate by the following year. There is unlikely to be much in the way of future fertility incentives that was not attempted in Eastern Europe in the two decades after 1965 (McIntyre 1975; Heitlinger 1976; Berelson 1979; Frejka 1980; McIntosh 1981; Andorka and Vukovich 1985; Höhn 1987; Büttner and Lutz 1990; Monnier 1990; Ardeev and Monnier 1995).

### **The contemporary world**

By 1989 many industrialized countries were reporting, in answer to United Nations population policy inquiries, that both population growth and fertility were too low (United Nations 1989; Gauthier 1991: 4). The responses are summarized in Table 3.3, which is noteworthy for the lack of demographic apprehension expressed by the majority of governments. Countries worried about fertility levels included France, Greece, Luxembourg, Switzerland, Austria, Belgium and Germany. The conspicuous absentees are the English-speaking and Nordic countries, and the Netherlands.

Most Western countries are somewhat apprehensive of very low fertility as indicating (together with lower levels of formal marriage

and higher levels of cohabitation, divorce and matters in the workforce) that something undesirable or pathological is happening to the family and that it occupies an “ever shrinking space in our lives” (Bumpass 1990: 493). This has been explained as an inevitable result of the passing of family production and the continuing move toward a more fully capitalist society with all production outside the home and most people living in huge urban complexes (Caldwell and Ruzicka 1978; Caldwell 1981, 1982). Davis (1997: 623-624) advanced the view in 1936 that “the family is not indefinitely adaptable to modern society”, and that “a new system of reproductive institutions” would need to be invented so that “child-bearing would once again be more motivated”.

**Table 3.3 Responses by industrialized countries to the 1989 United Nations survey<sup>a</sup> of attitudes to demographic trends**

Demographic factor	Number of countries with any mention of Demographic factor being:		
	too low	too high	satisfaction only expressed
Fertility	13	2	22
Population growth	11	3	23
Mortality	0	37	0
Immigration	1	11	25
Emigration	3	9	25

<sup>a</sup> n=37

Source: United Nations 1989.

Lesthaeghe and Meekers (1986) and Lesthaeghe and Surkyn (1988), examining the cultural ideas and social fashions that have swept the West, warned against underrating social factors. Caldwell and colleagues (1988) found evidence for this proposition from a 1986 Australian study which showed that a high proportion of young adults were deferring both marriage and childbearing not for economic reasons but because they wanted, by travel and other

experience, “to find themselves” as individuals. The authors concluded that... *Major issues for the future are whether quality couples can fully achieve their aspirations while having children at all, and whether quality individuals can achieve their aspirations while marrying* (Caldwell et al. 1988: 140).

Ariès (1980) noted some of these changes. Two qualifications should be made. The first is that all these social changes are driven by the underlying economic ones, interpreted admittedly, in various ways by different cultures. The second is that the same Australian study showed that... *The family size desired at first marriage in Australia has fallen very little over the last 30 years. Desired family size is still closer to three than two, and very few women report wanting fewer than two... Whatever the reason, original desired family size exceeds completed fertility and has done so for many years* (Bracher and Santow 1991: 48). This remains true in Australia (McDonald 1998) and in many other low-fertility countries (van de Kaa 1998: 33-34).

Nevertheless, those governments that wish to reverse the fertility decline wish to do so for very specific reasons: the extra burden imposed by a rising proportion of old population on, first, the old age support systems, and second, the health system where the numbers and cost of treatment rises with patients’ age especially after 65 years (Clare and Tulpulé 1994: 43). Additionally, governments are concerned at the eventual shortage of new entrants into the labour force (McIntosh 1981: 186ff; Gauthier 1991: 4). Chesnais (1990) showed that currently the old-age populations of industrialized countries are increasing at a faster rate than total populations ever have.

Freedman (1995: 23) reported that... *Apart from China... governments in the other low-fertility countries of East Asia, as well as some in Southeast Asia, are anxious to raise fertility to at least replacement level... they now meet to discuss ways to restore replacement-level fertility because they are concerned about the*

*aging of their populations and the shrinking of their entry-level labour force.*

McIntosh (1981: 186) reported, after interviewing large numbers of French, German and Swedish policy makers in the late 1970s, that *the concern that is uppermost in the minds of politicians in all three countries is the effect of age-structure change on the financial bases of social security schemes.* In 1982, the first United Nations workshop on ageing was held, and many more were to follow.

### **The relative policy silence**

The most significant aspect of the present period of low fertility is the near silence on the subject from governments and the public alike. This contrasts markedly with the situation before the Second World War. In the first years of the century France and New South Wales, Australia had both held government inquiries about their low birth rates and the need for intervention when their TFRs were 2.9 and 3.5 respectively.

The excitement over demographic defeat in the 1930s occurred at a time when the countries involved all had positive population growth. Reasons have been suggested for the present apparent lack of concern (Easterlin 1968; Berelson 1974; Espenshade 1978; Espenshade and Serow 1978; McIntosh 1981, 1983; Teitelbaum and Winter 1985; Leeuw 1986; Betts 1989; Gauthier 1991, 1993; Chesnais 1996; Conrad et al. 1996; McNicoll 1995; Rindfuss and Brewster 1996; US Council of Economic Advisers 1997).

The first reason is that few countries have yet experienced declining populations. Most that have are in Eastern Europe and are faced at present by more immediate challenges. Even Germany will not experience steep population declines for another 20 years. The United States' fertility is only just below replacement and a recent conference publication on its fertility (Casterline et al. 1996) does not even mention population policy. Furthermore, the United States



and the other English-speaking overseas European settlement countries, Canada, Australia and New Zealand, will probably be able to maintain their population sizes indefinitely with modest immigration streams that do not exceed rates experienced in the recent past and which do not markedly change their population compositions from the multicultural ones they have already developed. Many societies are not yet convinced that the present low fertility is permanent, remembering the passing of the low fertility of the 1930s and the baby boom of the 1950s. They receive support from believers in Easterlin (1968) cycles and from the fact that the United Nations (1995: 149) medium and “most likely” (1995: 143) projection still argues for a return to replacement fertility.

Other governments feel that it would be inappropriate to argue for higher fertility while the world as a whole is faced with another near-doubling of population and a doubt whether it can easily sustain such numbers. The English-speaking countries, the Nordic ones and the Netherlands all told the United Nations (1989) enquiry that they were not worried about low fertility levels, and they were probably at least partly influenced by the fact that they were all major donors assisting developing countries to reduce their fertility.

Many low-fertility countries are not convinced that low or negative levels of population growth are harmful and note that there are economic analyses that support this view (e.g., Espenshade and Serow 1978; Espenshade 1978). They see the solution to the problem of finding funding to support the aged as political rather than economic or demographic. There is also the argument that low or negative rates of population growth are beneficial in that they protect the environment and ensure long-term environment and resource sustainability. As early as 1974, Berelson (1974: 772) listed environmental concerns as militating against actions to raise the birth rate in the United States, Britain, Japan and Australia. In Australia, a country with less than one-hundredth the population

density of Japan or one-thirtieth that of Europe, Betts (1989) expressed a widely held view when she argued that the present population should be regarded as the most desirable because anything higher would place undue pressure on the environment and the quality of urban life.

Many Western societies believe that any attempt to raise fertility would be likely to be intrusive and, in Eisenhower's words, would place the government in the bedroom. Feminism and other movements have made it impossible to curtail contraception and, in most countries, to ban abortion. There is a widespread feeling that it is not the government's role to define the desirable type of family or individual lifestyles, although some governments may come to feel that they should do more to establish conditions which facilitate desires for higher fertility.

In some, but not all countries there is support for financially assisting families with children, single mothers to raise their children, and mothers of young children to stay in the workforce. Most of the support is, however, on grounds of social and gender equity and fits the aims of social welfare states. In the United States and Japan, such assistance is rudimentary because the welfare state did not fully develop. Some of the strongest supporters of such assistance do not believe it will raise fertility (cf. Gornick et al. 1998).

Indeed, such assistance runs against one of the strongest forces of our times, economic rationalism, with its arguments that taxation should be lower and that economic growth depends on at least the partial reduction of social welfare expenditure. Underlying these specific aims is a philosophy which holds that the market, Adam Smith's "invisible hand", is likely anyhow, to produce the most satisfactory economy and society. This implies that either fertility will rise again as the market answers the problems of working mothers, or continuing low fertility is what the people really want. In addition, McIntosh (1981, 1983) has cogently argued that no

liberal democracy, not even those most attuned to welfare statism, would be prepared to spend a fraction of the sums that were allocated under authoritarian Eastern European regimes to raise fertility.

Finally, it might be noted again that the older predominant argument of the need for national military strength is no longer raised or apparently even seriously considered.

### **Reasons advanced for very low fertility**

If policies are to be developed to raise fertility or to restrain it from going lower, then it is necessary to be clear about the causes of very low fertility.

One point is rarely made, possibly because it is no longer policy relevant. After 1965, fertility fell widely in the Third World at least partly because there were new and better methods of fertility control available: the pill, IUD and associated copper-coated devices, new methods of female sterilization, suction abortion and increasing access to legalized abortion; and because the “population explosion” debate had increasingly legitimized birth control. In Matlab, Bangladesh, fertility fell to a new level every time a new effective type of contraceptive was introduced (Caldwell and Caldwell 1992). Almost certainly the same factors played a role in the passing of the Western baby boom. They certainly were important in achieving low fertility in Asia.

Some believe that lower fertility is simply a reaction to bad times after the end of the high-employment, rapid-growth period stretching through the 1950s and 1960s. Others would add the insecurity of job tenure, brought about at least partly by the application of economic rationalist theory and the reduction in the coverage provided by the welfare state. There has been a weakening, at least in the real value of benefits, of the pronatalist programmes in France (McIntosh 1981: 185) and Italy. In the latter, child

benefits declined between 1970 and 1992 from 13.3 to 3.9 percent of the social security budget. Hobcraft (1996: 523) blames occupational insecurity since the early 1970s for the British fertility decline.

In the case of Sweden, Hoem and Hoem (1996: 12-17) attribute the rise in fertility during the 1980s to massive social security expenditure, and the fall in fertility during the 1990s to economically worse times, as the Swedish economy found itself in trouble and government expenditure was trimmed for entrance into the European Union in 1995, resulting in an unprecedented rise in unemployment and major social welfare cuts. Witte and Wagner (1995) see no need to go beyond economic and child-care explanations when analysing the fall in the East German TFR from 1.6 at unification in 1990 to 0.7 in 1993, or half the West German level at that date... *Couples, knowing that unemployment is high, that their labour market value is relatively low, and that there are [now] less generous maternity benefits, perhaps less flexible employers, and far fewer child care alternatives, respond rationally to socioeconomic change by limiting fertility* (Witte and Wagner 1995: 394).

But most explanations for very low fertility centre on the mass employment of married women with children, an explanation that must be tempered by noting that mothers were flooding into the job market in most Western countries well back into the baby-boom years of the 1950s and 1960s. Some explanations emphasize that full-time employment, based on preceding lengthy education, gives women an alternative role to that of mother and even wife. The greatest emphasis has been placed on the difficulties encountered by women seeking not only to work full-time but to give sufficient commitment to the work to gain recognition and promotion while at the same time shouldering the great bulk of housework and taking long periods off to give birth and to look after young children.

McDonald (1997) essentially posits a socio-economic change model with some social changes lagging behind others and so causing a fertility crisis of indefinite duration, the length of which will be determined by societal and governmental reaction. Western industrial society has until recently been characterized by major gender differentials in the sphere of work, with the husband as “the breadwinner” working outside the home and bringing home money for purchases while the wife has been responsible for all work within the home including child care.

There has, in recent years, been a move toward gender equality in both education and work outside the home. Nevertheless, women are handicapped in their ability to work, secure continuous employment, and rise in the promotion ladder, by pressures to cease work for childbirth and when the children are young because they still undertake the majority of child care and household work. In this predicament they may choose to have only one or two children or even none. The problems can be mitigated by government intervention to provide free or inexpensive child-care facilities and facilitate temporary movements out of the workforce and by a major participation in domestic tasks by husbands. Both circumstances exist to a greater extent in Nordic countries and Northwest Europe than they do in Mediterranean Europe and Japan with the result that the current TFR in Northern Europe of 1.7 contrasts with levels of 1.3 in more patriarchal Southern Europe and 1.5 (or 1.4) in Japan.

McDonald draws on Abbas-Shavazi and McDonald (1997: 18-19) to show that Australians of Italian and Greek origin, with a cultural tradition of women doing most household tasks, have lower fertility than other Australians who are predominantly of Northern European descent. The anomaly of the United States, which records both the industrialized world's highest fertility and lowest government support for families, is explained by very cheap private child care arising from the wage structure and illegal immigrants working (it

might also be noted that Hispanic migrants have raised the United States' TFR by 0.2 points).

Rindfuss and colleagues (1996) argue that in the United States fertility declined because women changed their attitudes towards working without changing their views on the amount of care children needed. Women also mitigate the problems of working by having a very different work profile from men with consequent impact on their incomes and promotions. Sweden records only 10 percent of women as housewives by listing 30 percent as full-time workers, 40 percent as part-time, and 20 percent as students or in similar activities (Hoem and Hoem 1996: 13). The last category is still close to 20 percent at 35 years of age.

### **Policies available and those put into practice**

The policies available are divided into attempts to raise fertility (or to substitute immigration) or the acceptance of low fertility and the modification of institutions so as to meet its challenges. Many countries may do both, although rarely if ever is fertility likely to rise far enough to rule out the need for institutional change. No longer can the state ban contraception, although abortion will probably remain controversial, especially in the United States. The one area which may become more subject to policy direction is that of sex-selective abortion, especially in East and South Asia where compatibility between low fertility and strong son preference may lead to an increasing level of the practice (Park and Cho 1995).

Nearly all the methods likely to be employed to raise fertility have been implemented over the last half century by either France or communist Eastern Europe (Bourgeois-Pichat 1974; McIntosh 1981; Höhn 1987; Heitlinger 1976; Gauthier 1991, 1993, 1996). They include bonus payments for births, family allowances, paid maternity and parental leave, leave to care for sick children, tax relief for parents, care facilities for young children or tax relief for

child care, flexible work arrangements for mothers and guarantees of retained promotion rights, labour force re-entry training programmes, housing benefits for families with children, and educational supplements for children.

Several points should be made. The first is that none of these programmes cost at present anything like the expenditure made in Eastern Europe a generation ago, and they are unlikely to do so in the future. The second is that in real terms their value has been falling in recent years, especially as European Union and single currency requirements are met. The third is that many of them are indistinguishable from social welfare provision and the latter is the most frequently proclaimed aim. A publication of the Council of Europe (1978: 254) stated... *Population policy cannot be separated from overall social policies. It must be geared to the same objectives... for this reason, it is frequently a compromise, which may lessen its effectiveness from the demographic point of view.* Thus, scaling down social policies is likely to lower fertility levels.

The fourth point is that there have evolved different cultures in terms of economic and social policies and attitudes to state intervention. In terms of per capita social welfare cash transfers expressed as a proportion of the average wage there were, in the West in 1986, three groups of countries: (1) those countries, referred to somewhat disparagingly by *The Economist* magazine as Colbertist after Louis XIV's Minister of Finance, where the transfers are large, in the range 20-24 percent (France, Belgium, Luxembourg); (2) those with medium transfers, 12-14 percent (Norway, Switzerland, Sweden, United Kingdom, Greece, Germany, Finland); and (3) those with low transfers, under six percent (Australia, Denmark, New Zealand, Canada, Japan, Ireland, Spain, the United States) (Gauthier 1991: 10).

In terms of the proportion of 3-4 year-old children in publicly funded day care, the division is broadly similar, but this time Britain joins the other English-speaking countries in the low-spending

group where Thatcherite government policy aimed at moving the country in terms of all social expenditure (Gauthier 1991: 13). It might be noted that the countries categorised as (1) and (2) record slightly lower average fertility than group (3), hardly a measure of policy success, but this may merely mean there is less pressure on group (3) to implement such policies.

Action to halt fertility decline or to raise fertility may also take the form of exhortation to have children or to abjure contraception. This was the policy of Fascist Italy. In contemporary Europe only France has in any sense adopted this approach. However, Asia may be different. While fertility decline in the West was not characterized by government leadership, both governments and elites urged such decline in Asia, apparently with some success (Caldwell 1993). They may play the opposite role once governments decide fertility is too low. Government exhortation seems to have halted for a time Malay fertility decline in Malaysia (Freedman 1995: 15-17), but the Singapore government does not seem to have had the same success. Religious elites may, during the 1980s, have slowed fertility decline in the Philippines and Iran (Ladrier-Fouladi 1997).

An obvious policy for preventing population decline is immigration. This policy probably will be adopted, if low fertility persists, by all the English-speaking countries of overseas European settlement: the United States, Canada, Australia and New Zealand. All have experienced immigration-induced growth of half to one percent per annum even when fertility was high (and much higher immigration levels earlier in their histories), sufficient to compensate indefinitely for TFRs as low as 1.6. All are consciously multicultural societies and would probably agree to such intakes to prevent population decline. McIntosh's (1981: 187-188) interviews in Europe convinced her that the low-fertility countries of Europe, with a strong sense of their historical and cultural identity, would resist immigration on this scale, as doubtless would Japan (cf. also



Gauthier 1993: 153; Lesthaeghe et al. 1988). It should be noted that immigration would probably have little effect on the age structure.

All countries with below replacement level fertility will have to modify a range of institutions to meet the needs of a very different age structure from that of the past. There will be a need for fewer schools and smaller universities even before the population stabilizes at its low-fertility level. But the greatest need for change will arise from the different age structure, with an unprecedented proportion of old people. The greatest challenge will be to pension systems, old-age care systems, and health systems or health insurance. In every one of these areas experimentation has already begun, although for many moderately low-fertility countries there is no immediate crisis: the U.S. Council of Economic Advisers (1997: 448-449) reported that the American social security system would be in no great difficulty until the third decade of the twenty-first century. A comparison of current pension expenditure compared with the situation two or three generations ago shows huge increases, but these are not solely the result of the changed age structure but also of better and more complete social security for the old.

As noted earlier, the real problem with old-age pensions is not the ratio of the working age population to the old, but the fact that modern populations are more reluctant to make expenditures on the old than on the young. This is partly because the young live in the same household as the wage earners and much of the expenditure is subsumed as household costs; but it is also because the notion of the old as dependants has largely been lost, and there are intergenerational resentments when either private or government expenditure on the old rises steeply.

In Asian countries, such as Japan, Taiwan and Singapore, where the tradition of support of the old within the home has not been entirely lost, attempts have been made to encourage the retention of this system. Ogawa and Retherford (1997: 59ff.) report Japan's efforts to bolster the residence of the old with their children. Of the

population aged 65 years or more, 56 percent lived in three-generational households as late as 1972, a far higher proportion than in the West, but because of changing values and separation caused by the younger generation's rural-urban migration, this proportion had fallen to 33 percent by 1995 (Ogawa and Retherford 1997: 76). Japan still has only two percent of the aged living in institutions compared with four percent in Germany and nine percent in Sweden (1997: 70).

For most countries, one answer to the changing age structure is to cut the real value of pensions. This is increasingly politically difficult as the aged, and those nearing that state, become an ever bigger part of the electorate. Indeed, Preston (1984) has argued that in the United States "grey power" has in recent years influenced expenditure to be directed towards the old rather than children. The major solution – a political one – will probably be to give the appearance that the old are supporting themselves. This can be contrived by separating normal taxation from social security payments as in the United States, and steeply increasing only the latter. Or it can be made closer to the truth by having individuals insure themselves by contributing to private pension or superannuation schemes. More commonly, it is made compulsory for both the individual and the person's employer to contribute, thus disguising in each case what is in effect additional taxation.

There are gains and problems in taking this route. The money becomes private investment instead of remaining with government but it may grow to huge sums with less than optimal avenues for further investment. There may be a problem of excess saving paralleling the situation in contemporary Japan. The government will probably be forced to guarantee the individual against defaulting firms and to pay the employer's share for the self-employed, itinerant workers and the unemployed. This will, of course, result in different levels of pension, as is already widely the case (but not for government pensions in Britain, Ireland, Australia

and New Zealand). Japan is at present considering the option cited in Table 3.2, namely raising the age of retirement or when pension payments begin, and a United States bi-party committee privately convened has made the same suggestion.

There are also problems because of the steeply increasing demands for institutional care of the old. This is not a problem which can easily be addressed by adding the cost to the social security tax because only a minority of the old need full-time care in old-age or nursing homes or in hospitals. Most low-fertility countries encourage the old to stay in their own homes or with relatives and attempt to facilitate this by visiting services or day care. The services may include providing meals, helping with dressing or bathing, and advising on health. For those old people who are transferring from residences they own to institutions it might seem commonsense to demand the sale of the residence to allow reinvestment in their new home, as has in effect been done in Britain. The Australian government has recently attempted this but withdrew after an electoral backlash at what was regarded as an attack on the old.

The public health systems and health insurance schemes are facing problems because of increasingly expensive technology and because a growing proportion of their members are old and so need more frequent services and are more likely than the young to require the use of expensive high technology. Adjustments to the systems will be necessary and none will prove to be very palatable to the electorate. Possible adjustments include raising premiums, establishing differential premiums according to the type of health cover the person wants or according to age, limiting available services, refusing to cover certain procedures for persons beyond a given age, restricting purchases of high technology, limiting pathology testing, and putting pressure on doctors and hospitals to keep costs down. The latter may be achieved through the pressure of purchasing agents on hospitals and health suppliers.

Experience has been gained in the United States with Health Management Organizations and in the British National Health System with the General Practice Budget Holder model. Japan is enacting a compulsory insurance scheme whereby everyone over 40 years of age will from April, 2000 have to pay a monthly premium to ensure nursing care for the elderly (JOICEP 1997:1). The United States is in the unique situation of offering fully government paid services only to the old, with a high cost per capita but apparently lower age-specific mortality among the old than would be expected from the experience of the younger population.

### **The effectiveness of policies aimed at raising fertility**

The conventional wisdom is that government expenditures aimed at raising fertility achieve little or nothing (Berelson 1974: 788; Council of Europe 1978: 242-244; Cliquet 1991: 137-138; Gauthier 1991: 30), and this may be true for most industrialized democracies. Gornick and colleagues (1998) have computed index values for the benefits given in these countries to help working mothers with children under three years of age, and it can be shown that these indices are not significantly related to fertility levels. They also report (1998: 16) that the English-speaking countries, which provide relatively little government support for crèches, record the largest employment drops for women with children under three years, but here again these are countries with relatively high fertility.

But specific country studies give a somewhat different picture, although only to a minor extent in the liberal democracies. Calot calculates that France's policies raised the TFR by only 0.2 to 0.3 children but, if fully implemented, the rise might have been half a child (Höhn 1987: 467-468). Sweden's experience is also of interest, although, with regard to the 1930s and 1940s, Hoem and Hoem (1996: 4) point out that fertility began to rise before any of Alva and Gunnar Myrdal's programme was enacted. Nevertheless, they

believe that massive government expenditure probably did contribute to the rise in Swedish fertility in the 1980s (Hoem and Hoem 1996: 15-16; Hoem 1990). Gustafsson and Klevmarcken (1993: 102, 114 ff.) record that Swedish child-related transfers rose between 1973 and 1991 from three to six percent of GDP, mostly on public expenditure on the day care of small children, apparently increasing the female labour supply, and probably modestly raising fertility. Olah (1996) analysed the Swedish experience and concluded that the introduction of paid paternal leave increased the chance of families having more than two children.

There is greater certainty over the experience of Eastern Europe during the 1960s and 1970s and nearly every specific study concludes that the massive transfers, amounting to up to 10 percent of the government budget (Frejka 1980: 70-71) effected a significant rise in fertility or the cessation of fertility decline (Heitlinger 1976: 133; Berelson 1979: 221; Frejka 1980: 87; Andorka and Vukovich 1985: 410; Büttner and Lutz 1990; Monnier 1990: 127-132; Ardeev and Monnier 1995: 25). The clearest case is that of Romania after 1965 when abortion was made illegal and other restrictive measures on fertility control introduced: the TFR almost doubled from 1.9 in 1966 to 3.7 in 1967 and, at 2.6, was still the highest in Eastern Europe in 1975, an effect which Berelson (1979: 205, 221) compared with the earlier American baby boom.

Elsewhere, the measures were mostly positive incentives. Ardeev and Monnier (1995: 25) calculate that the 1981 Russian measures probably raised the fertility of affected cohorts by 20 percent. The 1976 policy in East Germany resulted in earlier childbirth (Monnier 1990: 139-140), and raised fertility generally according to Büttner and Lutz (1990) who, however, say this was without changing the order-specific mean ages of mothers at childbirth. Most analysts believed that the effect of these measures was dwindling over time, but dramatic political changes have made proof impossible.

Gauthier (1991: 8) used 1988 data to examine whether women with one or more children were more likely to be in the workforce if governments spent more assisting them, and concluded that they were. Furthermore, at that date in Western and Northern Europe they were also more likely to have higher fertility. Rindfuss and Brewster (1996: 262), examining 20 OECD countries, also concluded that fertility rises with women's participation in the labour force but would probably take the view that this meant government intervention was not helpful.

Finally, the Malaysian government appears to have stopped Malay fertility decline, admittedly at a TFR of 4.3, "by building on religious and cultural values" (Freedman 1995: 15-17), while leaving Chinese and Indian fertility to continue their fall. Govindasamy and DaVanzo (1992) cautiously note that economic policy also differentially affected the races.

### **The future**

Very large government expenditures probably could raise fertility levels in the West, especially if they were aimed at allowing the mothers of young children to stay in the workforce (McIntosh 1981). Such large expenditures are unlikely to happen in the years immediately ahead. Gauthier (1996: 205ff) gives as the three potent reasons: (1) tight budgets, (2) the growing political power of the old which will shift policies away from those that expensively assist young parents, and (3) the strength of non-interventionist and self-support ideology. Point (3) is what we have referred to as "economic rationalism" and subsumes point (1) as well.

Bumpass (1990: 493) suggests that there will be ever more debate but little action. Folbre (1997) and McDonald (1997) argue that an ideological attack on the patriarchy, with the aim that husbands should provide wives with much more assistance within the household, would have some effect. It would certainly be cheaper.

Such a movement is likely to intensify, mostly for reasons of gender equity, but it could gain greater momentum if linked with overcoming very low fertility. Hobcraft (1996: 523) blames low fertility on a specific feature of economic rationalism: job insecurity. The economic ideological drive that has caused this might be blunted if only because there are stronger reasons for doing so than demographic ones.

For the present, governments have sufficient intellectual support to be able to argue that such expenditures on raising fertility are not only too great but unlikely to prove effective. Nor, as Teitelbaum and Winter (1985: 151-152) argue, are there likely to be sufficiently spectacular demographic effects in the short run to justify government intervention. If population size declines markedly in any country, then the sentiments of both governments and their electorates might well change. Leeuw (1986: 308-313) notes that between the 1977 Netherlands Royal Commission, which was sanguine about fertility levels, and a 1983 government position statement, which said that continued low fertility would necessitate pronatalist steps, surveys of public opinion showed those favouring population decline dropping from 65 to 33 percent. Significantly, no new government initiatives have since been identified. If governments do take action, it is likely to be in Continental Europe. The English-speaking countries are too given to economic rationalism and against social interventions to participate. Besides, all but Britain are likely to prevent population decline through immigration and the British might accept decline.

Most effort is likely to be directed at changing provisions for the old or their financing. For decades to come, political debate will undoubtedly focus ever more on modifying pensions and health care schemes, especially for the old, and on providing alternatives to the institutionalising of the old. Some of what is done will probably be less a changing of the taxation base than the appearance of changing it. The taxation base may be increased by extending the working

span. However, this may not come about, because the central irony of this debate is that modern economies cannot employ all those of working age.

Taking Germany as an example, only about three-quarters even of men 20-64 years are employed, while the rest are either unemployed or prematurely retired. Such early retirement has become a way of life and change will be resisted: in Austria, where the average age of retirement is also early, a recent move to raise the age when the pension for childless women begins from 60 to 65 years, equivalent to men, was strongly attacked and withdrawn. In demographic policy, our politicians will almost certainly feel their way cautiously into the future, and give the impression of being pushed by events rather than leading.



## References

- Abbasi-Shavazi, J. Jalal and Peter McDonald. 1997. "Fertility and multiculturalism: immigrant fertility in Australia," paper presented at International Union for the Scientific Study of Population International Population Conference, Beijing.
- Andorka, Rudolf and Gyorgy Vukovich. 1985. "The impact of population policy on fertility in Hungary, 1960-1980", in *International Population Conference, Florence 1985*, Volume 3, pp. 403-412. Liège: IUSSP.
- Aries, Philippe. 1980. "Two successive motivations for the declining birth rate in the West", *Population and Development Review* 6(4).
- Avdeev, Alexandre and Alain Monnier. 1995. "A survey of modern Russian fertility", *Population. An English Selection* 7.
- Berelson, Bernard (ed.). 1974. *Population Policy in Developed Countries*. New York: McGraw-Hill.
- Berelson, B. 1979. "Romania's 1966 anti-abortion decree: the demographic experience of the first decade", *Population Studies* 33(2).
- Betts, Katharine. 1989. "Does Australia's low fertility matter?" *Journal of the Australian Population Association* 6(2).
- Bourgeois-Pichat, Jean. 1974. "France", in B. Berelson, ed., *Population Policy in Developed Countries*. New York: McGraw-Hill. pp. 545-591.
- \_\_\_\_\_. 1986. "The unprecedented shortage of births in Europe", in K. Davis, M.S. Bernstam and R. Ricardo-Campbell eds., *Below Replacement Fertility in Industrial Societies: Causes, Consequences and Policies*. Supplement to *Population and Development Review* 12: 3-25.
- Bracher, Michael and Gigi Santow. 1991. "Fertility desires and fertility outcomes", *Journal of the Australian Population Association* 8(1).
- Bumpass, Larry L. 1990. "What's happening to the family? Interactions between demographic and institutional change", *Demography* 27(4).
- Büttner, Thomas and Wolfgang Lutz. 1990. "Estimating fertility responses to policy measures in the German Democratic Republic", *Population and Development Review* 16(3).
- Caldwell, John C. 1981. "The mechanisms of demographic change in historical perspective", *Population Studies* 35(1).

- \_\_\_\_\_. 1982. "An explanation of the continued fertility decline in the West: stages, succession and crisis", in *Theory of Fertility Decline*. London: Academic Press. pp. 233-266.
- \_\_\_\_\_. 1993. "The Asian fertility transition: its implications for transition theories", in R. Leete and I. Alam eds., *The Revolution in Asian Fertility: Dimensions, Causes and Implications*. Oxford: Clarendon. pp. 299-316.
- Caldwell, John C. and Pat Caldwell. 1992. "What does Matlab really show?" *Studies in Family Planning* 23(5).
- Caldwell, John C., Pat Caldwell, Michael Bracher and Gigi Santow. 1988. "The contemporary marriage and fertility revolutions in the West: the explanations provided by Australian participants", *Journal of the Australian Population Association* 5(2).
- Caldwell, John C. and Lado Ruzicka. 1978. "The Australian fertility transition: an analysis", *Population and Development Review* 4(1).
- Campbell, Arthur A. (ed.). 1980. *Social, Economic and Health Aspects of Low Fertility*. Washington DC: US Department of Health, Education and Welfare.
- Casterline, John B., Ronald D. Lee and Karen A. Foote, eds. 1996. *Fertility in the United States: New Patterns, New Theories*. Supplement to *Population and Development Review* 22.
- Charles, Enid. 1934. *The Menace of Underpopulation*. London: Watts.
- Chesnais, Jean-Claude. 1990. "Demographic transition patterns and their impact on age structure" *Population and Development Review* 16(2).
- \_\_\_\_\_. 1996. "Fertility, family, and social policy in contemporary Western Europe", *Population and Development Review* 22(4).
- Clare, Ross and Ashok Tulpulé. 1994. "Australia's ageing society", *EPAC Background Paper* 37. Canberra: Economic Planning Advisory Council, Australian Government.
- Cliquet, R.L., ed. 1991. *Desirabilities and Possibilities of a Fertility Recovery at Replacement Level in Europe*. Amsterdam: Swets and Zeitlinger.
- Conrad, Christopher, Michael Lechner, and Welf Werner. 1996. "East German fertility after unification: crisis or adaption", *Population and Development Review* 22(2).

- Council of Europe. 1978. *Population Decline in Europe: Implications of a Declining or Stationary Population*. London: Edward Arnold.
- David, Henry P., Jochen Fleischhacker, and Charlotte Höhn. 1988. "Abortion and eugenics in Nazi Germany" *Population and Development Review* 14.
- Davis, Kingsley. 1997. "Reproductive institutions and the pressure for population", *Population and Development Review* 23(3) (first published in *Sociological Review*, July 1937).
- Davis, Kingsley, Mikhail S. Bernstam, and Rita Ricardo-Campbell (eds). 1986. *Below Replacement Fertility in Industrial Societies: Causes, Consequences and Policies*. Supplement to *Population and Development Review* 12.
- Easterlin, Richard. 1968. *Population, Labor Force, and Long Swings in Economic Growth*. New York: National Bureau for Economic Research.
- Espenshade, Thomas J. 1978. "Zero population growth in the economies of developed nations", *Population and Development Review* 4(4).
- Espenshade, Thomas J. and William J. Serow (eds). 1978. *The Economic Consequences of Slowing Population Growth*. New York: Academic Press.
- Folbre, Nancy. 1997. "The future of the elephant bird", *Population and Development Review* 23(3).
- Freedman, Ronald. 1995. "Asia's recent fertility decline and prospects for future demographic change", *Asia-Pacific Population Research Reports* No. 1. Honolulu: East-West Center.
- Frejka, Tomas. 1980. "Fertility trends and policies: Czechoslovakia in the 1970s", *Population and Development Review* 6(1).
- Gauthier, Anne H. 1991. "Family policies in comparative perspective", *Discussion Paper* No. 5. Oxford: Centre for European Studies, Nuffield College.
- \_\_\_\_\_. 1993. "Towards renewed fears of population and family decline?" *European Journal of Population* 9.
- \_\_\_\_\_. 1996. *The State and the Family: A Comparative Analysis of Family Policies in Industrialized Countries*. Oxford: Clarendon.
- Glass, D.V. 1967 [1940]. *Population: Policies and Movements in Europe*. London: Frank Cass.

- Gornick, Janet C., Marcia K. Meyers, and Katharin E. Ross. 1998. "Public policies and the employment of mothers: a cross-national study", *Social Science Quarterly* March.
- Govindasamy, Pavalavalli and Julie DaVanzo. 1992. "Ethnicity and fertility differentials in Peninsular Malaysia: do policies matter?" *Population and Development Review* 18(2).
- Gustafsson, Björn and N. Anders Klevmarken. 1993. "Taxes and transfers in Sweden: incentive effects on labour supply", in A.B. Atkinson and G.V. Mogensen, eds., *Welfare and Work Incentives*.: Oxford: Clarendon. pp. 50-134.
- Heitlinger, Alena. 1976. "Pro-natalist population policies in Czechoslovakia", *Population Studies* 30(1).
- Hobcraft, John. 1996. "Fertility in England and Wales: a fifty-year perspective", *Population Studies* 50(3).
- Hoem, Britta and Jan M. Hoem. 1996. "Sweden's family policies and roller-coaster fertility", *Journal of Population Problems* (China) 52.
- Höhn, Charlotte. 1987. "Population policies in advanced societies: pronatalist and migration strategies", *European Journal of Population* 3.
- Ipsen, Carl. 1996. *Dictating Demography: The Problem of Population in Fascist Italy*. Cambridge: Cambridge University Press.
- JOICEP. 1997. Ageing: An update. Tokyo: JOICEP.
- Ladier-Fouladi, Marie. 1997. "The fertility transition in Iran", *Population: An English Selection* 9.
- Leeuw, Frans L. 1986. "On the acceptability and feasibility of pronatalist population policy in the Netherlands: an empirical approach", *European Journal of Population* 2.
- Lesthaeghe, Ron and Dominique Meekers. 1986. "Value changes and the dimensions of familism in the European community", *European Journal of Population* 2.
- Lesthaeghe, Ron and Johan Surkyn. 1988. "Cultural dynamics and economic theories of fertility change" *Population and Development Review* 14(1).
- McDonald, Peter, F. 1997. "Gender equity, social institutions and the future of fertility", *Working Papers in Demography* No. 69. Canberra: Australian National University.

- \_\_\_\_\_. 1998. "Current fertility patterns in Australia: Fertility data from the 1996 census", *People and Place* 6(1).
- McIntosh, C. Alison. 1981. "Low fertility and liberal democracy in Western Europe", *Population and Development Review* 7(2).
- \_\_\_\_\_. 1983. *Population Policy in Western Europe: Responses to Low Fertility in France, Sweden and West Germany*. New York: Sharpe: Amonk.
- McIntyre, Robert J. 1975. "Pronatalist programmes in Eastern Europe", *Soviet Studies* 27(3).
- McNicoll, Geoffrey. 1995. "Institutional impediments to population policy in Australia", *Working Papers in Demography* No. 53. Canberra: Australian National University.
- Monnier, Alain. 1990. "The effect of family policies in the German Democratic Republic: a re-evaluation" 2.
- Myrdal, Alva and Gunnar Myrdal. 1935. *Kris i Befolkningsfrågan [Crisis in Population Policy]*. Stockholm.
- Ogawa, Naohiro and Robert D. Retherford. 1997. "Shifting costs of caring for the elderly back to families in Japan: will it work?" *Population and Development Review* 23(1).
- Oláh, Livia S. 1996. "The gendered impact of public policies on the second-birth rates: the case of Sweden (and Hungary)". Stockholm: Demography Unit, Stockholm University.
- Park, Chai Bin and Nam-Hoon Cho. 1995. "Consequences of son preference in a low-fertility society: imbalance of the sex ratio at birth in Korea", *Population and Development Review* 21(1).
- Population Reference Bureau. 1997. *1997 World Population Data Sheet*. Washington DC.
- Preston, Samuel H. 1984. "Children and the elderly: divergent paths for America's dependants", *Demography* 21(4).
- Prioux, France. 1990. "Fertility and family size in Western Europe", *Population: An English Selection* 2.
- Quine, Maria Sophia. 1996. *Population Policies in Twentieth-Century Europe: Fascist Dictatorships and Liberal Democracies*. London: Routledge.
- Retherford, Robert D., Naohiro Ogawa, and Satomi Sakamoto. 1996. "Values and fertility change in Japan", *Population Studies* 50(1).

- Rindfuss, Ronald R. and Karin L. Brewster. 1996. "Childrearing and fertility", in J.B. Casterline, R.D. Lee and K.A. Foote, eds., *Fertility in the United States: New Patterns, New Theories*. Supplement to *Population and Development Review* 22. pp. 258-289.
- Rindfuss, Ronald R., Karin L. Brewster, and Andrew L. Kavee. 1996. "Women, work, and children: behavioral and attitudinal change in the United States", *Population and Development Review* 22(3).
- Ryder, Norman B. 1997. "Migration and population replacement", *Canadian Studies in Population* 24(1).
- Spengler, Oswald. 1926. *The Decline of the West*. New York: Knopf.
- Teitelbaum, Michael S. and Jay M. Winter. 1985. *The Fear of Population Decline*. London: Academic Press.
- United Nations. 1989. Department of International Economic and Social Affairs. *Trends in Population Policy*. New York.
- \_\_\_\_\_. 1995. Population Division, *World Population Prospects: The 1994 Revision*. New York.
- US Council of Economic Advisers. 1997. *1997 Annual Report*. Partly reproduced in *Population and Development Review* 23(2).
- van de Kaa, Dirk J. 1998. "Postmodern fertility preferences: From changing value orientation to new behaviour" *Working Papers in Demography*. Canberra: Demography Program, Australian National University.
- van Nimwegen, Nico, Jean-Claude Chesnais, and Pearl Dykstra (eds). 1993. *Coping with Sustained Low Fertility in France and the Netherlands*. Amsterdam: Swets and Zeitlinger.
- Wall, Richard and Jay Winter (eds). 1988. *The Upheaval of War: Family, Work and Welfare in Europe, 1914-1918*. Cambridge: Cambridge University Press.
- Witte, James C. and Gert G. Wagner. 1995. "Declining fertility in East Germany after unification: a demographic response to socioeconomic change", *Population and Development Review* 21(2).
- Zeng Yi. 1996. "Is fertility in China in 1991-92 far below replacement level?" *Population Studies* 50(1).

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## 4. Low Fertility and Policy Responses in Singapore

*Yap Mui Teng*

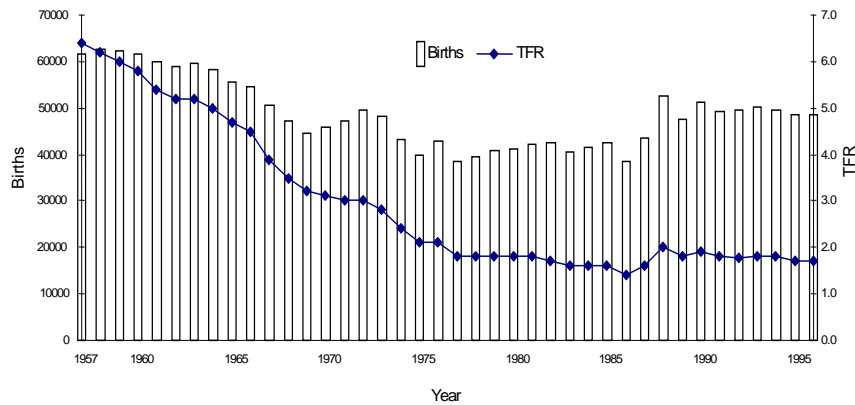
### **Fertility trends**

As in many parts of the world, Singapore experienced a post-Second World War baby boom, with the period total fertility rate (TFR) reaching more than six children per woman in 1957 (Figure 4.1). From this peak, the TFR plunged to replacement level in 1975 and 1976, and then fell below this level in 1977. Fertility has remained below replacement in spite of government efforts, begun in the mid-1980s, to reverse the declining trend. Singapore's TFR in 1996 was 1.7 children per woman. Although the current TFR is above the level prevalent before the implementation of the new population policy, Singapore remains a country with substantially below replacement fertility.

Many factors contributed to the dramatic decline in fertility. Among the proximate determinants, changes that tend to depress fertility include rising singlehood and permanent celibacy rates, older ages at marriage and childbearing, and increased use of contraception and abortion, particularly during the earlier antinatalist phase (Table 4.1). These changes occurred during a period when there was rapid economic and social development which saw dramatic rises in educational attainment (young men and women remaining longer in secondary and tertiary education), female labour force participation rates, and nuclearization of the family (Table 4.2). Improvement in health and decline in mortality probably also reduced the investment motive for childbearing. By contrast, improvements in maternal mortality and health, which are also conducive to higher fertility, have not made any great impact.

Two other features of fertility patterns in Singapore should be mentioned here because they have been part of the public discourse on the implications of demographic behaviour for the country's future economic growth. First, while all three major ethnic groups in Singapore have experienced substantial fertility declines, Malay fertility resumed an upward trend in the 1980s, followed by the Indian rates, while Chinese fertility continued on a downward path.

**Figure 4.1 Live births (numbers) and total fertility rate (per woman)<sup>a</sup> for Singapore, 1957-1996**



<sup>a</sup> TFR data from 1980 onwards are for the resident population only.

In 1996, the Malay TFR was well above replacement level at 2.5 children per woman, while Indian and Chinese rates were well below, at 1.8 and 1.5 respectively. Due to the relative predominance of the Chinese population (comprising about 77 percent of the total), the overall level of fertility in Singapore is essentially a reflection of the low fertility of the Chinese population. The ethnic balance featured as an issue in the public debates that followed the announcements of the new population and immigration policies. The government has declared its intention of maintaining the

existing ethnic distribution as it believes this has contributed to Singapore's rapid economic development in the past.

**Table 4.1 Selected proximate determinants of fertility**

Proximate determinants	1970	1980 <sup>a</sup>	1990	1996
Mean female age at first marriage (years)	23.7	24.3	25.9	26.5
Proportion single among Women aged 30-39 (percent)	7.6	13.4	18.1	18.2
Family planning: new Acceptors (numbers)	24,230	15,009	6,535	3,892 <sup>c</sup>
Female sterilization (numbers)	2,321	6,487	4,394	5,410 <sup>c</sup>
Male sterilization (numbers)	51	458	134	152 <sup>c</sup>
Abortions (numbers)	1,913	18,219 <sup>b</sup>	18,470	14,504 <sup>c</sup>

<sup>a</sup> Statistics for 1980 onwards refer to the resident population only.

<sup>b</sup> Statistics for 1980 onwards include menstrual regulation.

<sup>c</sup> Statistics are for 1995.

Source: Department of Statistics 1996; 1997; Ministry of Health (various years).

The second feature of the fertility patterns that has drawn much attention is the differential in educational attainment of women. While there are no data available on educational differentials in direct relation to TFRs, census data on completed family sizes show that secondary and better-educated women tend to have fewer than two children while the less well-educated tended to have more than two. Tertiary-educated women are also more likely than their less-educated counterparts to marry later and to remain single throughout their life time. Former Prime Minister Lee Kuan Yew discussed this "lop-sided" pattern of procreation extensively in his

address to the nation in 1983, and steps to relax the population policy to encourage the better-educated women to have more children followed soon after. While acknowledging the universality of this phenomenon, the former Prime Minister maintained that its impact on Singapore will be greater because of the speed of the transition (Lee 1983).

**Table 4.2 Selected social development indicators**

Social development indicators	1970	1980	1990	1996
Median period of schooling among population aged 15-29 <sup>a</sup> (years)	n.a.	7.5	9.3	10.8
Labour force participation rate among population aged 20-24 (percent)	73.5	86.1	82.5	76.1
Labour force participation rate among population aged 25-29 (percent)	64.5	78.3	86.4	88.1
Female labour force participation rate (percent)	29.5	44.3	53.0	51.5
Female university enrolment rate <sup>a</sup> (percent)	2.1	3.0	10.6	16.7

<sup>a</sup> Statistics for 1980 onwards refer to the resident population only.

Sources: Department of Statistics 1996; 1997.

### Age Structure Change

Given the sharp decline in fertility and the significant increase in life expectancy, it is not surprising that Singapore's population has been ageing rapidly. The proportion aged below 15 years has fallen dramatically from about 43 percent of the total population in 1957 to about 23 percent in 1997. By contrast, the proportion of the elderly aged 60 and over has risen from only about four percent to 10 percent over the same period. These changes are summarized by

the median age of the population in 1997 which was 32.6 years, compared to a very youthful 18.8 years in 1957.

The broad band of population of working ages, 15-59 years, has also begun to shrink. After reaching a peak at 67.9 percent of the total population in 1988, the proportion had fallen to 67.2 percent in 1997. The relatively slow pace of the decline is probably the result of immigration of a growing number of foreigners who have taken up permanent residence in Singapore since 1989 (Table 4.3). Within this age band, the proportion in the younger working ages, 15-29 years, has fallen as the smaller “baby-bust” cohorts have entered the working ages, while those in the older age groups, 30-59 years, have risen with the ageing of the “baby boomers.”

**Table 4.3 Foreigners granted citizenship and permanent residence**

Year	Citizens	Permanent residents
1980	17,641	9,295
1981	12,741	9,598
1982	11,206	8,671
1983	6,447	7,158
1984	4,557	7,325
1985	4,703	5,824
1986	4,033	4,973
1987	4,089	6,988
1988	6,355	8,823
1989	7,818	13,203
1990	7,617	22,875
1991	7,150	21,713
1992	7,193	22,982
1993	8,984	21,941
1994	11,500	21,659

Source: Chew and Chew 1995.

Depending on the assumptions adopted, the proportion of the young (0-14 years) is projected to decline to 16-19 percent of the

total population by 2030. The proportion in the working ages is also projected to decline, to about 55 percent under the same assumptions. By contrast, the proportion of the elderly will rise to 25-28 percent. According to a study made by the United States Bureau of the Census, the speed of ageing of the Singapore population may be even faster than that of Japan. Whereas it took 26 years (1970-1996) for Japan's elderly population aged 65 and over to increase from seven to 14 percent of the total population, it will take Singapore only 21 years (1997-2018) (Kinsella and Gist 1995). It may be noted here that, as the result of the ageing of the baby-boom cohorts, the number of the elderly is also expected to rise sharply, from the present 313,000 to about one million persons in 2030.

In this connection it may also be noted that the annual growth rate of the indigenous labour force has been projected to decline from 0.9 percent over the 1990-2000 period, to 0.7 percent over the period 2000-2010, and to 0.15 percent for the period 2010-2020 (Lee 1989). The size of the labour force is expected to peak at 1.56 million in 2020 and to decline thereafter.

### **Policy concerns**

The Singapore government is keenly aware of the social and economic implications of continued low fertility and the consequent changes in the dependency ratio. It is perhaps unique among governments both in the way it has put the matter up for public discussion and in the measures taken to redress the situation. The government's involvement in what some would consider intensely private matters such as marriage and childbearing is of course not new (having begun in the 1950s) but the circumstances have been reversed. From the mid-1960s to the mid-1980s, the government had instituted what were commonly perceived to be the world's

most comprehensive package of incentives and disincentives to promote the adoption of the two-child family norm (Yap 1997).

From the mid-1980s, the main concerns exercising the Singapore government in connection with the effects of persistent low fertility have been identified as more akin to those in more developed countries (e.g., Salvage 1995; Pearson 1996). First, there are the specific issues of how to provide sustainable care for the elderly in view of the rapid expansion in the number and proportion of the elderly in the population, changes in family size and structure, increased female labour force participation, and the effects of these on the willingness and ability to care for the old. Secondly, there are the contextual issues of how to sustain economic growth and competitiveness with an ageing and diminishing work force.

These concerns are evident in the following excerpts from a landmark speech made in 1986 by Prime Minister Goh Chok Tong, then First Deputy Prime Minister, to undergraduates at a local university.... *Economic growth comes from two sources - growth in the size of the work force and growth in its productivity... If the work force does not increase, then productivity must increase to generate economic growth. But there is a limit to productivity growth as the economy becomes more developed... Economic growth will slacken for another related reason. With fewer babies born each year, the proportion of the younger people in the population will become smaller. Put in another way, our work force will become increasingly older... Will our work force be vigorous and dynamic? Will investors be attracted to a country which does not have enough young workers?*

... *Our changing demographic profile will throw up another grave problem - how to cope with a fast ageing population... The older population that is without a steady income will need medical care, housing and [help] to move around. These services will have to be paid for, not by the government, but by those who are working. Singapore has no natural wealth. The only way for the government*

*to raise the required tax revenue to take care of the older people is to levy more taxes on those who are working... The tax burden can be extremely heavy if it has to support some 30 percent of the population who are over 60 years old (Goh 1986, cited in Saw 1990: 62-63).*

Perhaps more than elsewhere, the Singapore government is also concerned about the quality of the population implied by the educational differential in fertility. The articulation of this is probably best demonstrated by a speech in 1983 by the then Prime Minister Lee Kuan Yew at the National Day Rally. Referring to 1980 census data which showed that secondary and tertiary educated women aged 35-39 were having fewer than two children while their less-educated counterparts had three or four, Mr Lee remarked that *...If we continue to reproduce ourselves in this lop-sided way, we will be unable to maintain our present standards. Levels of our competence will decline. Our economy will falter, the administration will suffer, and the society will decline. For how can we avoid lowering performance when for every two graduates (with some exaggeration to make the point), in 25 years time there will be one graduate, and for every two uneducated workers, there will be three?* (Lee 1983 cited in Saw 1990: 43).

This was because, according to the former Prime Minister... *A person's performance depends on nature and nurture... nature, or what is inherited, is the greater determinant of a person's performance than nurture (or education and environment)* (Lee 1983 cited in Saw 1990: 41). However, he also acknowledged that... *Even though only 20 percent of the performance of a human being is due to nurture, much more than 20 percent of the performance of human beings as a group depends on training and organization, and that it was ...crucial to help every Singaporean, whatever his inherited characteristics, to achieve his best through improved training and education* (Lee 1983 cited in Saw 1990: 41). The former Prime Minister also touched off what came to be known



as the “great marriage debate” when he pointed to the persistence of traditional preferences for female hypergamy and male hypogamy, with the result that a large proportion of the better educated women were remaining unmarried so that their contribution to the quality of the population was being lost. The government was, moreover, rather disturbed by evidence of rising emigration, which was disproportionately higher among the better educated.

Thus it was in the mid-1980s that the Singapore government initiated a series of policy measures to redress these demographic trends. Besides instituting measures to encourage more Singaporeans, particularly the better-educated ones, to marry and have larger families, immigration also became a policy instrument to “top up the shortfall in births” and increase the talent pool - in the words of Mr Lee Kuan Yew, *to make up for [the] loss of replacement at the top of the educational pyramid, we must increase recruitment of top talent from outside* (Lee 1983 cited in Saw 1990: 44). The seemingly overwhelming concern about the quality of the population in Singapore may be attributed to the fact that it is only an island city-state, with no natural resources or in-country hinterland to support it. But the need for such policy has subsequently been accentuated by the anticipated rapid ageing of the population. Support for the immigration of skilled professionals to boost Singapore’s talent pool and competitiveness was given by two economic committees comprising top public and private sector officials (Economic Committee 1986; Economic Planning Committee 1991). The increasing globalization of economic activities and growing competition from neighbouring countries, together with the movement out of the labour force by older workers, have more recently bolstered the impetus to admit even more “foreign talent” into the country (Goh 1997).

Singapore’s response to the problem of persistent low fertility and its consequences has been the formulation of a series of

demographic, labour force and social policies. These policies and their impact, where relevant, are discussed below.

## **Population Policy**

### **Introduction of pronatalist measures**

In March 1987, the Singapore government reversed what had been until then a very successful antinatalist policy and replaced it with a selectively pronatalist one. The first step in this direction actually took place in 1984 with the introduction of the “graduate mother scheme” giving priority in primary school registration to children of graduate women with at least three children was introduced. Income tax relief for mothers with certain qualifications was also increased. The “graduate mother scheme” was abandoned in 1985 on account of the controversy it raised and the small numbers that were likely to benefit from it. In 1984 as well, a government agency was set up to promote opportunities for social interaction among single men and women with university degrees. Activities included computer matchmaking, talks, outings and even overseas trips.

The overall goal of the new population policy announced in 1987 may be characterized as “population rejuvenation” in the broadest sense of the term. It was an attempt to address the potentially disruptive effects of low fertility, the ageing of the population and the educational differential in fertility, by encouraging single persons to get married and by promoting a larger family size of three or more children among the married couples who can afford them (hence, the previous “stop at two” slogan was replaced by “have three, more if you can afford it”). The latter effort is to compensate for those who do not marry and those who do not have any children, in order to attain the two-child average necessary for generational replacement. The government hoped that by raising

fertility to replacement level, and then maintaining fertility at this level indefinitely, a stationary population with a balanced age structure would be reached, with neither too many of the elderly nor too many of the very young to be supported. As subsequently noted, this objective has met with limited success.

A series of policy measures or incentives has been introduced to support the “three or more” policy. These policy measures may be classified as follows:

1. incentives to ease the financial burden of child rearing (S\$20,000 tax rebates for third and fourth children born since the implementation of the new population policy, and income tax relief for up to four children);
2. incentives to ease the conflict between women’s work and child-rearing roles (child-care subsidy; rebates on maid levies; child-care leave, no-pay leave and part-time work in the public sector);
3. modification of the earlier, two-child incentives in line with the new policy (priority in allocation of housing and primary school registration for families with three instead of two children).

In 1990, an incentive for earlier child bearing (i.e., a tax rebate of S\$20,000 for mothers giving birth to their second child before age 28) was also introduced. The purpose is to counter the trend towards later ages at marriage and childbearing which, in the long run, slow the rate of population growth. Eligibility for the incentives was no longer confined to graduate women, those with secondary (“O level”) educational achievements also qualified. However, a sterilization cash grant scheme introduced as incentive for low-income, less-educated women to permanently limit their family sizes to two or fewer children was retained. This was modified in 1993 to require only that the women accept reversible contraceptive methods, and the incentive was also enhanced with the addition of educational bursaries for the children.

To date there have not been any direct incentives for marriage. However, two other marriage promotion agencies, for secondary and other less-educated young adults were also set up. In 1995, the government introduced measures to enable young couples to rent or purchase their own public housing apartments and start their families earlier. These measures included lower rental and shorter waiting time for first-time applicants (who are mostly young couples) to rent a flat (apartment) while waiting for their owner-occupier units to be ready, and a housing grant worth S\$40,000 to be put into the Central Provident Fund (CPF) account of such couples to help them purchase a flat on the re-sale market. This sum is raised to S\$50,000 if they choose a flat close to their parents' home, the higher incentive being in line with another government objective, namely promoting intergenerational togetherness.

### **The impact of pronatalist measures**

The year following the introduction of the new population policy in 1987 saw Singapore's TFR rise to 1.96 children per woman, a level not seen since the mid-1970s (Figure 4.1). It must be noted, however, that 1988 was an unusual year in that it was considered especially auspicious for having children, both because it was the Chinese "Year of the Dragon" and because the number "88" was homonymic with "double prosperity" in the Cantonese dialect. The TFR dropped to 1.75 the following year but rose again to about 1.87 in 1990. These initial surges have been followed by an almost continuous declining trend, from 1.77 in 1991 to 1.70 in 1996. However, this is still above the 1.6 level experienced just prior to the introduction of the new population policy.

A similar initial spurt, followed by a declining trend, can be observed in the data on third-order births, in absolute as well as proportional terms. There was also a spike in the trend for fourth-order births, although of much smaller magnitude and after a lapse

of about three years. Again, these higher order births have remained above their pre-1987 levels despite the declining trends. The better-educated mothers, however, continued to be under-represented among the higher order births. The median age of mothers at second birth has also continued to rise, to 30.9 years in 1996 compared to 29.8 in 1990.

According to marriage registration data compiled by the Department of Statistics, the age-specific marriage rates for males in 1996 were lower than those experienced in 1980, though they were higher than those in 1990 for the 30 and older age groups (Department of Statistics 1997). The marriage rates among females have declined consistently since 1980 among age groups below 25 (indicating postponement or avoidance of marriage) but they have stabilized for the older age groups, particularly since 1990. Statistics compiled by the Population Planning Section of the Ministry of Health also show that the proportions of younger men and women (aged 25-34) remaining single have declined in recent years.

### **Modifications to immigration policy**

When Singapore became an independent nation in 1965, it adopted a highly restrictive immigration policy as part of a two-pronged strategy to control the rate of population growth (the other being the fertility control programme). This soon had to be relaxed due to a labour shortage, and a work permit system was introduced to allow the inflow of unskilled workers into the country in a controlled manner for temporary employment (Wong 1997). This scheme was originally intended as a stop-gap measure, and an announcement was made in 1981 requiring the use of foreign unskilled workers to be phased out by 1991. By the mid-1980s, however, it became quite apparent that Singapore would continue to have to rely on migrant workers as a buffer against manpower

shortages as well as to fill positions where it had been difficult to recruit Singaporeans. Thus, the government accepted the recommendation of the Economic Committee (1986) to allow “a revolving pool” of foreign workers on short-term work permits.

The entrenchment of unskilled foreign workers in the Singapore labour force is demonstrated by the growing numbers employed which has recently risen to about half a million (compared to the total labour force of about 1.8 million). These foreigners are not eligible for permanent residence, unlike immigrant professionals, managers and entrepreneurs. Employment of foreign workers is confined to certain sectors (such as construction, manufacturing, and domestic work), subject to caps on the ratio of foreigners to locals employed and to a surcharge known as the foreign-worker levy. These measures were introduced to dampen the demand for cheap foreign unskilled workers and because of the perceived negative social consequences of the presence of a large number of these workers.

Unlike the unskilled foreign workers, professionals, managers, investors and entrepreneurs are deemed to make a more substantial contribution economically, and have always been welcome to settle permanently in Singapore (Wong 1997; Yap 1998). This policy, which began during the colonial period, was stepped up by the Singapore government in the late 1970s and became an important part of its population and manpower policies from the mid-1980s. Thus, foreigners with tertiary or professional qualifications who are able to command a specified monthly salary have been given employment passes to live and work in the country and encouraged to take up permanent residence, and even to take Singapore citizenship eventually. Investors and entrepreneurs who invest a certain amount in Singapore are also eligible for permanent residence. Besides their potential economic contribution, an early criterion has been assimilability into the multi-ethnic indigenous

population but this has been relaxed more recently as Singapore seeks to draw on talent worldwide.

More significant because of its unprecedented liberality and potential impact, was the decision in 1989 that the government would immediately relax educational requirements for permanent residence, from university degrees or professional qualifications to secondary or equivalent technical qualifications provided the applicant had work experience and could command a monthly salary of at least S\$1,500 (revised to S\$2,000 in 1994 in line with the general rise in wage levels). For business investors and entrepreneurs, the value of their proposed projects was reduced to below S\$1 million, provided these were approved by the Economic Development Board, the government agency for promoting investment in Singapore.

In 1991, the minister in charge of immigration affairs announced that there would be no cap on the number of foreign professionals recruited until such time as the number became too large. In 1997, Prime Minister Goh reiterated the government's intention to recruit even more such foreign talent, including skilled blue collar workers (Goh 1997).

Besides skilled and professional workers and investors, the government also relaxed the conditions for immigration for family reunion. In 1990, it was announced that the foreign wives and children of Singapore citizens and those who have strong connections or family ties in Singapore would be considered more favourably for permanent residence. This meant that they need not meet the criteria ordinarily required of other permanent residents. Initially, however, while male Singaporeans needed only to show that they can support their wives and children, the husbands of female Singaporeans must first find employment in Singapore and qualify on their own merit. This was changed in 1997, however, when Prime Minister Goh announced that Singaporean women may sponsor their foreign husbands for permanent residence.

### The impact of immigration policy

The growing importance of the contribution of immigration to population growth in Singapore is evident from Table 4.3. The resident population, which comprises both citizens and permanent residents, is steadily being augmented by a growing number of foreigners who have taken up permanent residence or become citizens of Singapore. The number of foreigners granted permanent residence rose to 30,000 in 1996, and this number can be expected to increase further given the government's stated desire for more foreign talent.

**Table 4.4 Population and growth rates**

Year	Total population (Number:thousands)	Resident population	Total Population (Growth rate:percent)	Resident population
1957 <sup>a</sup>	1,445.9	n.a.	4.4	n.a.
1970	2,074.5	2,013.6	2.8	n.a.
1980	2,413.9	2,282.1	1.5	1.3
1990	3,016.4	2,705.1	2.3	1.7
1991 <sup>b</sup>	3,089.9	2,762.7	2.4	2.1
1992	3,178.0	2,818.2	2.9	2.0
1993	3,259.4	2,873.8	2.6	2.0
1994	3,363.5	2,930.2	3.2	2.0
1995	3,467.5	2,986.5	3.1	1.9
1996	3,612.0	3,044.3	4.2	1.9
1997	3,736.7	3,103.5	3.5	1.9

<sup>a</sup> Population figures for 1957-1990 are census counts.

<sup>b</sup> Population figures for 1991-1997 are mid-year estimates.

Source: Department of Statistics 1998.

In addition to the new permanent residents, the number of professional foreigners working in Singapore on employment passes has risen quite dramatically - from about 20,000 in 1980 to 50,000 in 1995, 69,000 in 1997, and 77,000 in 1998. As noted earlier, employment pass holders may apply for permanent



residence, and eventually citizenship. Table 4.4 shows the rates of growth of the resident and total populations, the latter including the transient population of work permit and employment holders as well as foreigners on long-term social visit passes (who are commonly family members of employment pass holders). It is evident from this data that foreigners (non-citizens and non-permanent residents) are becoming an ever larger part of the Singapore population.

### **Economic restructuring and manpower policies**

When Singapore first embarked on its industrialization programme in the early 1960s, like most other developing nations with substantial unemployment, it adopted a strategy of labour-intensive manufacturing. However, within a few years a substantial labour shortage occurred. In 1979, the government decided to embark on a “second industrial revolution”, turning to high technology and high value-added production, in recognition of Singapore’s land and labour constraints and their implications for its competitiveness. Thus, besides immigration, the Singapore government also embarked on a concerted effort to improve the quantity and quality of the domestic work force. Most recently, in 1998, the Ministry of Labour was restructured as the Ministry of Manpower and given the mandate to “coordinate all critical manpower planning and management issues” (Ministry of Labour 1998). The new ministry is adopting an integrated manpower approach “in order to contribute even more to Singapore’s global competitiveness.”

Measures taken to enhance the size or quantity of the workforce include raising the retirement age (from 55 to 60 in 1993, to 62 in 1999 and eventually to 67 by 2003) so that more older people can remain economically active longer, and by encouraging the elderly and women who have withdrawn from the labour force to return to

work. These measures are largely responses to the ageing of the workforce and the availability of fewer younger workers. On the quality of the work force, the concept of life-long learning is being promoted and workers are also being encouraged to update their skills in order to maintain relevant skills through training and re-training programmes. The importance of life-long employability has been emphasized repeatedly by Singapore's leaders in recent times in the face of the current regional economic crisis. Government leaders have also repeatedly reassured Singaporeans of the government's commitment to improving the skills levels of local workers in response to concerns expressed by Singaporeans over competition from immigrants. The government is also spending substantial public funds to ensure that the young are well-trained and prepared for competition, globalization and rapid technological change in the twenty-first century. In this regard, the education curriculum is being modified to emphasize thinking skills and creativity. "Capability competitiveness" rather than "cost competitiveness", is seen as key to Singapore's success as a developed nation.

In light of the ageing work force, a major concern among employers has been rising manpower costs, particularly if more older workers are encouraged to remain in the work force. In this regard, adjustments are also being made to the wage and benefits structure, away from the prevalent seniority-based system, to a more flexible system reflecting productivity. In 1995, a Tripartite Committee on the Extension of the Retirement Age was set up to "study the cost implications of a higher retirement age to ensure that the cost of retaining older workers would not undermine Singapore's long-term competitiveness" (Report of the Tripartite Committee 1997). The Committee's recommendations included reduction in employers' CPF contributions for workers aged 60 and older; up to 10 percent reduction in wage costs through a reduction in fringe benefits, variable bonuses or basic wages (although

employers are to keep in mind the employees' "job worth" and if necessary make alternative arrangements for reduced hours of work or adjusted conditions of service); introduction of an alternative medical benefits scheme; and outplacement of older workers.

### **The impact of restructuring and manpower policies**

It is too early yet to determine the success of the above measures. As the Minister for Manpower said recently, Singapore is taking these proactive measures in anticipation of future problems.

### **Policies on the aged**

As early as 1982, the government appointed a Committee headed by the Minister of Health to study the issues of the increasing number of people aged 60 and older and their consequences, and to recommend measures to deal with any problems (Ministry of Health 1984). When it appeared in 1984, the Committee's report generated much controversy because of its recommendation to raise the age for withdrawal of CPF savings. However, the Committee's recommendations set the stage for many future policies on the aged. In 1988, the government appointed an Advisory Council on the Aged, one of six such councils to look into improving various aspects of life in Singapore. The Council's recommendations became the basis of Singapore's policy on the aged.

The basic principle of Singapore's policy on the aged is that the older person should remain in the community for as long as possible. The primary responsibility for the care of the elderly lies with the family, and this is to be complemented by community-based care, with institutionalization only as a last resort. The aged are also encouraged to remain healthy and independent. A positive attitude towards ageing and the aged is also encouraged.

Various schemes have been introduced to keep the aged with their families. Public housing schemes introduced include granny

flats, multigenerational family homes or at least for elderly parents and their children to live in close proximity (“intimacy at a distance”). Taxpayers who live together with the parents are allowed higher income tax relief than those who live apart. Tax incentive (relief) is also given to children who top up their parents’ CPF accounts. Parent’s hospitalization bills can also be paid by deductions from their children’s medical savings accounts. In 1995, the Maintenance of Parents Act was passed which provided for parents to sue for financial support from their children if they have been neglectful. A conciliatory approach is stressed, however, and litigation is avoided as far as possible.

The government encourages voluntary welfare organizations to provide community-based services for the elderly through funding 90 percent of capital costs and 50 percent of operational costs. Land is made available to approved voluntary welfare organizations at a nominal charge. The government also sets the standards for services and maintains a regulatory role. Community-based services include: befriender service, home help and home nursing; meals on wheel, escort service, day centres, day rehabilitation centres, and senior health centres. However, there has been criticism that these services, although abundant in variety, are too thinly spread. There is only a minimal direct provision of institutional facilities by the government and these are usually confined to the destitute. The government co-funds residential facilities provided by voluntary welfare organizations but these are not meant for long-term institutionalization.

### **Concluding observations**

Since the mid-1980s, Singapore has been implementing a series of measures to address the problem of persistent low fertility and its consequences. These have involved the reversal of some previously dearly-held policies such as those on limiting fertility and

immigration. In writing about Singapore's stringent antinatalist policies in the past, Fawcett noted that... *The government's case is based largely on the concept of externalities - the social and environmental results of an individual's action* and that the environmental conditions in Singapore, such as its limited size and lack of natural resources *strengthen the case for public policies based on externalities* (Fawcett 1979: 11). For these same reasons, such stringent policies are also more readily accepted by the population. Although a reversal of the previous policy stance, Singapore's immigration and pronatalist population policies reflect new domestic realities and new externalities. These policy shifts are more understandable if one recognizes the underlying purpose, which is enhancing the interrelationship between population and development. If pragmatism is a hallmark of the Singapore government, other characteristics include being proactive and preemptive, features reflected by these recent developments in policies dealing with manpower and population ageing.

## References

- Chew, Soon Beng and Rosalind Chew. 1995. "Immigration and foreign labour in Singapore," *ASEAN Economic Bulletin* 12(2). pp. 191-200.
- Department of Statistics. 1997. *Statistics on Marriages and Divorces 1996*.  
 \_\_\_\_\_. 1996. *Singapore 1965-1995 Statistical Highlights; A Review of 30 Years' Development*.  
 \_\_\_\_\_. 1997. *Singapore 1996 Statistical Highlights*.  
 \_\_\_\_\_. 1998. *Monthly Digest of Statistics, Singapore, January 1998*.
- Economic Committee. 1986. *The Singapore Economy: New Directions*, Report of the Economic Committee, Singapore: Ministry of Trade and Industry.
- Economic Planning Committee. 1991. *Towards a Developed Nation; The Strategic Economic Plan*, Singapore: Ministry of Trade and Industry.
- Fawcett, James T. 1979. "Singapore's population policies in perspective" in Peter S.J. Chen and James T. Fawcett, eds., *Public Policy and Population Change in Singapore*. New York: The Population Council.
- Goh, Chok Tong. 1990. "The Second Long March." Speech delivered at the Nanyang Technological Institute, 4 August 1986, reproduced in Saw Swee-Hock, *Changes in the Fertility Policy of Singapore*, IPS Occasional Paper no. 2. Singapore: Times Academic Press for the Institute of Policy Studies.  
 \_\_\_\_\_. *Prime Minister's National Day Rally Speech 1997*, Singapore: Ministry of Information and the Arts.
- Kinsella, Kevin and Yvonne J. Gist. 1995. *Older Workers, Retirement, and Pensions; A Comparative International Chartbook*, IPC/95-2. Washington, D.C.: Bureau of the Census.
- Lee Kuan Yew. 1990. "Talent for the Future." Prepared text delivered at the National Day Rally on 14 August 1983, cited in Saw Swee-Hock, *Changes in the Fertility Policy of Singapore*, IPS Occasional Paper no. 2. Singapore: Times Academic Press for the Institute of Policy Studies.
- Lee Yock Suan. 1989. "Singapore's Changing Labour Force: Policy Options" *Speeches* '89 13(5) (September-October).
- Ministry of Health. 1984. *Report of the Committee on the Problems of the Aged*.  
 \_\_\_\_\_. Various years. *Annual Report*.

- Ministry of Labour. 25 February 1998. Media brief.
- Pearson, Maggie. 1996. *Experience, Skill and Competitiveness; The Implications of an Ageing Population for the Workplace*. Shankill, Co Dublin: European Foundation for the Improvement of Living and Working Conditions.
- Salvage, Ann V. 1995. *Who Will Care? Future Prospects for Family Care of Older Persons in the European Union*. Shankill, Co Dublin: European Foundation for the Improvement of Living and Working Conditions.
- Saw Swee-Hock. 1990. *Changes in the Fertility Policy of Singapore*, IPS Occasional Paper no. 2, Singapore: Times Academic Press for the Institute of Policy Studies.
- Wong, Diana. 1997. "Transience and settlement: Singapore's foreign labor policy", *Asian and Pacific Migration Journal* 6(2): 135-67.
- Yap, Mui Teng. 1991. Singapore's New Immigration Policy 1989; Benefits and Pitfalls. Paper presented at the International Conference on Migration organized by the Centre for Advanced Studies, National University of Singapore.
- \_\_\_\_\_. "Policy options for low fertility countries: The Singapore experience", *International Population Conference Montreal 1993*, volume 4. Liege: IUSSP.
- \_\_\_\_\_. 1995. "Singapore's 'three or more' policy: The first five years", *Asia-Pacific Population Journal* 10(4).
- \_\_\_\_\_. August 1997. Population Policies and Programs in Singapore, East-West Center Working Papers, Population Series No. 88-22.
- \_\_\_\_\_. January 1998. "Country Report: Singapore". Prepared for the Workshop on International Migration and Labour Markets in Asia, organized by the Japan Institute of Labour and supported by the Government of Japan, OECD and ILO, Tokyo.

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## 5. Low Fertility and Population Policy Development in the Republic of Korea

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### **Population policy developments**

The Republic of Korea's national family planning programme has been in effect as a means of population control policy since 1962 under the direction of the Ministry of Health and Welfare. The programme included a demographic target of reducing the annual growth rate of the population and the total fertility rate (TFR), and it was implemented through the successive five-year economic development plans.

In its initial stage the main emphasis of the national programme was placed on providing contraceptive and information services free of charge through family planning workers at health centres and designated private physicians. The primary reason for adopting such a strategy stemmed from the need to focus on rural areas, because not only was the fertility level relatively high and contraceptives practically unheard of in rural areas, but over 70 percent of total population in 1960 resided there. In response to the increasing number of people moving from rural areas to urban settings in the 1970s, more weight had to be given to family planning programmes for urban areas and, in particular, for those in the low-income brackets and those who worked at industrial sites.

The government also introduced a number of social support policies designed to propagate the small family norm. These policies can be subdivided into three categories: the incentive and disincentive schemes, the revision of laws and institutions, and population-related education. In 1981, the government paid

particular attention to the impact of population growth on the nation's socio-economic development in the immediate future, and announced new innovative population control policy measures through Presidential Decrees on August 11. These new policies, consisting of 49 measures, called for improved family planning programme management and operating systems; strengthened social support policy measures; a revision of laws to eradicate the traditional preference for sons; a strengthening of Information, Education and Communication activities; and the establishment of close coordination among government ministries to carry out the programme.

As a consequence of these efforts by the government to step up population control programmes, fertility took a drastic downturn in the 1980s. The TFR per woman declined from 6.0 in 1960 to 1.6 in 1987. Thereafter, the TFR fluctuated between 1.6 and 1.7, but decreased further to 1.48 in 1998(NSO, 1999). This meant that the national family planning programme in Korea achieved its primary objectives of reducing the fertility rate to below replacement level and accomplished near universal contraceptive use. As a result, when the Seventh Five-Year Economic and Social Development Plan (1992-1996) was drawn up in 1991, the government began to move away from its policy on free contraceptive distribution through government programmes toward a self-supported system administered by the private and commercial sectors, including the nationwide health insurance programme.

Nevertheless, no sooner was one set of problems overcome than new challenges of a totally different nature arose out of the resulting decreased fertility rate. Some of the unfavourable consequences of rapid fertility decline in Korea have included the shrinking of the labour force; an increase in the elderly population; a high prevalence of induced abortions; and an unbalanced sex ratio. In order to deal with these new problems, it became apparent that Korea would have to shift its population policy directions in a way

that best reflects the changing socio-economic and demographic conditions currently being witnessed and forecast for the immediate future.

For this purpose, the government established a Population Policy Deliberation Committee in December 1994 to review population policy by focusing on its past accomplishments and its future prospects, as well as on the socio-economic problems related to it, in an effort to work out new policy directions and measures for the twenty-first century. During the process of the policy formulation, 1994 ICPD recommendations and Programme of Action were also considered. In 1996, the government officially adopted and announced the new population policy, which had been prepared and suggested by the committee, with an emphasis on the population's quality of life and welfare.

However, despite the transition of the population policy in Korea, the TFR continuously declined to 1.42 in 1999(NSO, 2000). Since the rapid process of fertility decline and population aging will affect Korean society to a great extent, Korea needs to pay full attention to preparations for the expected demographic changes.

### **Future population prospects**

In 1996, new population projections were made based on the assumption that in the coming years the TFR would be maintained within the range of 1.7-1.8 (according to the National Statistical Office, the TFR in 1998 was 1.48). According to this projection, the population in Korea is expected to increase from 46.4 million in 1998 to 52.5 million in 2028 at its peak and thereafter decrease to 52.7 million in 2030. The proportion of population under 15 years of age will decline from 22.0 percent in 1998 to 16.0 percent in the year 2030, while the population aged 65 or more will increase from 6.6 percent in 1998 to 19.3 percent in 2030. Accordingly, the dependency ratio of 40.0 in 1998 can be expected gradually to

increase to 54.5 in the year 2030.

**Table 5.1 Future population growth and structure, 1995-2030**

Index	1995	2000	2010	2020	2030
Total population (thousands)	45,092	47,275	50,618	52,358	52,744
Total fertility rate (per woman)	1.74	1.71	1.74	1.80	1.80
Crude birth rate (per thousand)	16.1	14.8	12.3	10.9	10.6
Crude death rate (per thousand)	5.4	5.7	6.8	8.5	10.8
Natural increase rate (percent)	1.07	0.91	0.55	0.24	-0.02
<i>Life expectancy at birth (years)</i>					
Male	69.6	71.0	73.3	74.5	75.4
Female	77.4	78.6	80.7	81.7	82.5
<i>Age composition (percent)</i>					
0-14	23.4	21.7	19.9	17.2	16.0
15-64	70.7	71.2	70.1	69.6	64.7
65 and over	5.9	7.1	10.0	13.2	19.3
Elderly/child ratio (percent)	25.2	32.9	49.9	76.5	120.3
Dependency ratio (percent)	41.3	40.4	42.6	43.7	54.5
Young age	33.0	30.4	28.4	24.7	24.7
old age	8.3	10.0	14.2	18.9	29.8
Mean age of population (years)	31.2	32.9	36.3	39.5	42.1

Source: National Statistical Office (NSO) 1996.

One interesting indicator for showing the change in age structure is the elderly/child ratio, which is the number of elderly (65 and over) per 100 children under age 15. Increases in this ratio are primarily due to the fall in fertility and the lengthening of life expectancies resulting from the advances in medical sciences and improvements in public health represented by the fall in mortality. The ratio for Korea is predicted to rise from 30.0 in 1998 to 120.3 in 2030. Korea's population is approaching toward the ageing population stage. By the year 2022, Korea will certainly enter the aged population stage, as 14.3 percent of the total population will then be accounted for by those aged 65 years and over.

### **Consequences of low fertility**

***Labour Shortage and Ageing.*** In Korea, the labour shortage, as measured by the vacancy rate (the ratio of unfilled vacancies to current employees) has been serious, specifically for the production workers (mostly unskilled workers), which causes the small and medium sized manufacturing firms to suffer from labour shortage. The labour shortage rate has maintained at 2 to 5 percent during the last ten years and that for the unskilled has increased to more than 10 percent (Ministry of Labour, 1983 & 1997).

This labour shortage might be attributable to the accelerated GDP growth which led to an excessive demand for labour in the manufacturing sector, increase in the labour force with higher educational attainment (in 1996, about 62 percent of the labour force were higher educated and about 20 percent graduated college or university). But it seems to be related to the change in the age structure of the population, which implies that this phenomenon will be structural and long-term.

As there has been lack of labour in small and medium manufacturer establishments, the number of foreign workers has rapidly increased. According to a statistics by the Ministry of

Labour(1999), the total number of foreign workers, legal and illegal, was estimated as 81,824 in 1994 and 210,494 in 1996, showing an increase of 157.3 percent during two years. In 1996, approximately 61 percent of all foreign workers were illegally employed, in comparison to 58.9 percent in 1994. However, the economic crisis which began in 1997, has had an impact on the movement of foreign workers; the number of foreign workers working in Korea was 157,689 in 1998, which is a decrease of 25.1 percent, from 1996. The decrease may be a result of the rise in the exchange rate and lack of jobs during the economic crisis in Korea.

In Korea, the ageing of the labour force has accelerated. The proportion of the economically active population of ages 45 or over increased from 32.2 percent in 1990 to 33.6 percent in 1998. Accordingly, an average age of the total economically active population increased from 39.1 years in 1990 to 40.1 years in 1998. This labour ageing phenomenon is expected to accelerate, as the total population ageing rises. On the other hand, it was attributable to the fact that aged workers want to work longer simply because they expect to live longer and are healthy enough to work even in relatively unpleasant workplaces.

***Increase in Medical Costs.*** The increase in the elderly population has resulted in the rise of medical costs in Korea. At present health insurance or medical assistance (for those who are supported by the Livelihood Protection Law) programs cover all Koreans. As of 1995, 96.7 percent of these aged 65 or over were covered by health insurance and the rest of the elderly were covered by medical assistance. Despite the high coverage of health insurance, there was an increase in medical expenditures due to the population ageing in Korea. The health insurance cost for the elderly persons(Korea Health Insurance Corporation, 2000) shows a speedier increase than the total population; the cost for older persons shows an increase rate 27.7 percent, compared with 18.7 percent for the total

population between 1995 and 1998. The amount of medical insurance cost for the elderly accounted for 12.8 percent of the total cost in 1985 and increased to 15.9 percent in 1998. Even the medical costs per elderly person are over 2 times that of the population under age 65.

***Growing Burden on the National Pension Scheme.*** Since the process of population ageing will continue to accelerate in the future, the financial crisis of the national pension is anticipated. According to an actuarial estimate, the total number of beneficiaries of the old age pension will increase rapidly although the number of insurants who pay contributions to pension will decrease.

According to an estimation(National Pension Research Center, 2000), the number of pensioners will increase up to about 45 percent of the total number of the pension insurants, implying that the burden of the working age population will sharply increase. The total pension expenditure will exceed the total revenue by 2034. As a result, the accumulated pension reserve is expected to be exhausted in 2048. Thus, the population ageing in Korea will be a serious burden on the pension system, and the future young generations will have to pay heavy contributions in order to sustain the system.

## **Policy responses**

Policy which attempts to address the determinants of expected population ageing and decline, policies to recover the fertility level or to check the rapid decline in fertility will be needed. These policies may include support for the compatibility of work and child rearing for women. In Korea, expansion of child-care institutions including those at workplace, extension of maternity leave, adoption of paternity leave (in government sector), payment of family allowance, etc. have been implemented, although they are

not directly aimed to increase the fertility rate. However, such policies have proven not to be effective, as exhibited in case studies of other countries.

The influx of migrants to compensate for the expected decline of the working age population may also be considered in Korea. However, this measure has received less attention due to its negative effects on social and cultural aspects.

Thus, the most effective response to fertility decline and population ageing may include the policies for improving the quality of the declined population, mainly through improving the reproductive health, and the welfare of the elderly. The following are the policies considered for the reproductive health and the welfare of the elderly in Korea, both of which have been emphasized in the New Population Policy.

### **The new population policy**

With the successful implementation of the population policy couched strictly as an antinatalist policy during the last three decades, the TFR in Korea decreased to replacement level in 1988 and has remained below the replacement level since. However, there was a need to direct population policy away from the narrower approach of fertility reduction towards the enhancement of quality of life and welfare services for the people. The new policy had to maintain a proper population size and structure in the context of sustainable socio-economic development in the twenty-first century; contribute to the advancement of the quality of life through the development of welfare-oriented strategies focused on the qualitative population goals; and incorporate major objectives of the ICPD recommendations and Programme of Action into the new population policy.

The major goals of the new population policy which was adopted in 1996 by the government were: to maintain the below



replacement level of fertility and to improve morbidity and mortality levels as part of the process of achieving sustainable socio-economic development; to enhance family health and welfare; to prevent the imbalance of the sex ratios at births and to reduce the incidence of induced abortions; to tackle the sex-related problems of youth and adolescence; to empower women by expanding employment opportunities and welfare services for them; and to improve work opportunities and provide adequate health care and welfare services for the elderly.

With the new population policy, the family planning programme played a crucial role once again, and its major anticipated shifts in the policy options and directions in the immediate future were: to enhance the quality of contraceptive services for reducing the induced abortion prevalence rate; to integrate reproductive health programmes, such as family planning (FP), maternal and child health care (MCH) and other social welfare programmes; to strengthen social and institutional support policies for a balanced sex ratio through the improvement of women's social status and gender equality; and to expand the scope of the family planning programme target population to cover the young unmarried population in order to prevent premarital pregnancies.

## **Reproductive health**

***Maternal and child health.*** The percentage of women who had visited maternity hospitals or local health centres for prenatal checkup has been increasing progressively since 1985, according to the 1997 National Fertility and Family Health Survey: the rate rose from 82.4 percent in 1985 to 88.5 percent in 1988, 94.4 percent in 1991, 99.2 percent in 1994, and 99.6 percent in 1997. In 1994, 86.9 percent of the 1,939 women who visited maternity hospitals for prenatal care were issued with the MCH family health booklets, while in 1997, 92.5 percent of the 1,159 women visiting the

maternity wards were given the booklets. According to the regulations on MCH revised in 1987, expectant mothers are to be issued the MCH family health booklets from the maternity hospitals or the health centres they visit. The health booklets carry information on antenatal and postnatal care, immunization, family planning services for the mothers, and nutritional advice for infants.

In 1997, 99.7 percent of all newborn infants were delivered in an institutional setting, which stands in marked contrast to the 8.5 percent institutional delivery rate of 1974. Even in 1980, only 56.9 percent of the babies were delivered in maternity hospitals, clinics, and health centres. By 1985, 75.2 percent of all babies were delivered in institutions, the majority in maternity hospitals (Table 5.2). By the early 1990s, the proportion of women whose babies were delivered in general hospitals and private clinics was still increasing – a reflection of the national medical insurance system introduced in 1989. Under the insurance system, institutional delivery costs are covered, by the insurance.

**Table 5.2 Trends in institutional delivery (in percent) by institution, 1985-1997**

Location of delivery	1985	1988	1991	1994	1997
Institutional delivery	75.2	87.8	98.1	98.8	99.7
General hospital	17.8	23.6	-	31.8	39.0
Clinics	45.8	53.4	91.0 <sup>a</sup>	64.4	59.3
Midwifery ward	9.1	7.4	5.1	2.0	1.1
Health centre	2.5	3.4	2.0	0.6	0.3
Non-institutional delivery	24.8	12.2	1.9	1.2	0.3
Total	100.0	100.0	100.0	100.0	100.0
Number	3,541	2,843	2,151	1,932	1,163

<sup>a</sup> includes general hospitals.

Source: National Statistical Office (NSO) 1996: 12.

As for postnatal care, in 1997, 81.0 percent of those women with the newborn infants visited maternity hospitals; this was almost a 29 percentage point increase over the 1988 level. More than 82 percent of the women with college education, and 80 percent of those with high school education, but less than 75 percent of those with middle school education received postnatal care in 1997.

***Induced abortion.*** WHO estimates that worldwide each year, some 20 million unsafe, induced abortions are being carried out and that 10 to 20 percent of women undergoing these unsafe abortion procedures need medical treatment for complications. ICPD recommendations urged all governments to reduce the recourse to abortion through expanded and improved family planning services. Again, in the Fourth World Conference on Women held in Beijing in 1995, all governments were urged to recognize and deal with the health impact of unsafe abortion as a major public health concern. In Korea, under the MCH Law promulgated in 1973, induced abortions are allowed within 28 weeks from the date of conception in the following four grounds: possibility of fetal impairment (eugenic grounds); contagious diseases on the part of one or both parent(s); forced rape or incest; impairment of the pregnant woman's physical or mental health.

The induced abortion rate has kept on increasing since the government initiated the family planning programme in 1962. The rate for the 20-24 year age group reached a plateau in 1990 and has since been decreasing (Table 5.3). For this young age category, the induced abortion rate for 1996 was almost half that for 1990. For the 1990-1996 period, this decline was also pronounced for the 25-29 year age group. Despite the decline for the 20-29 age group over the seven-year period, in 1996 the number of abortions in the 20-24 age group comprised about 40 percent of the total number of abortions in the entire 20-44 age category compared with only 36 percent in 1993. In other words, while the abortion rate for 20-24

year olds declined, their share of total abortions increased.

Two factors account for the increased concentration of abortions in this 20-24 age group. One has to do with a lower family planning practice rate for this group. The contraceptive practice rate for this age category stands at around 50 percent, a level far lower than the national family planning practice rate of 80.5 percent. The second explanation has to do with the fact that, unlike women in other categories, a larger number of those in this 20-24 age group favour such unreliable contraceptive methods as condoms and the rhythm method. By contrast women in the 35-44 age category resort to sterilization, and their overall family planning practice rate exceeds the 90 percent-level, which in turn accounts for the low abortion rate for this age group (Table 5.3).

**Table 5.3 Induced abortion rates (abortions per thousand married women), 1975-1996**

Age category	1975	1984	1987	1990	1993	1996
20-24	63	91	102	186	105	79
25-29	86	146	103	112	94	51
30-34	158	115	71	60	63	49
35-39	153	40	29	21	25	16
40-44	75	20	7	6	1	3
Total abortion rate	2.7	2.1	1.6	1.9	1.4	1.0

Source: Cho et al. 1997.

As for the reasons for induced abortion, in the 1997 National Survey, 49.7 percent of 2,394 women who experienced induced abortion replied that they had to resort to abortion because they did not want any more children, a reduction on the 1994 National Fertility and Family Health Survey, when 58.4 percent of 2,541 women had the same answer. Both in 1994 and in 1997, 11.0

percent said they had abortion for the purpose of birth spacing (Table 5.4).

**Table 5.4 Distribution of married women who have experienced induced abortion by reason (in percent), 1994 and 1997**

Reason	1994	1997
Child unwanted	58.4	49.7
Birth spacing	11.1	11.0
Health of mother	9.7	10.6
Foetal impairment	5.1	3.6
Premarital pregnancy	3.3	4.0
Family discord	1.7	1.9
Economic reasons	3.7	7.3
Sex pre-selection	1.7	2.6
Other	5.3	9.3
Total	100.0	100.0
Number	2,541	2,394

Source: Cho et al. 1997.

**Sex preference.** There is clear evidence that some women, numerically quite a small group, are resorting to induced abortion in order to have a son rather than a daughter, after determining the sex of the fetus by amniocentesis (Table 5.5). Almost certainly, this is the major factor contributing to the unusually high sex ratios at birth, in particular, those for the third and higher birth order. The TFR for 1995 of 1.7 implies that the majority of couples wanted at least one child, consequently the sex ratio for first births, although somewhat higher than expected, fell within the usual range of about 105-108.

However, beginning at the second birth order, recent ratios have deviated greatly from the norm, as more and more couples have decided to abort, either because they did not want a child at all or because the fetus proved to be of the sex that they did not favour, or

both.

The imbalance of the sex ratio at birth has declined annually from a peak of 115.3 in 1993 to 110.1 in 1998, but rather than reflecting a change in sex preference, this can be attributed to the government's strict enforcement of the medical law, which prohibits fetal sex determination procedures and stipulates a fine or imprisonment for infringement. Therefore, there must be an enhanced flow of information, public education and communication through various forms of mass media, raising awareness of the serious social and cultural effects of an artificially unbalanced sex ratio at birth for us and our descendants. There also needs to be self regulation by the medical profession to ensure elimination of practices to achieve socially unacceptable outcomes. Such changes need to be supported by continuous improvement of the social system and policies for promoting the status of women.

**Table 5.5 Sex ratio at birth (males per hundred females) by birth order, 1980-1996**

Year	Total	Birth order			
		1	2	3	4 and over
1980	105.3	106.0	106.5	106.9	110.2
1985	109.5	106.0	107.8	129.1	148.7
1990	116.8	108.7	117.2	191.0	218.9
1994	115.3	106.0	114.2	205.9	227.7
1995	113.3	105.9	111.8	178.2	213.9
1996	111.6	105.3	109.8	165.5	190.1
1997	108.2	105.1	106.3	133.6	156.1
1998	110.1	105.9	108.0	145.0	155.2

Source: National Statistical Office (NSO) various dates.

***Pregnancy wastage.*** The number of pregnancies and the extent of pregnancy wastage are two of the more significant indicators reflective of reproductive maternal health. The reduction in the number of pregnancies would save many women from the so-called

maternal depletion syndrome resulting from a large number of pregnancies. Even if the number of pregnancies is limited to one or two, maternal health may be seriously impaired if those pregnancies do not come to term.

In Korea, the average number of pregnancies per woman decreased from 3.5 in 1991 to 3.0 in 1994 and to 2.8 in 1997. In 1991, 44.9 percent of the total 7,462 married women aged 15-44 surveyed experienced more than four pregnancies, whereas in 1994 31.7 percent of the total 5,183 women in the same age category had more than four pregnancies. In 1997, only 29.2 percent of the total 5,418 women in the same age group had more than four pregnancies. KIHASA's 1997 National Survey shows that there exists a clear difference in the number of pregnancies by age and education. Excepting those aged less than 24 years who have not yet completed their childbearing, the number of pregnancies is positively related to the age of women. Those aged 40-44 years had on average 3.5 pregnancies, while those aged 25-29 years had only 1.9 pregnancies. The level of schooling showed an inverse relationship with the number of pregnancies: those with more than college-level education had on the average 2.4 pregnancies, and by contrast, those with less than primary school education had 3.8 pregnancies on average.

The decrease in the number of pregnancies, *inter alia*, has to do with the continuing fall in infant mortality rate, the prevalence of contraceptive use among women of childbearing age, and the sustained socio-economic development of the country. As far as pregnancy wastage is concerned, data for 1994 and 1997 imply a gradual improvement in maternal health (Table 5.6). However, more than 35 percent of 1997 pregnancy outcomes are accounted for by pregnancy wastage, and most of the pregnancy wastage is due to induced abortions. Unsafe abortion, along with haemorrhage, obstructed labour, infection, and pregnancy-induced hypertension, is one of the five main causes of maternal death. The fact that a

large proportion of the pregnancy wastage results from induced abortions points toward the urgent need to implement measures to reduce induced abortions.

**Table 5.6 Pregnancy outcomes for married women aged 15-44 years (in percent), 1994-1997**

Pregnancy outcomes	1994	1997
Full-term parturition	61.0	62.9
Pregnancy wastage	36.9	35.5
Still birth	0.4	0.3
Spontaneous abortion	8.2	9.1
Induced abortion	28.3	26.1
Currently pregnant	2.1	1.6
Total	100.0	100.0
Number	15,316	15,311

Source: Cho et al. 1997.

*Adolescent sexual problems.* In Korea, with the centuries-old neo-Confucian mores being greatly modified in the last couple of decades, adolescent sexual activity leading to teen-age pregnancy has emerged as one of the country's more serious social problems. For instance, a 1992 study of students at middle school, high school, vocational school, and of adolescent inmates in two other institutions revealed that 5.5 percent of 3,611 third-year middle school, 15.4 percent of 3,756 third-year high school students, 37.7 percent of 777 vocational school students, and almost two-thirds of 255 adolescents in the institutions reported having had sexual intercourse at least once.

In the absence of knowledge on contraceptives and of adolescents' willingness to resort to contraceptive methods, even if contraceptives are easily accessible to them, adolescent sexuality is most likely to end up in teen-age childbearing. Pre-marital pregnancies often lead to pregnancy-related complications resulting



from unsafe induced abortions. Adolescents often have no choice but to resort to unsafe abortion to avoid having to leave school. Unmarried women are more likely to seek abortions from untrained practitioners, often because of fear, shame, and lack of money, and to delay seeking medical care for abortion complications.

Unsafe abortions are the leading cause of maternal deaths around the world and the World Health Organization (WHO) estimates that 13 percent of all pregnancy-related deaths result from abortion complications. A recent U.S. Census Bureau report points out that in 1994-1995 over half of the women aged 15 to 44 years seeking abortions were unmarried.

The government's current adolescent programme designed to control adolescents' sexual activity before marriage needs to be drastically revised to better suit the rapidly changing environment Korean adolescents find themselves in. The programmes for training of the teachers in reproductive physiology need to be strengthened and adolescent counselling programmes developed. Government programmes on adolescent sexuality are currently the responsibility of three separate government offices: the Ministry of Education, the Ministry of Health and Welfare, and the Ministry of Government Administration and Home Affairs. Such policies and their implementation need to be reformulated so that one single government office controls the programmes.

***Child care and the empowerment of women.*** Reproductive health and reproductive rights of women are closely related to the socio-economic system of the society in which they find themselves. In particular, the changing family structures and opportunities for female labour force participation strongly influence every aspect of women's lives.

In 1996, the labour force participation rate among married women was 48.7 percent, and the rate can be expected to continue to increase with the expansion of education opportunities for

women and the continuing reduction in family size. With the small family norm becoming ever more pervasive, married women will face difficulties in child rearing, and may still not be able to participate in labour force even if they want to for want of child care.

In the 1997 National Survey by KIHASA, 50.6 percent of the 3,546 married women surveyed said they cannot work because of their children, while only 15.8 percent replied they could not work because they could not find any work. Among women with infants, 72.7 percent (total sample size: 485) preferred their kinsfolk to look after their children while they are away from home working. Nevertheless, 63.6 percent of working mothers replied that they would send their children to creches if such facilities were available.

### **Policies on the elderly**

Major consequences of rapid fertility decline include the growth of the elderly population. Though Korean society is characterized by a strong tradition of familial support for the elderly, these customs are under pressure due to societal change. Moreover, elderly people are living longer, which means that they are more susceptible to chronic health problems that may demand long-term treatment and constant nursing care. The implications in terms of health costs for family care givers are serious.

Public pension programmes, public assistance based on the Livelihood Protection Law, and old age allowance are three components of public policy that aim at enhancing the economic security of the elderly in Korea. The Government Employee pension scheme was instituted in 1960 and the Military Personnel pension was instituted in 1963. The Private School Teachers' Pension was implemented in 1975. The National Pension scheme was instituted in 1988 for people employed in workplace with 10 or more employees. In 1992, the National Pension Act was amended to expand the coverage to workplace with 5 or more employees.

National Pension provisions was expanded to rural area in 1995. Under a special provision, those between the ages of 60 to 65 years old can also apply for pension before they reach age of 71. Finally, The compulsory coverage of the National Pension Scheme was expanded to the urban self-employed in 1999.

Public assistance based on the Livelihood Protection system, was enacted in 1961 and revised in 1982 and 1997. Public assistance aims to guarantee a minimum standard of living and enhance the self-reliance capabilities of the poor, who have no one to support him, or whose household members cannot provide for him or her without assistance. They include older persons who are unable to support themselves.

An old age allowance was provided to poor elderly persons since 1991 as a Special Scheme to Guarantee a Minimum Standard of Living. The government expanded the allowance from the limited number of elderly to the elderly who were between 65 to 79 years of ages (229 thousand) and to the elderly of 80 or over old (37 thousand) under Livelihood Protection, with an increase in amount of money. Since the National Pension System did not most of 65 years or over old persons, the old age pension came to replace the old age allowance with the amendment of the Welfare Act for the Elderly in 1997, which became effective since 1998. Pensions that are eligible for Old Age Pension must be Livelihood Protection recipients who are 65 years of age or over and must be below the government's minimum income and asset level.

To enhance employment of the elderly, there are three programs that include the Elderly Job Placement Center, Elderly Workplace and Elderly Employment Promotion. Based on the Elderly Employment Promotion Programme enacted in 1991, establishments with 300 employees are to employ the aged workers by more than 3 percent of the total employees. The Act also recommends the government to provide more training facilities and more job information for the aged workers. Although the Act lacks

compulsory enforcement, its effects seem to be tremendous. The public enterprises extended the mandatory retirement age up to 60 and leading private enterprises followed the practices of the public sector.

The Elderly Job Placement Center was started in 1981 to provide older persons with leisure time and opportunities to earn money. The Elderly Workplace program was started in 1986 to support employment opportunities for the older persons. The Employment Promotion Law, enacted in 1991, encourages firms to employ 3 percent or more of its employees from among the population aged 55 and over. In addition, the law stipulates that 60 occupation categories should be preferentially allocated to older persons.

## **Conclusion**

In the past, Korea's family planning programme placed emphasis on population quantity control. As a consequence, the fertility rate has rapidly declined coinciding with the decline in working age population since the mid-2010s and rapid population ageing. This population phenomenon will eventually cause a serious deficit of the labour force and an increase of social welfare costs in Korea.

Although some policies have been instituted to increase the fertility rate and to check the rapid decline in the fertility, such policies cannot guarantee success. The policy promoting the influx of the migrants will be ineffective due to its negative impact on the society. Thus, the policies to be considered in preparation for the change in the size and structure of population in the future will include the policies to improve the quality and welfare of the population.

The future population quality programme should cover much broader issues of women's reproductive health and reproductive rights. The Korean government took a step in the right direction when, in June 1996, it adopted, a new population policy focusing

on population quality and family welfare.

In view of the high rate of pregnancy wastage, measures have to be taken to strengthen the birth registration and reporting system of physicians to better facilitate child-care monitoring services, in particular, antenatal and postnatal care, immunization services and nutritional supervision. In the past, FP services mainly focused on married women of reproductive age, to the neglect of adolescents and post-menopausal women. The present high rate of induced abortion among unmarried women is a matter of grave concern from the point of view of reproductive health. Sustained efforts should be made to eliminate unwanted pregnancies and prevent the spread of STDs. It is strongly recommended that the government revise school curricula to include more information on adolescent sexuality and other social issues such as drug abuse.

In addition, multisectoral national plans and strategies to deal with acquired immune-deficiency syndrome (AIDS) should be integrated into population and development strategies. Also, educational counselling on these issues from a family planning standpoint would be most desirable.

Efforts should also be made to have as many women and the elderly as possible participating in the labour force. It may not be feasible to achieve significant improvement in the female labour market. However, one cannot simply disregard the many well-qualified women who are in search of employment after completing childbearing and child rearing. For them, the government and private business enterprises should adopt a system of flexible working hours or a home-based working system, that is, include them as part of an IT system appropriate to a contemporary information society. The development of a variety of after-school programmes and the expansion of the current nursery school system are two of the many services that would help improve the implementation of reproductive health.

In order to improve employment of the elderly, the environment

that makes the employment of the elderly feasible should be emphasized. This environment may include the provision of job training, reallocation of job, and provision of subsidies and tax reduction for the enterprises who employ the elderly. Both public and private sectors should be encouraged to employ the elderly according to the Elderly Employment Promotion Programme and even above the criterion, with increase in the occupations categories as appropriate for the elderly.

In response to the expected labour shortage, the mismatch problem of youth labour markets, which currently leads the high unemployment rate for the younger ages, needs to be solved, although it cannot be a solution for the problems inherited from the change in the age structure. Vocational training needs to be modified and flexible enough to meet the needs which will be caused by the expected labour shortage as well as changes in the other social and economic circumstances such as industrial structure, employment structure, production process, technology, and the education system. In addition, the vocational training needs to be provided not only for the youth but also for the female, the aged, and the disabled.

The government is very cautious in inviting foreign workers, fearing the possible undesirable social tensions and repercussions. Economic cooperation with North Korea could be a positive solution for solving labour shortage problems since North Korea workers have the technical know-how as well as disciplined spirit to be employed in labour intensive industries. At the same time, the government needs to encourage investments in labour-saving technology in the hope that we can utilize the saved labour force in labour intensive industries.

The family health and welfare programmes must be promoted through an integrated approach. Because of the anticipate large increase in the welfare requirements of elderly people's health, income, and leisurely activities, there needs to be expansion of the

scope of the existing health programmes to includes such welfare functions as home-nursing and day-care services, as well as child nursery programmes.

In spite of the new population policies adopted in 1996, a continuation of the decline in the fertility rate will eventually lead to the lack of labour and increase in the aged population, increasing the burden on the social welfare costs and accelerated dissolution of the family due to increase in the proportion of non-married population and divorce rate, resulting in a serious social challenge. Accordingly, efforts should be made at maintaining the optimum fertility rate through emphasizing the welfare of women and children, improving the population quality through strengthening health promotion and reproductive health programmes, stabilizing the social insurance finance and alleviating the labour shortage through gradual extension of retirement age, and integrating the health and welfare services, which will be systematically connected to the comprehensive population policy.

## References

- Cho, Nam-Hoon, et al. 1994. *Changes in Population Size and Structure and Their Policy Issues and Measures*, KIHASA.
- \_\_\_\_\_. 1997. *1997 National Fertility and Family Health Survey Report*, KIHASA.
- Cho, Nam-Hoon. 1996. *Achievements and Challenges of the Population Policy Development in Korea*, KIHASA.
- Chung, Kyung-Hee and Mee-Kyung Suh. 1996. *The Changing Structure of the Korean Family and Policy Issues*, KIHASA.
- Höhn Charlotte. 1987. "Population strategies in advanced societies: Pro-natalist and migration strategies", *European Journal of Population* 3.
- Lee, Hung-Tak and Nam-Hoon Cho. 1992. "Consequences of fertility decline: Socio-economic and cultural implications of Korea", *Impact of Fertility Decline on Population Policies and Programme Strategies*, KIHASA.
- Ministry of Labour(1983, 1997), *Labour Demand trend Survey Report*, Each year.
- Ministry of Labour(1999), *Labour White Paper*
- Korea Health Insurance Corporation(2000), *Health Insurance Expenditure Statistics*, Unpublished
- National Pension Research Center(2000), *Estimation of the National Pension Financing, 2000-2050*, Unpublished
- National Statistical Office. Various dates. *Annual Report of Vital Statistics: 1980-2000*.
- \_\_\_\_\_. 1996. *Future Population Projections: 1996-2030*.
- Park, Chai-Bin and Cho Nam-Hoon. 1995. "Consequences of Son Preference in a Low-fertility Society: Imbalance of the Sex Ratio at Birth in Korea", *Population and Development Review* 21(1).



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be huge swings in the level of migration in relatively short time sequences.

Even more tellingly, Lesthaeghe, Page and Surkyn (1988) indicate that, again in the context of low fertility, large-scale migration leads in about fifty years to the migrant population dominating the total population, with the original inhabitants being numerically overwhelmed. This would be politically unsustainable in all advance countries, including Australia. It is also worth mentioning that, contrary to popular wisdom, in Australia the fertility rate of the Australia-born population is actually higher (by a small amount) than the fertility of the non-Australia-born (Abbasi-Shavazi and McDonald 1997).

Third, feminists fear that discussion of low fertility will provide weight to the arguments of traditionalists to send women back into the house. For example, in 1997, the Austrian Defence Minister, Werner Fasslabend, was reported to have said that women had a patriotic duty to have at least two children to increase the number of future earners. In reaction to the objections of Austrian women about the gender inequity implied in this statement, his colleague, the Austrian Family Minister, Martin Bartenstein, added that social policy for men and women could be equalised “when it becomes a reality that the raising of children is done by men and women” (*The Canberra Times* 1977:8). In other words, the male breadwinner model of the family is still shaping Austrian policy and, under this model, women’s place is to look after children - and they should be at home looking after more of them.

Fourth, when fertility fell to around replacement level in the 1930s in several countries, pronatalist movements were associated with fascists and eugenicists. Hence, pronatalism has a very murky past. These associations of pronatalism are not far distant today. Fascism in Australia at present targets non-white immigration, but promotion of white Australian babies would be a logical progression. Furthermore, there are already modern-day eugenicists

who express fears of a fall in the mean IQ of Australians because higher educated women have fewer children than lesser educated women<sup>1</sup>. The well-known book, *The Fear of Population Decline*, by Teitelbaum and Winter (1985), makes the point that there is a tendency for societies in fear of population decline to adopt pronatalist policies “verging on the draconian”.

As a person who believes in the need to bring world population growth under control, who believes that massive immigration is not sensible policy direction for Australia, who believes in the continued advance of feminism and is opposed to fascism and eugenicism, I am reluctant to pursue an issue which may jeopardise all of these causes. On the other hand, low fertility in advanced countries is a reality which cannot be ignored. Indeed, failure to address the issue of low fertility in a sensible and non-draconian way will undoubtedly contribute to the arguments of the opponents of these causes.

### **The incidence and demographic impact of low fertility**

The level of the total fertility rate (TFR) in several countries in 1990 and in 1995/96 is shown in Table 6.1. The TFR is a measure of the average number of children that women would have in their lifetime if they experienced the fertility rates applying at each age in the given year. By any known historical standard, fertility today is exceptionally low. It is lowest in countries in southern and eastern Europe (with the exceptions of Poland and Yugoslavia) and in Germanic countries. It is also very low in Japan. Among the advanced countries, fertility is relatively high (above 1.6 children per woman) in English-speaking countries, Scandinavian countries and France.

It must be emphasised that fear of population decline is very well founded when fertility is sustained at levels as low as those now prevailing in many of the countries shown in Table 6.1. The number

of births in the next 40 years or so is influenced by the current age structure as well as by the fertility rate. For countries like Australia and the United States with relatively young age structures, this means that the number of births will exceed the number of deaths for many years to come. However, for several of the countries listed in Table 6.1 with older age structures, the number of deaths already exceeds the number of births. In Russia, the deficit of births compared to deaths is approaching one million per year, and increasing.

**Table 6.1 Total fertility rates in 1990 and 1995/96 for selected countries**

Country	1990	1995/96
Spain	1.36	1.15
Italy	1.33	1.22
Greece	1.39	1.31
Portugal	1.51	1.40
Russia	1.90	1.34 <sup>a</sup>
Ukraine	1.85	1.40 <sup>a</sup>
Belarus	1.91	1.39
Latvia	2.02	1.16
Lithuania	2.00	1.43
Estonia	2.04	1.30
Hungary	1.87	1.46
Poland	2.04	1.60
Romania	1.83	1.30
Bulgaria	1.81	1.24
Czech Republic	1.89	1.18
Slovakia	2.09	1.47
Croatia	1.63	1.48 <sup>a</sup>
Slovenia	1.46	1.28
Bosnia-Hertzgovinia	1.70	1.47
Yugoslavia	2.08	1.88 <sup>a</sup>
Germany	1.45	1.29

( continued )

Country	1990	1995/96
Austria	1.45	1.42
Switzerland	1.58	1.50
Netherlands	1.62	1.52
Belgium	1.62	1.59
France	1.78	1.72
Norway	1.93	1.89
Denmark	1.67	1.75
Finland	1.78	1.76
Sweden	2.13	1.61
Japan	1.54	1.42
United Kingdom	1.83	1.70
Canada	1.71	1.64 <sup>a</sup>
United States	2.08	2.02 <sup>a</sup>
New Zealand	2.18	2.04 <sup>a</sup>
Australia	1.91	1.80

<sup>a</sup> for 1995; otherwise the rates are for 1996.

Source: de Guibert-Lantoine and Monnier 1997.

The mathematics is simple. If women, on average, have just one child (and some of these countries are close to this level), then the size of the generation will halve in one generation which, in demographic terms, is about 28 years. In 56 years, the generation size will only be a quarter of what it was two generations before. In a population with fertility at the current Italian level, after the impact on the crude birth rate of the current age structure has been wiped out (about 40 years), the population in the subsequent 100-year period will fall to just 14 percent of its initial level. Just as a younger age structure provides a momentum of population increase, an old age structure provides a momentum of population decline. To stop population decline in this situation, fertility would have to return, for a time, to the highest levels ever achieved by European countries.

While many would argue that a fall in the number of people living in many of the countries shown in Table 6.1 would not be a bad thing, sustained very low fertility is not the way to achieve this goal because of the disruptions that are caused to society. It is interesting that we are quick to make this argument about China's explicit one-child policy, but not about the implicit one-child policies that apply in European countries. The latter are seen as having freedom of choice, but little cognisance is given to the institutional constraints upon choice. Sustained very low fertility will change cultures. In particular, the place of children in the culture will be minimised and social institutions will adapt to the relative absence of children. A subsequent reversal of the trend would be difficult and slow.

If the long-term aim is to reduce a population's size, sustained fertility at the current Australian level will achieve this result in good time without major social disruption. Those who take a very long-term view of population growth point out that, in the very long run, world population growth must be close to zero (Wilson and Airey 1997). In most instances, it would be preferable if this result was characterised by gentle swings rather than by violent fluctuations.

### **The nature of contemporary low fertility**

The TFR can be misleading if fertility is temporarily low or high. In particular the rate may be temporarily high if successive groups of women have their children at progressively younger ages (as was the case in Australia in the 1950s and 1960s) and temporarily low if successive groups of women have their children at increasingly older ages (as has been the case in Australia since about the mid-1970s). Thus, an issue for debate at the present time is whether or not fertility is only temporarily low because of the delay of childbearing to older ages that has continued over the past two decades. It is inevitable, however, that a proportion of births delayed will never occur, primarily because life circumstances

change and a birth does not suit new circumstances, but also because the biological time clock eventually rings midnight.

A very interesting recent paper by van de Kaa (1998) shows that women in most European countries have high expectations about the number of children that they will have when they are young, but as women get older, the number of children that they eventually have falls well short of expectations. The extent of reduction tends to be higher for those who have more to lose by reducing their attachment to the paid labour force, that is, for whom the opportunity cost of withdrawal from the paid labour force is highest. Similar data are now available for Australia from the *Negotiating the Life Course Survey* conducted by the Australian National University early in 1997. This Survey also indicates that young Australian women expect to have an average of more than two children. For example, in this Survey, Australian 20-24 year-old women expect to have an average of 2.33 children. Evidence presented later, however, suggests that they will fall well short of this expectation.

The ANU Survey also shows that the expectations of Australian women who have completed secondary school and have a post-secondary school qualification (the more highly educated) drop sharply from age group 20-24 (2.55 children expected on average) to age group 30-34 (1.81 children expected). By age group 30-34, this more highly educated group had actually only 1.7 children on average and so their chance of meeting their expected number of 1.81 children would have to be doubted. At the other end of the education spectrum, those who did not complete secondary school and had no post-secondary school qualification had no change in the expected family size from age group 20-24 through age group 30-34, and their achieved fertility at age group 30-34 (1.96 children on average) was relatively close to their expected number (2.40 children).

Some commentators expect that fertility in low-fertility countries will rise automatically in the future because desired family sizes of young women are above the actual current fertility levels. My view is that achieved fertility will remain below early expected fertility as expectations are modified by the reality of institutional constraints. That is, if women are to achieve the number of children they would prefer to have, there must be changes in social institutions. It will not happen of its own accord.

Elsewhere, I have argued that the countries with very low fertility are countries in which gender equity has advanced in individual-oriented social institutions such as education and market employment, but has been very slow to advance in family-oriented social institutions such as the tax-transfer system, the system of industrial relations, the availability and affordability of family-support services, and most particularly, the family itself (McDonald 1997). On the other hand, countries with relatively high fertility have done better in advancing gender equity in family-related social institutions.

Policy directions which are premised on the male breadwinner model of the family, usually more implicitly than explicitly, will lead to lower fertility. In other words, if a woman is offered major rewards through education and market employment, but those rewards are severely curtailed the more children that she has, then many women will have fewer children than they intended at the outset. Evidence for this point is provided by the fact that, among the advanced countries, those which have higher labour force participation rates for women, that is, those that make it easier for women to combine work and childbearing, have higher levels of fertility.



### **Australian fertility trends**

In the context of the preceding sections, not unexpectedly, my view is that we should be aiming in Australia to sustain fertility at about its recent level of 1.8 to 1.9 children per woman. Indeed, there has been very little movement in the TFR in Australia over the past 20 years. However, there is emerging evidence of a downward trend in the 1990s (de Guilbert-Lantoine and Monnier 1997) (Table 6.1). Furthermore, the TFR is a summary measure which can conceal important sub-trends which themselves may be more indicative of future fertility levels. In a recent paper by Jain and McDonald (1997), it has been pointed out that, while the TFR has dropped only by a small amount in the past 20 years, there have been important sub-trends in Australian fertility.

For successive age cohorts of Australian women, the mean age at first birth is increasing, the average length of the intervals between births is widening, more women are having no children and the mean age at last birth is not increasing. These components determine the level of completed fertility of a cohort, and these trends indicate that completed fertility is falling sharply for each successive age cohort. There has also been a considerable increase in the proportion of births which are born to women who are not currently married (ex-nuptial births). Parity progression ratios (the proportion of women with a given number of children who go on to have another child) have fallen over the past 20 years, but only very slowly, with the exception of the rapid drop in progression from having no births to having one birth.

### **The 1996 Census data**

The purpose of this chapter is to examine what further light can be shed upon the future of fertility in Australia using the results of the 1996 Census. The restoration to the 1996 Census questionnaire

of a question which asks women how many children they have ever had provides a new opportunity to investigate aspects of fertility in Australia, in particular, differences in fertility among women with differing characteristics. Such information is generally not available from birth registration statistics and requires very large sample surveys to collect reliable estimates. It is to be hoped that this fundamental piece of information about Australian society will not be dropped from any subsequent census.

Statistics on children ever born (issue) to women have two problems. First, there is a tendency for women who have never had a child to not answer the question. Attempts are made on the questionnaire to remind women that they should complete this question even if they have never had a child. In general, the levels of "issue not stated" are comparatively low in the 1996 Census, especially in the main childbearing ages. In this study, the main reliance is placed on the statements of women aged 25-29 and 35-39 years. At these ages, the levels of issue not stated were 4.4 percent and 3.8 percent respectively, compared to 7.6 percent and 6.4 percent at the 1986 Census. The levels of "issue not stated" in 1996 are only a little above levels not stated for questions such as labour force status. Therefore, for the purposes of this analysis, it has been assumed that issue not stated is no more likely to mean zero issue than any other number of issue. That is, women with issue not stated can be excluded from the calculations of proportions and means. In terms of the proportion of women who are childless, this assumption may lead to estimates slightly below the actual levels.

The second difficulty with statistics of children ever born is that, for women at younger ages, especially those under 35 years, they represent incomplete fertility. That is, it is uncertain how many more children these women will have in the future. Hence, a fall over time in the average number of children of women aged 25-29 years, for example, could reflect either a delay in childbearing with

the same number of children being born to these women ultimately, or a fall in the ultimate number of children that they have. More particularly for this discussion, one group of women may have a higher number of children at age 25-29 than another group simply because they have their children at an earlier age. Both groups could end up with the same number of children by the time they have completed their childbearing. This point needs to be kept in mind in the interpretation of the results<sup>2</sup>.

### **Intercensal change in the average number of children ever born**

The average number of children has fallen at all ages (except 15-19 years) between the 1986 and 1996 Censuses (Table 6.2). The most substantial drops are for age groups 25-29 and 30-34, partly reflecting the postponement of fertility to later ages, but also indicating an overall decline in fertility with each successive age cohort. The distributions of the number of children ever born to women aged 35-39 in 1986 and to women aged 45-49 in 1996 (the same age cohort) are almost the same (Table 6.3), indicating that the fertility of women aged 35-39 can be considered to be very close to the cohort's completed fertility. Thus, those aged 35-39 in 1996 can be expected to end with slightly more than 2.01 children per woman. This compares with a completed fertility for women aged 40-44 in 1986 of 2.48 children per woman. This reiterates the Jain and McDonald (1997) finding that completed fertility is declining sharply for successive age cohorts. Nevertheless, the completed fertility of women aged 35-39 in 1996 will be close to replacement level (2.06 children per woman).

However, the question remains as to how much the falls in average fertility at ages less than 35-39 will lead to future declines in the completed fertility of age cohorts. Those aged 25-29 in 1986 added an average of 0.91 children as they aged from 25-29 to 35-39.

If this same average number were to be added by the cohort aged 25-29 in 1996, then their fertility at age group 35-39 will be 1.70, indicating a completed fertility well below the long-term replacement level. Applying this same approach to those aged 30-34 in 1996, their completed fertility would be 1.85. While these cohorts could add a higher average number of children in the next ten years because their low fertility may reflect postponement of fertility, rather than truncation, it seems inevitable that the 25-29 year-old cohort in 1996 will have a completed fertility of no more than 1.8 children per woman. This means that the 1996 cross-sectional TFR is indicative of the completed fertility of women aged 25-29 years in 1996. Consequently a rise in the TFR in the short term is very unlikely as the current level approximates the levels of completed fertility of central cohorts.

**Table 6.2 Average number of children ever born to women by age group, Australia, 1976, 1986 and 1996**

Age group	1976	1986	1996
15-19	0.04	0.05	0.05
20-24	0.55	0.38	0.28
25-29	1.52	1.10	0.79
30-34	2.34	1.85	1.53
35-39	2.89	2.24	2.01
40-44	3.15	2.48	2.17

Sources: Australian Bureau of Statistics 1992; Centre for Population and Urban Research, Monash University 1996.

It should also be noted that an argument can be mounted that the 1996 cohorts aged 25-29 and 30-34 will in fact add less to their fertility in the next decade than those who were at the same ages in 1986, if conditions for childbearing in the next ten years are unfavourable. Indeed, the following analysis shows that there were

sharp reductions in the proportions of women with three or more children in the 1986-1996 decade

**Table 6.3 Distribution of the number of children ever born to women by age group, Australia, 1986 and 1996**

Age group	Year	0	1	2	3	4 and over	Total
20-24	1986	75.4	14.7	7.7	1.8	0.5	100.0
	1996	81.5	11.6	5.2	1.3	0.4	100.0
25-29	1986	42.8	20.9	24.1	9.2	3.1	100.0
	1996	56.3	19.4	16.1	5.9	2.2	100.0
30-34	1986	19.9	15.4	36.2	20.0	8.5	100.0
	1996	29.0	18.8	30.7	15.0	6.4	100.0
35-39	1986	12.0	10.5	38.9	25.2	13.5	100.0
	1996	16.3	13.3	36.7	22.3	11.0	100.0
40-44	1986	9.7	8.7	35.6	27.0	18.9	100.0
	1996	12.8	11.3	38.2	24.6	13.2	100.0
45-49	1996	10.7	10.2	39.0	25.6	14.5	100.0

Sources: Australian Bureau of Statistics 1992; Centre for Population and Urban Research, Monash University 1996.

### **Intercensal change in the distributions of the number of children ever born**

While it is the average number of children per woman which determines population growth, women do not have the average number. They have a given number of children and these numbers have a distribution which tells us a great deal about fertility behaviour. Taking the distribution of children to women aged 35-39 as indicative of their completed fertility, around 16 percent will have no children, 13 percent will have one child, 37 percent will

have two, 23 percent will have three, and 11 percent will have four or more.

The commonly accepted norm is two children and indeed the average number of children for this group of women is 2.01, but these data indicate a very broad spread of outcomes with only 37 percent having two children. One in three women in this age cohort has three or more children. This is the main difference between fertility in Australia and fertility in European countries which have very low fertility. Very few women in the countries with very low fertility have more than two children. Giorgi (1993) has shown, for example, that falls in the progressions from the first to the second child and more particularly from the second to the third child account for most of the drop in fertility in Italian fertility over the past 20 years. The difference in the fertility rates of Italy and Australia, therefore, is not due to differences in the proportions of women who have no children.

There were sharp increases between 1986 and 1996 in the proportions of Australian women in each age group who have no children, and fairly sharp falls in the proportions who have three or more children (Table 6.3). The distribution is clearly shifting downwards. Examining these trends, it might be predicted that those currently aged around 30 will have something like the completed distribution of fertility:

Number of children	Percent	Cum.percent
0	22	22
1	16	38
2	35	73
3	20	93
4	5	98
5 or more	2	100

This distribution would yield average completed fertility of about 1.77 children per woman, close to the current TFR. The important point to note from this distribution, however, is that more than 50 percent of the total fertility is contributed by the 27 percent of women who have three or more children. The other 73 percent of women, with 0-2 children, contribute less than 50 percent. This indicates the extent to which the current level of fertility in Australia is dependent upon around one-quarter of all women having three or more children.

However, as Table 6.3 shows, the proportion with three or more children is trending downwards. If all the women in the distribution above who now have three or more children had two children instead, the average fertility in Australia would fall to 1.4 children per woman. If the proportions having no children and only one child were to increase simultaneously then Australian fertility would fall to the levels of Spain and Italy. There are movements in Australia which call for no Australian woman to have more than two children. This is not the right approach to a sustainable population.

### **Trends in differences in fertility 1986 to 1996**

By examining the differences in fertility among sub-groups in the society, it is possible to obtain further insight into the future directions of fertility. For example, if married women have the highest fertility and there is a trend away from women being married, then fertility can be expected to fall. Trends in fertility for women based on three characteristics, marital status, living arrangements and labour force status are shown in Table 6.4. Trends over the same time period in the proportions of women in each category of these characteristics are depicted in Table 6.5. The mean number of children ever born declined between 1986 and 1996 in both age groups for every category in Table 6.4, except for

women who have never married. Never married women aged 35-39 years had markedly higher average fertility in 1996 than in 1986, but their fertility level was still well below that of married women.

**Table 6.4 Women in age groups 25-29 and 35-39, by selected characteristics, with 0 children and 3 or more children (in percentages) and mean number of children ever born, Australia 1986 and 1996**

		25-29			35-39		
		0	3 and over	Mean	0	3 and over	Mean
<i>Marital status</i>							
Married	1986	28.6	15.4	1.38	6.5	42.0	2.40
	1996	39.1	10.8	1.10	8.0	37.8	2.26
Never married	1986	82.1	2.8	0.30	78.2	5.5	0.44
	1996	78.0	3.9	0.38	65.6	8.9	0.69
Widowed, separated	1986	32.2	16.8	1.35	12.8	34.9	2.15
Divorced	1996	34.7	17.0	1.30	16.0	34.1	2.04
De facto wife	1986	59.0	10.0	0.81	21.6	31.5	1.96
	1996	60.7	8.7	0.74	27.5	26.3	1.69
<i>Labour force status</i>							
Employed	1986	64.3	5.3	0.62	15.5	33.3	2.05
	1996	72.7	2.9	0.43	21.1	28.0	1.82
Unemployed	1986	44.4	12.7	1.09	14.0	38.7	2.22
	1996	54.7	8.7	0.83	19.2	31.0	1.92
Not in labour force	1986	11.4	22.2	1.79	6.0	47.2	2.55
	1996	18.9	20.0	1.60	8.3	46.6	2.48

Sources: Australian Bureau of Statistics 1992; Centre for Population and Urban Research, Monash University 1996.



Considering marital status, by far the largest group of women at each census were those who were currently married. This means that changes for this group will have a larger impact on overall fertility than changes for other groups. Tables 6.4 and 6.5 show that the average fertility level of married women dropped markedly between 1986 and 1996 and, at the same time, the proportion who were currently married also fell. Thus, these trends have a combined downward effect upon the overall fertility level. This is not countered by women having children in de facto relationships, a group whose proportion of the population increased between 1986 and 1996, because the average fertility of women in de facto relationships also fell between 1986 and 1996.

Considering labour force status, fertility declined between 1986 and 1996 for all three categories of women. However, the decline is greater for those in the labour force. At the same time, the proportion of women in the labour force increased sharply between 1986 and 1996. Thus, again, both the changes in fertility and the changes in population composition are in the direction of fertility decline.

Furthermore, data not shown in the tables indicate that, between 1986 and 1996, fertility fell by a larger amount for women of low education than for women of high education. For women aged 35-39, the average number of children ever born to those with university degrees was 1.62 in 1986 and 1.55 in 1996. For those with no post-secondary school qualifications, the fall in the decade was from 2.34 to 2.15.

In the light of the above findings, it seems most unlikely that fertility will rise in future because the trends in the composition of the population and in the fertility of individual categories of women all point to further decline. Sustaining fertility at about current levels will not be achieved by reversing the directions of changes in population composition. A return to early and universal marriage and a return to a substantial majority of women being outside the

paid labour force is not a possibility. Indeed, it has been argued (McDonald 1997) that to attempt to reverse these trends would force fertility lower. Countries with very low fertility are all countries in which levels of gender equity are low.

**Table 6.5 Selected characteristics (in percentages) of women in age groups 25-29 and 35-39, Australia 1986 and 1996**

	25-29		35-39	
	1986	1996	1986	1996
<i>Marital status</i>				
Married	64.2	47.2	79.1	70.0
Never married	27.3	45.4	14.0	13.5
Widowed, divorced & separated	8.5	7.4	6.9	16.5
De facto wife	6.8	12.5	3.5	6.3
<i>Employment status</i>				
Employed	55.3	66.0	57.9	64.2
Unemployed	5.9	5.8	4.3	4.8
Not in labour force	38.8	28.2	37.8	31.0

Source: Australian Bureau of Statistics 1992; Centre for Population and Urban Research, Monash University 1996.

### **Differences in fertility in 1996**

The average number of children ever born to women aged 25-29 and 35-39 at the 1996 Census according to a selection of characteristics is shown in Table 6.6. By qualification obtained, fertility falls as education rises in both age groups, but especially in the younger age group. If fertility at age group 35-39 is taken as near-to-completed fertility, then women with a bachelors degree or higher have about 1.55 children on average compared to those with no qualifications who have 2.15 children. Other education categories lie between these two. The differences in fertility by education are much larger at age group 25-29 years, probably

mainly reflecting the delay of childbearing for the more educated women.

Somewhat similar patterns emerge for women in different occupation groups. It should be pointed out that to have an occupation in the census, a woman must be employed, so the occupation data shown do not include women who were not employed. Fertility in age group 35-39 is lowest for professionals (1.61) and highest for women working in the trades or as production process workers or as labourers (2.01), a result which might have been expected on the basis of the differences by education level.

The next block of data in Table 6.6 shows, however, that when the analysis is restricted to wives in registered marriages, there is a much smaller difference between the fertility of professionals (2.02) and the fertility of those in trades and labouring (2.23). This suggests that the lower fertility of all professionals might be due to a lower proportion of these women being wives in a registered marriage, that is, that the lower fertility is due to a lower marriage rate. This appears not to be the case as 66 percent of professionals and 69 percent of those in trades and labouring were wives in registered marriages, that is, there was almost no difference in their marriage rates. Therefore, the lower fertility of all professionals must have been due, in large measure, to the lower fertility of professionals who were not wives. This is confirmed by other data in Table 6.6. Professionals living in de facto relationships have much lower fertility than those in trades and labouring who were living in de facto relationships. The fertility differences by occupation were even wider among women who were not married or in a de facto relationship (for age group 35-39, an average of 0.76 for professionals and 1.40 for trades and labouring).

Finally, Table 6.6 shows differences in fertility by levels of family income. The comparisons are shown only for women who were living in couple relationships because family income is only

comparable for couples. Table 6.6 shows that for wives, the differences in fertility by income level for age group 35-39 are small, although there is a tendency for fertility to fall as income rises. Mirroring the results for occupation, however, the fertility differences by income level for women living in de facto relationships were much wider with fertility falling sharply as income rises.

**Table 6.6 Mean number of children ever born to Australian women aged 25-29 and 35-39, by selected characteristics 1996 Census**

	25-29	35-39
<i><b>Qualification attained</b></i>		
Bachelor degree and above	0.22	1.55
Diploma	0.45	1.89
Skilled vocational	0.71	1.95
Basic vocational	0.66	1.98
None and not stated	1.02	2.15
<i><b>Family income (wives)</b></i>		
<\$300	1.44	2.26
\$300-\$499	1.59	2.39
\$500-\$799	1.44	2.40
\$800-\$1199	0.96	2.27
\$1200 and over	0.56	2.11
<i><b>Family income (de facto)</b></i>		
<\$300	1.23	1.91
\$300-\$499	1.56	2.22
\$500-\$799	1.09	2.02
\$800-\$1199	0.44	1.60
\$1200 and over	0.18	1.09
<i><b>Occupation (all women)</b></i>		
Managers and administration	0.44	1.77
Professionals	0.21	1.61
Associate professionals	0.36	1.72

( Continued)		
	25-29	35-39
Clerical	0.49	1.90
Trades, process workers	0.70	2.01
<b><i>Occupation (wives)</i></b>		
Managers, administration	0.81	2.19
Professionals	0.42	2.02
Associate professionals	0.63	2.07
Clerical	0.79	2.17
Trades, process workers	1.07	2.23
<b><i>Occupation (de facto)</i></b>		
Managers, administration	0.20	1.01
Professionals	0.13	1.01
Associate professionals	0.24	1.19
Clerical	0.36	1.45
Trades, process workers	0.63	1.79

Source: Centre for Population and Urban Research, Monash University 1996.

Thus fertility is highest in every socio-economic group for women who are wives in registered marriages and, for these women, the differences between groups are not large. Compared to ten years ago, the proportions of women in all categories who are in registered marriages has declined and this has contributed substantially to the fall in fertility overall. By age group 35-39, however, socio-economic differences in fertility are mainly due to the higher fertility of women of lower socio-economic status who are not in a registered marriage. Overall, the conclusion is that the trend towards lower fertility is a trend for almost all types of women. Instead, maintaining the current level of fertility requires programmes directed at all women, and all men.

## **Conclusion**

Data from the 1996 Census of Australia indicate that fertility in Australia is very unlikely to rise in the future from the current level of about 1.8 births per woman. By contrast, future falls in fertility appear to be quite likely. For those categories of women for whom it was possible to examine the change in fertility over time, almost all had experienced a fall in fertility between 1986 and 1996. Furthermore, trends in the composition of the population are in the direction of groups that have lower fertility.

In particular, women are achieving increasingly higher qualifications and are becoming much more likely to be engaged in the paid labour force. Higher educated women have fewer children than lower educated women and fertility falls as involvement in the paid labour force rises. Thus, on present trends, Australia can expect its fertility rate to fall to lower levels, I have argued in this chapter and in an earlier paper that a further fall in Australia's fertility is not in Australia's long-term interest nor, for that matter, in the long-term interest of almost any developed country.

The solution to this situation does not lie in restricting women's education and labour force participation. This is clearly unacceptable to most women, and nowadays, to most men. The solution does not lie in increasing the migration intake. In demographic and social terms, migrants are not a substitute for children. The solution does not lie in draconian approaches to increasing the birth rate such as banning contraception or abortion or baby farming. There is only one viable approach and that is to institute conditions under which women and men can participate in paid employment and have the number of children that they say they want.

The new liberal economic agenda which dominates present policy formulation does not provide much reassurance that this will be achieved. There is very strong direction in present policy to cut

services for families with children. Most notably and most importantly, formal child-care services are becoming increasingly unaffordable. The National Commission of Audit Report (1996: 123) urges that support from government to families with children should be limited only to “poor” families. Support for middle-class families with children is negatively labelled as “middle-class welfare”. The tag of “middle-class welfare” is even being extended to such basic support for children as primary school education. Of course it is more efficient in the short term for governments to cut their support of children. It is the longer term consequences that are the problem.

The National Commission of Audit suggests that we need to be making these efficiency changes so that we can deal with the future burden of an ageing population, but it is obvious that when people have fewer children as a result of these policy directions, the ageing problem will be considerably worse than the Commission envisaged. There seems to be a blind faith among policy makers that Australians will continue having children despite the institutional hurdles that they will have to jump in order to do so. Many will do so, but many others will reduce the number of children that they intended to have.

Lack of support for families with children is not just a direction of government policy. It is also the direction of employment policy. The family-friendly employment policies of the late 1980s are being reversed in the interests of lower costs. Indeed, it is cheaper for an employer not to support the family needs of an employee. The workplace, if anything, is reverting to the male breadwinner model under which the employee is expected to put the workplace first, to be available out of hours and not to have children who get sick or have school holidays. Insecurity of employment is also a major determinant of fertility decision making. If you feel that your job may be cut or that you may have to move around the country in order to stay in work, then you will avoid long-term decisions – and

children are for the long term. The labour market rewards the flexible and mobile, but family life is not flexible or mobile.

Low fertility is not a product of people rejecting the family way of life. As the fertility preference surveys cited earlier show, most young people still want to have a partner and to have children. However, they change their minds in the face of reality. Low fertility is the result of conflict between a liberal economic agenda and the persistence of social institutions which are premised on the male breadwinner model of the family. It is this combination which is fatal to contemporary childbearing.

The liberal economic agenda needs to find space for the fulfilment of longer-term social and economic goals. It needs to find space for children. This can only be achieved through programmes which emphasise gender equity and programmes which recognize that governments must be involved in providing very substantial transfers through services or money to those who have children. In the nineteenth century, when policies in relation to children were first introduced by governments, there was a recognition that children and their education were valuable to the whole society, not just their parents. In sharp contrast, policy today says to parents: you had them, you pay for them. We could all pay for this approach in the long term.

## Notes

1 Research of my own ancestry, just about 100 percent farm or mine labourers, reassures me that my ancestors would not have been a target of a pronatalist campaign based on the educated.

2 Some researchers mistakenly believe that this problem is overcome by age-standardization of data on children ever born. Two groups of women may end their childbearing with exactly the same average fertility but the one that has children earlier will have a higher age-standardized rate.



## References

- Abbasi-Shavazi, M. and P. McDonald. 1997. "Fertility and multiculturalism: Immigrant fertility in Australia, 1977-1991", paper presented to the International Population Conference. Beijing.
- Australian Bureau of Statistics. 1992.
- Centre for Population and Urban Research. 1996. Monash University.
- de Guibert-Lantoine, C. and A. Monnier. 1997. "La conjoncture démographique: L'Europe et les pays développés d'outre-mer", *Population*, No. 5. pp.1204-5.
- Giorgi, P. 1993. "Una rilettura della fecondità del momento per ordine di nascita in Italia nel periodo 1950-1990 considerando la struttura per parità", *Genus* 49(3-4). pp.177-204.
- Jain, S. and P. McDonald. May 1997. "Fertility of Australian birth cohorts: components and differentials", *Journal of the Australian Population Association* 14(1).
- Lesthaeghe, R., H. Page, and J. Surkyn. 1988. "Are immigrants substitutes for births?", IPD-Working Paper 1988-3, Interuniversity Programme in Demography. Brussels.
- McDonald, P. 1997. "Gender equity, social institutions and the future of fertility", Working Papers in Demography No. 69. Canberra: Research School of Social Sciences, Australian National University.
- National Commission of Audit, Report to the Commonwealth Government, June 1996. Canberra: Australian Government Publishing Service.
- Teitelbaum, M. and J. Winter. 1985. *The Fear of Population Decline*. San Diego: Academic Press.
- The Canberra Times*. August 22, 1977, p.8.
- Wilson, C. and P. Airey. March 27-29, 1997. "What can transition theory learn from the diversity of low-growth demographic regimes?". Paper presented to the Annual Meeting of the Population Association of America, Washington DC.
- van de Kaa, D. 1988. "Postmodern fertility preferences: from changing value orientation to new behaviour", Working Papers in Demography, No 74. Canberra: Research School of Social Sciences, Australian National University.

## 6. Below Replacement Fertility in Australia Trends and Implications

*Peter McDonald*

### **Introduction**

In a century that has seen phenomenal growth in the number of people inhabiting the planet and massive efforts to bring the growth of world population under control, it is ironic that the emerging demographic issue at the end of the century is concern about low fertility in the advanced countries.

For several reasons, there is a degree of reluctance to raise the issue of low fertility. First, world population continues to grow at a massive rate. The United Nations medium projection shows world population increasing from 5.7 billion in 1995 to 9.4 billion in 2050 – and this projection is based on the assumption that fertility will continue to fall in developing countries during this period. There is a fear, therefore, that discussion of low fertility in advanced countries may jeopardise efforts to bring about the still-essential fertility declines in developing countries.

Second, opponents of immigration in countries such as Australia fear that recognition of low fertility may lead governments to pursue vigorous immigration programmes in an attempt to compensate for the effects of very low fertility. Lesthaeghe, Page and Surkyn (1988) have demonstrated that if governments were to take this approach, they would be wrong. Immigration is a very inefficient mechanism for slowing down ageing. Ageing is only significantly slowed by massive immigration. Also, in the context of low fertility, to keep the total population at a constant level, Lesthaeghe, Page and Surkyn (1988) show that there would need to

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## 7. Fertility Decline and Population Policy in China

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### **A brief review of population growth and policy**

Population growth in China accelerated from the eighteenth century. The Chinese population increased from 200 million in 1764 to 450 million in 1840. From the mid-nineteenth century, China suffered from wars, famines and epidemic diseases. When the People's Republic of China (PRC) was founded in 1949, the official population was 540 million. This number increased rapidly following the founding of the PRC, reaching 600 million in 1954, 700 million in 1964, 800 million in 1969, 900 million in 1974, 1 billion in 1981, 1.1 billion in 1988 and 1.2 billion in 1995. The time intervals for adding 100 million people to China's population were 9 years and 10 months (1954-64), 5 years and 1 month (1964-69), 4 years and 9 months (1969-74), 7 years and 6 months (1974-81), 6 years and 5 months (1981-88), and 6 years and 9 months (1988-95). The population of the PRC was estimated to have reached 1.236 billion at the end of 1997.

The result of the 1953 China population census shocked the policy makers. In 1954, the Chinese government approved a document issued by the Ministry of Public Health entitled *The Regulation of the Use of Contraception and Induced Abortion*. In 1956, in a document entitled *The Framework of State Agricultural Development*, it was clearly pointed out that in all areas with high population density (except the minority-nation regions) contraceptive methods should be introduced and planned births should be encouraged. This was the prelude to the implementation of the family planning programme in China.

The family planning office under the State Council of China was established in 1964 to manage the family planning programme which was widely adhered to in urban areas. Unfortunately, the so-called “cultural revolution” interrupted the normal working routine of Chinese society including the implementation of the family planning programme. Fertility remained at a very high level through the 1950s and 1960s and the echo effect of this baby boom was evidenced in large numbers of women who were of reproductive age in the 1980s and 1990s. This necessitated the relatively strict family planning regime which has been in place since 1973.

In this year (1973), for the first time, the Chinese government incorporated specific policy measures for a reduction in the population growth rate in the National Economic Development Plan. A formal policy of “better to have one child for each couple, with a maximum of two” , and “later marriage, more widely spaced and fewer births” was forged then. In 1980, in the light of the extremely high proportion of women of reproductive age, the edict of “one child per couple except in minority-nation regions” was issued. Concurrently, a more open, market-oriented economic policy was being implemented in China.

The Chinese government was well aware of the disadvantages of the pressure of large population numbers. However, it took several years for the Chinese population at large to adjust to the constraints of the new small family-size environment. Eventually, more and more people recognized the opportunities that the new socio-economic policy created for many people with fewer children to accumulate wealth. It has been estimated that more than three hundred million births were averted in China from 1970 to 1997 in response to the implementation of the family planning programme.

Four stages in the implementation of the PRC’s population policy can be identified. In the 1950s the PRC had no explicit policy. The

1950s were the baby-boom period worldwide and the Chinese too were in a phase of expanding their families. At this stage the government paid more attention to economic reconstruction and social development (health care, education). It took time for the Chinese government to recognise the population problem and no explicit population policy was formulated or announced at this time.

It was only in the early 1960s that family planning was introduced to the populations of selected cities and counties. By then the government had come to recognize the threat to economic development of such rapid population growth as that of the 1950s and to realize that family planning was the only practicable solution to the problem. Special offices were established in selected cities and counties such as Shanghai, Beijing and Tianjin to implement family planning programmes and to accumulate practical experience.

By the beginning of the 1970s, the principles of later marriage, more widely spaced and fewer births were being actively promulgated throughout the entire country. At this stage the view was that one was good, two were acceptable, three were too many. The concept of the one-child family was already being encouraged in different ways in different regions.

In the 1980s and since, the policy has been to continue to encourage late marriage, later births, and fewer but healthier babies. For the majority of the population this limited couples to one child. However, in rural areas, a second child was acceptable but should be spaced at four or five years after the first. Minority groups were encouraged to plan their families but were subject to fewer regulations. Provincial governments were responsible for encouraging restraint among their own minorities.

Since the mid-1990s, a new stage in population policy has emerged in which quality family planning service and reproductive health care are emphasised. However, before addressing these present and future trends, the experience of Shanghai is outlined as

an exemplary study of achievements in population policy implementation.

### **Shanghai: case study of population policy implementation**

Shanghai provides a good example illustrating the population transition and policies reform which have occurred in China. The authorities in the Shanghai government realized the importance of population issues as early as the 1950s. Since the mid-1950s, the government has encouraged people to implement family planning practices and the city/region has made considerable progress in this regard. In the period 1950 to 1954, the CBR and natural increase rate of the Shanghai population were 52.74 per thousand and 45.62 per thousand respectively. Family planning clinics were set up in all hospitals in 1954 to encourage people to adopt birth control practices. Sterilization and induced abortion were legalized in 1955. At the beginning of 1958, the target was set by the People's Congress of the Municipality to reduce the CBR from 40 per thousand in 1957 to below 20 per thousand in the second five-year plan period. In February 1958, the Birth Control Committee of Shanghai was formed. Two months later, a special Technology Guide Committee for Birth Control was established by the Public Health Bureau of Shanghai and 159 clinics were opened in various districts across Shanghai to meet the demand.

Encouraged by their achievements and the positive reaction from the mass of the population in the 1950s, the city authority of Shanghai stepped up its efforts in the 1960s. A series of incentives was introduced including paid leave for urban workers and farmers who adopted family planning methods and an extra bonus for farm workers who were absent from work for reasons related to family planning implementation (e.g., sterilization). In the first half of 1963, 330,000 people in Shanghai watched a scientific education film entitled *Birth Control* to obtain first hand information about

family planning. A leadership group in Shanghai promoting scientific research on contraceptives was set up in 1964. Since then, effective contraceptives have been produced and distributed by Shanghai to many other parts of China. The CBR of Shanghai itself declined to 12.54 per thousand by 1967.

In the 1970s and 1980s, Shanghai further improved its family planning services. Each woman of reproductive age received a health-care card, and professional family planning workers visited regularly to provide the necessary services. Rigorous training was required for the field workers, and only those who passed specialized examinations held by the public health department could deliver technical family planning services. Population and reproductive health education courses were extended to middle schools and evening schools. The volunteers from NGOs such as the Women's Federation, Youth College and others contributed to education activities held at various district adults' schools. It was estimated that 97.22 percent of the eligible people were covered by the education network operating in Shanghai.

Since the beginning of the 1990s, the authorities in Shanghai have made reproductive health care their main priority. Special exhibitions featuring aspects of science, health, gender and reproductive health have been organized. More than 400,000 people visited the exhibitions. Different forms of consultation facilities, such as a hot-line, opportunities for individual face-to-face conversations and special mailing boxes have been provided to meet the needs of different groups. All these activities enhanced the implementation of the family planning programme and gave more information and choices for clients to meet their own needs. The TFR of Shanghai declined from 4.75 in the 1950s to 0.91 in 1997. Life expectancy rose to 77.2 years: 75.18 for males and 79.21 for females. Meantime, the infant mortality rate declined to 6.47 per thousand live births. These achievements in Shanghai were a product of the joint efforts of the government, NGOs, communes,



and people at large. This pattern is perceived as a model for the China of the future.

### **The current status of population policy**

To date, the family planning programme has been adhered to reasonably well. In recent years more attention has been given to improving the quality of service to couples of reproductive age. The successful elements of the programme are threefold, namely, education on family issues, the instigation of regular services, and the promotion of contraceptive use. These have been presented as advancing the family planning programme in conjunction with local economic development, economic activities of the family and a happy and prosperous family life. Special emphasis has also been given to projects which provide women with information, technology and financial support to help them actively participate in economic activities and, incidentally, give less time to produce and rear children. The project seems to be very successful.

The main objectives of the present family planning policy of the Chinese government are: to promote late marriage and later, fewer but healthier births; to prevent genetic defects; to advocate the practice of “one couple, one child” , and to encourage birth spacing for those couples who would have practical difficulties if they had only one child. Family planning policy, and specific regulations in areas inhabited by minority groups, are formulated by their respective provincial and autonomous regional governments.

The economic and social development plan of China stated that the average annual natural increase rate should not exceed 12.5 per thousand population in the ten-year period from 1991 to 2000. The plan also stipulates that the total population of the PRC should be limited to 1.3 billion or less by the year 2000 and to 1.4 billion or lower by the year 2010. In the longer term the intention is to stabilize numbers at 1.6 billion by the middle of the twentieth-first

century, a total considered appropriate to the carrying capacity of China in terms of natural resources.

Following the demographic transition in China, a dramatic change in age structure has been observed. Figure 7.1 illustrates the comparison of age structures at four population censuses of China. The broadening of the base of the age pyramid for the 1990 Census is obviously the echo of the baby boom of the 1960s.

### Fertility transition

Historically, China had very high fertility and mortality rates. Before the founding of the PRC, the crude birth rate (CBR) in rural China was around 40 per thousand. Even in urban areas, the CBR was about 20 per thousand. Life expectancy was a mere 35 years in the 1930s and 1940s. Correspondingly, the infant mortality rate was at a level of about 200 per thousand live births (Table 7.1).

**Table 7.1 Infant and neonatal mortality (deaths per thousand live births) in China from the 1940s to 1980s**

Year	Infant mortality rate	Neonatal mortality rate
1944-1949	203.60	92.55
1950-1954	197.93	67.96
1955-1959	107.64	51.01
1960-1964	109.92	46.94
1965-1969	72.13	35.52
1970-1974	50.00	29.14
1975-1979	45.41	24.36
1980-1984	39.26	22.90

Source: Statistics of the Public Health Ministry of China.

Traditionally, Chinese have aspired to the ideal of living in an extended family of several generations. Usually, the oldest man was the head of the household and controlled property and other

resources of the family. This phenomenon definitely encouraged large families and high fertility. Son preference was also a strong social concept among the ordinary Chinese people and probably contributed to the high fertility levels. At the beginning of the 1950s, the government of China began to concentrate on economic development and health care issues. At this stage contraceptive methods were used only for health reasons. Soon, serious employment and food supply problems made the consequences of population pressure apparent to the government. However, it took a long time for the pressure to be widely acknowledged by the ordinary citizen.

Partly spurred on by the painful experience of the famine period of the early 1960s, the family planning office under the State Council of China was established in 1964 and started to implement the official family planning programme in large cities and selected rural areas. Although the initial response was quite positive, the onset of the so-called “cultural revolution” interrupted the implementation of these procedures and brought another baby-boom period to the Chinese. When the Chinese government revived the family planning programme in 1973, the total population of China had already reached more than 800 million. Curbing population growth became an urgent target for Chinese society. It was at this stage that the “marry later, and have well-spaced and fewer births” policy was introduced, and the majority of Chinese broadly accepted the idea.

Encouraged by the successful implementation in the 1970s, China expanded its efforts to reduce population growth. A static population/zero-growth target was set and later marriages, well-spaced and fewer births, healthier babies, and preferably only one child per couple continued to be encouraged by the government. The total number of family planning workers reached 400,000 in 1996. According to non-governmental organisation (NGO) statistics, as many as 50 million people are believed to be working as

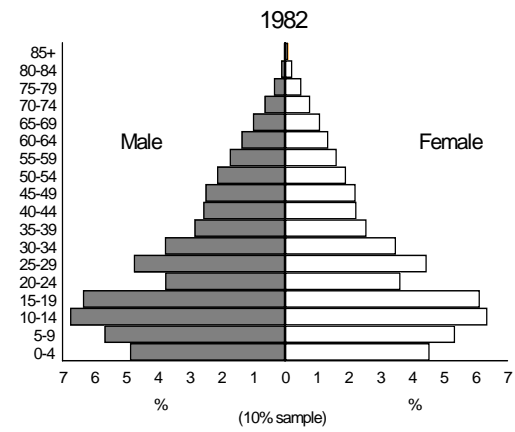
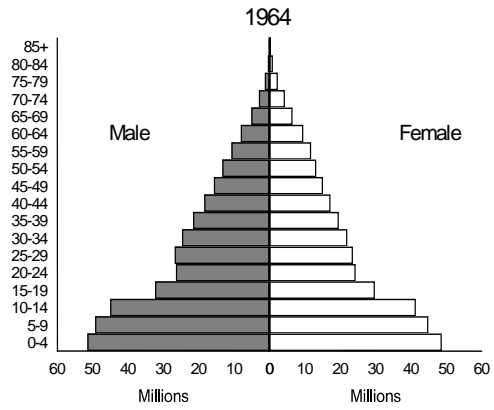
volunteers in the family planning and reproductive health fields in their home towns and villages. A large proportion of these volunteers comprise retired people.

They play an important role in many small villages by making use of their position as respected members of the older generation dedicated to teaching young people.

Five main actions are being taken to implement this policy. First there is the establishment of an education component influencing the whole of society. Population education courses have been incorporated in school curricula so that children can learn the concepts of controlling population growth, protecting the environment and integrating development programmes with demographic plans. A second line of action is raising the status of women, protecting women's rights and encouraging women to participate in economic development. These are viewed as important measures to reduce fertility and to contribute to the solution of population problems.

**Figure 7.1 Population pyramids for China, 1953, 1964, 1982 and 1990**





A third measure is to provide eligible women with suitable contraceptive methods. There are more than 40 factories producing different types of contraceptives in China. With the help of UNFPA, the Chinese government has taken a range of effective actions to improve the quality of IUD and other methods in order to protect the health of both mothers and children. Hospitals, mother and child health-care centres, and family planning clinics have cooperated to form a network covering both urban and rural areas for the convenience of the people.

Fourthly, measures include involving NGOs which play an important role in family planning in China. The Family Planning Association alone has 900 thousand sub-associations and more than 50 million voluntary workers. They organise people to help each other and to inform and educate people on modern family planning and reproductive health matters. NGOs aim to provide a suitable environment and congenial conditions for implementing the family planning programme.

Fifthly, organising special family planning agencies at all levels of government is an integral part of the programme. The Chinese government regards family planning as an essential national service. The budget for the family planning programme has increased by about 18 percent each year from the late 1980s. The population plan is integrated with the socio-economic development plan so that the whole of society is aware of the issues and can contribute to the effort of achieving population targets.

The data in Tables 7.2 and 7.3 illustrate the main achievements of the national population and development programme. The regional statistics in Table 7.3 show the close relationship between education, economic growth, overall level of development and population growth. It is clear from Table 7.3 that the majority of the developed areas in China have lower fertility rates. However, some provinces reached low fertility rates at a relatively low development level. At the national level, the birth rate had dropped to 16.57 per

thousand in 1997 from 33.43 per thousand in 1970. The total fertility rate (TFR) declined to below two in recent years from 5.81 in 1970.

**Table 7.2 A demographic profile of the People's Republic of China <sup>a</sup>, 1949-1997**

Year	Total population (10,000)	Number of births (10,000)	Crude birth rate(per thousand)	Crude death rate (per thousand)	Natural growth rate(per thousand)
1949	54,167		36.00	20.00	16.00
1950	55,196	2,023	37.00	18.00	19.00
1951	56,300	2,107	37.80	17.80	20.00
1952	57,482	2,105	37.00	17.00	20.00
1953	58,796	2,151	37.00	14.00	23.00
1954	60,266	2,260	37.97	13.18	24.79
1955	61,456	1,984	32.60	12.28	20.32
1956	62,828	1,982	31.90	11.40	20.50
1957	64,563	2,169	34.03	10.80	23.23
1958	65,994	1,909	29.22	11.98	17.24
1959	67,207	1,650	24.78	14.59	10.19
1960	66,207	1,392	20.86	25.43	-4.57
1961	65,859	1,190	18.02	14.24	3.78
1962	67,295	2,464	37.01	10.02	26.99
1963	69,172	2,959	43.37	10.04	33.33
1964	70,499	2,733	39.14	11.50	27.64
1965	72,538	2,709	37.88	9.50	28.38
1966	74,542	2,578	35.05	8.83	26.22
1967	76,368	2,562	33.96	8.43	25.53
1968	78,534	2,756	35.59	8.21	27.38
1969	80,671	2,715	34.11	8.03	26.08
1970	82,992	2,736	33.43	7.60	25.83
1971	85,229	2,578	30.65	7.32	23.33
1972	87,177	2,566	29.77	7.61	22.16
1973	89,211	2,463	27.93	7.04	20.89

(continued)

Year	Total population (10,000)	Number of births (10,000)	Crude birth rate(per thousand)	Crude death rate (per thousand)	Natural growth rate(per thousand)
1974	90,859	2,235	24.38	7.34	17.48
1975	92,420	2,109	23.01	7.32	15.69
1976	93,717	1,853	19.91	7.25	12.66
1977	94,974	1,786	18.93	6.87	12.06
1978	96,259	1,745	18.25	6.25	12.00
1979	97,452	1,727	17.82	6.21	11.61
1980	98,705	1,779	18.21	6.34	11.87
1981	100,072	2,069	20.91	6.36	14.55
1982	101,654	2,238	22.28	6.60	15.68
1983	103,008	2,058	20.19	6.90	13.29
1984	104,357	2,055	19.90	6.82	13.08
1985	105,851	2,202	21.04	6.78	14.26
1986	107,507	2,384	22.43	6.86	15.57
1987	109,300	2,522	23.33	6.72	16.61
1988	111,026	2,457	22.37	6.64	15.73
1989	112,704	2,407	21.58	6.54	15.04
1990	114,333	2,391	21.06	6.67	14.39
1991	115,823	2,258	19.68	6.70	12.98
1992	117,171	2,119	18.24	6.64	11.60
1993	118,517	2,126	18.09	6.64	11.45
1994	119,850	2,104	17.70	6.49	11.21
1995	121,121	2,063	17.12	6.57	10.55
1996	122,389	2,067	16.98	6.56	10.42
1997	123,626	2,038	16.57	6.49	10.06

<sup>a</sup> excluding the population of Hong Kong and Macau.

Source: State Statistics Bureau of China.

China's mortality rate fell to a little less than seven per thousand in the late 1980s and has stabilized at that level since. Life expectancy rose from 35 years in the 1940s, to 65 by the end of the 1980s and to 70 in the mid-1990s. A nation-wide network of family planning and maternity and child health services has been



established, with more than 3,000 health-care centres at various levels. The family planning programme has helped to free many married women from high order births and heavy family burdens. More and more women now have the opportunity to participate actively in matters relating to political and economic affairs. About 20 per cent of the deputies in the People's Congresses at different levels, are females, clear evidence of the rising status of women in China.

### **The consequences of fertility decline**

#### **An immediate consequence for economic development**

The immediate result of lower fertility is to save expenditure on raising children. By applying trend analysis it was estimated that births averted from 1971 to 1992 due to the family planning programme were of the order of 250 million. According to economists, the births foregone will save about US\$500 billion, which was more than the GNP of China in 1993. One-third of the savings occurred between 1971 and 1992, and two-thirds are anticipated between 1993 and 2007. By contrast, the total input to family planning from 1971 to 1992 was roughly US\$10 billion including both government and non-government sources. This represents a major saving to society.

It is estimated that the child-raising expenditure saved from 1971 to 1990 due to the impact of the family planning programme was of the order of 2,500 billion yuan, and that an additional 1,828 billion yuan will be saved in the period 1991 to 2005. These savings make it possible for government at different levels to invest more in productive sectors although part of the savings may be spent on consumption to improve the quality of life. At least ten percent of the national income growth for this period was estimated to have been made from the savings of lower population growth. In

estimating the increase of consumption due to the saving from lower fertility, some economists have suggested that something in the range of 10 to 47 percent of the consumption increase in the period 1971 to 1990 could be so attributed.

**Table 7.3 Socio-economic parameters of the People's Republic of China by province for various years in the 1990s**

Province	Illiteracy rate (percent)	Population urban (percent)	Mid-year population (ten thousands)	Population density (per km <sup>2</sup> )	TFR
Beijing	8.70	73.08	1,082	644	1.33
Tianjin	8.92	68.65	879	777	1.66
Hebei	15.21	19.08	6,108	325	2.33
Shanxi	11.30	27.72	2,876	184	2.46
Nei Mongol	15.39	35.12	2,146	18	1.97
Liaoning	8.81	50.86	3,946	270	1.51
Jilin	10.49	42.65	2,466	132	1.81
Heilongjiang	10.87	47.17	3,521	78	1.71
Shanghai	11.04	66.23	1,334	2118	1.34
Jiangsu	17.23	21.24	6,706	654	1.94
Zhejiang	17.46	32.81	4,145	407	1.40
Anhui	24.23	17.90	5,618	404	2.51
Fujian	15.63	21.36	3,005	248	2.36
Jiangxi	16.22	20.40	3,771	226	2.46
Shandong	16.87	27.34	8,439	539	2.12
Henan	16.15	15.52	8,551	512	2.90
Hubei	15.79	28.91	5,397	290	2.50
Hunan	12.10	18.23	6,066	286	2.71
Guangdong	10.45	36.77	6,283	353	2.51
Guangxi	10.61	15.10	4,225	178	2.73
Hainan	13.97	24.05	656	193	2.93
Sichuan	16.24	20.25	10,722	188	1.76
Guizhou	24.27	18.93	3,239	184	2.96
Yunnan	25.44	14.72	3,697	94	2.59
Tibet	44.33	12.59	220	1.8	4.22

( Continued )

Province	Illiteracy rate (percent)	Population urban (percent)	Mid-year population (ten thousands)	Population density (per km <sup>2</sup> )	TFR
Shaanxi	17.62	21.49	3,288	160	2.71
Gansu	27.93	22.04	2,237	49	2.34
Qinghai	27.70	27.35	446	6	2.47
Ningxia	22.06	25.72	466	90	2.61
Xinjiang	12.75	31.91	1,516	9	2.50

Sources: State Statistics Bureau of China.

Census Bureau of China.

### The impact on employment

According to 1982 and 1990 population census data, the labour force of China has increased by 138 million in this eight-year period. This is, of course, largely a product of the baby boom in the 1960s. Even though economic development was tremendously rapid, the number of new employees in the intercensal period was only 125.69 million. The 1990 Census data indicated that 72.1 percent of employees were working in the primary sector. A large quantity of surplus labour (estimated at 100-150 million workers) exists in rural China which is a serious obstacle for farmers who want to adopt modern agricultural equipment, as only by working in the traditional way is it possible to make full use of this labour. By the end of 2000, the surplus labour in rural China is expected to have increased to more than 190 million.

In urban areas, experts estimate that 20 to 25 percent of employees are surplus. Serious unemployment and underemployment problems result in lower economic efficiency in all industrial sectors. The authors estimate that there will be over ten million unemployed people in urban areas of China around the year 2000. The success of the family planning programme has greatly relieved the problem since the number unemployed could well have been three to four times greater if family planning

programmes had not been implemented. In rural China, the surplus labour force might have been doubled at the beginning of the twenty-first century were it not that the family planning programme had been implemented in such a resolute way. The socio-economic repercussions for China and the world of a further 450 to 500 million workers added to a country which already has a population of 1.2 billion are unthinkable.

### **Benefits for women and the family**

Women are the group most strongly in favour of the family planning programme. There were many examples in China of women being forced by their mothers-in-law or husbands to have more children than they wanted. In traditional China, particularly in rural areas, women were the property of their husbands and their value lay in creating heirs for their husbands' families. Since the 1950s, the situation has changed greatly. In 1998, there were 10.82 million female cadres in China working in various roles, and women generally have more opportunities for alternative activities to those of childbearing and child rearing. More than ten thousand women have leading positions in government at county level and above. Even in rural areas, young women have only one or two children in their families which gives them more chance to learn new skills and to participate in economic activity. More than 47 million rural women are now employed in township enterprises.

For the first time a large number of females can avail themselves of higher educational opportunities and become expert in a range of activities. In Jilin province for example, more and more women are becoming the breadwinners and heads of households in their families, giving them a much greater say in deciding family affairs including decisions on family size. According to a survey conducted jointly by Chinese and Japanese experts in Jilin province in 1985, married women expressed little desire for more children.

The majority of women wanted to stop after their second birth. Only about five per cent of women expressed a desire to have three or more children, compared with 20 per cent who wanted only one child. Since 1985, the government has stepped up its efforts to help women participate in socio-economic activities reinforcing the trend for fewer and fewer women to have a second child.

In recent years, the actual fertility level in many provinces has been much lower than the official target. The lower fertility has benefitted women by providing opportunities for raising their status. In turn, women with higher status have shown less interest in more children, further slowing population growth. Furthermore, rapid economic growth and a higher female economic activity participation rate have both served to raise the cost of children. The obvious benefits accruing to small families provide an example for the women (particularly the young women) targeted by family planning.

### **Poverty alleviation by slowing population growth**

The former State Chairman of China, Li Xiannian, shocked the world in 1978 when he admitted that there were still over 200 million people in China living below the poverty line. There are various reasons for these people to be poor. Most of them were living in so-called "poor regions" where population numbers were far beyond the carrying capacity of the regional resources. For instance, the "three Xi" region in north-west China is a typically poor region where the annual rainfall is only 150-450 mm but the annual water evaporation is 1500-2000 mm. The desert area has expanded year after year. In the seventh five-year plan, the State Council identified 331 poor counties requiring special attention by the state, and the provincial government identified a further 368 counties as poor regions requiring the special attention of the provincial government.

In 1985, it was estimated that there were 125 million people living below the poverty line at a time when the average annual income of farmers was \$US40 per person. By the end of 1991, the number of people living below the poverty line was reduced to 80 million. In this period, 1985 to 1991, the per capita output of the poor regions increased by 70.9 percent. One of the important determinants of this change was the rapid decline in the rate of population growth through reductions in fertility and organised out-migration.

There are distinct differences in regional fertility and population growth patterns between poor and other areas. High fertility was often observed in poor areas where, in general, the TFRs were double those of regions classified as economically developed. Over-population greatly accentuates the poverty problem in China and most people are well aware of the necessity for reducing population growth in these poor areas.

### **The negative side and other impacts of low fertility**

Not all impacts of low fertility are positive. At least three negative impacts of low fertility in China can be identified.

*Acceleration of the ageing process.* The dramatic drop in fertility over a short period has led to a substantial increase in the proportion of aged people in the population in the twenty-first century. Although the expanding number of aged people is largely determined by the baby boom which occurred before the present family planning programme was implemented, the aged dependency ratio will greatly increase due to the shrinkage of the young adult groups. Economic growth and the social-service system need to be prepared to cope with an enlarged problem in the 2020s. In urban areas, this issue is already a major problem for city

authorities. Important characteristics relating to trends in the ageing population of China are listed in Table 7.4.

**Table 7.4 Past and future estimates of the elderly population in China, 1950 to 2060**

Year	Population		Population		Sex ratio		Life expectancy	
	60+ (10,000)	65+ (10,000)	60+ (percent)	65+ (percent)	60+ (males per 100 females)	65+ (males per 100 females)	males (years)	females (years)
1950 <sup>a</sup>	4040	2434	7.32	4.41	81.69	74.27	60.12	63.31
1960 <sup>a</sup>	4691	2842	7.09	4.29	80.59	73.67	62.12	64.81
1970 <sup>a</sup>	5341	3250	6.44	3.92	79.49	73.06	63.62	66.31
1980 <sup>a</sup>	7192	4564	7.29	4.62	86.09	79.48	66.43	69.35
1990	9874	6416	8.64	5.61	91.08	83.69	67.00	72.00
2000	12881	8795	9.99	6.82	90.59	84.28	68.60	74.00
2010	16817	11086	12.08	7.96	88.50	82.39	70.60	76.50
2020	24019	16926	16.07	11.33	86.54	81.23	72.60	79.00
2030	35708	24299	22.89	15.58	85.48	79.38	74.60	81.50
2040	42265	33538	26.56	21.08	82.11	77.94	76.60	84.00
2050	47070	36208	29.52	22.71	80.12	74.03	78.60	86.50
2060	50275	40344	32.19	25.83	80.20	75.72	80.60	87.50

Year	Median age (years)	Dependency ratio		Ageing index (percent)
		15-60 (percent)		
1950 <sup>a</sup>	21.68	77.29		42.92
1960 <sup>a</sup>	20.89	79.68		41.05
1970 <sup>a</sup>	20.09	82.06		39.42
1980 <sup>a</sup>	21.58	67.98		39.48
1990	24.42	56.77		41.45
2000	28.77	56.73		43.80
2010	32.79	49.86		46.63
2020	35.07	56.32		48.64
2030	38.50	70.11		50.72
2040	41.43	75.80		52.10
2050	42.75	83.89		52.68
2060	44.23	89.12		53.22

<sup>a</sup> Calculated from the China Population Data Compilation, 1949-1985.

***Changes in family size and structure.*** The changes in family size and structure because of low fertility, are not necessarily positive or negative but are still somewhat uncertain. However, such rapid change may have considerable impact on social life and behaviour, and the stability of the traditional commune. According to surveys in 1982 and 1990, two-generation families still comprise over two-thirds of all family types and there is little recorded difference between rural, town and city localities (Table 7.5)

***The increase in the sex ratio at birth.*** Although fertility has declined rapidly, the preference for a son has not faded so quickly. Some people practice sex-specific abortion in order to get a son. In other families, girls do not get the same treatment as boys. Together, these practices have led to an increase in the sex ratio at birth and in the sex ratio of children.

**Table 7.5 Distribution of family types (in percent), 1982 and 1990**

Family Type	1982				1990			
	Total	Rural	Town	City	Total	Rural	Town	City
One person	8.0	7.5	11.3	9.3	6.3	5.9	7.8	7.0
One couple	4.8	4.5	5.7	5.7	6.5	5.8	8.0	8.2
One generation & other relatives or non-relatives	1.2	1.1	1.8	1.7	0.8	0.7	1.2	1.2
Two generations & other relatives or non-relatives	67.3	67.3	67.7	67.2	68.1	68.2	68.5	67.2
Three generations or more	18.7	19.7	13.5	16.1	18.5	19.4	14.4	16.5
Total	100	100	100	100	100	100	100	100

Sources: State Statistics Bureau of China 1988a, 1988b.



**Measures directed at improving the position of women**

In many respects, these potentially negative impacts relate to issues involving the role and status of women. The following measures have been recommended in order to help women.

***Enhance education and communication.*** There is a need to enhance education and communication on the nature and importance of these population issues so that the whole of society recognizes the rights and contributions of women in the development process. At the same time, it is necessary to increase financial support for women in women-specific projects to help them actively participate in aspects of socio-economic development. Actively promoting the implementation of laws and regulations which protect women from discrimination is also necessary.

***Promote the education of women.*** High priority should be given to promoting the education of women. The goal of the government in this regard is to eradicate illiteracy for three million women each year and to develop further vocational/technical education which is widely accessible to women. By 2000, 70 percent of urban women and 50 percent of rural women should have access either to on-the-job or other practical training. Such actions will increase the employment rate of women and relieve poverty in rural areas. Undertaken jointly with the women-specific projects, these measures could achieve even more.

***Create work opportunities for women.*** Setting up 20,000 women-dominant economic entities in poor areas, and providing 800,000 jobs for poor women would have a major impact in resolving issues related to the role and status of women in Chinese society. Linking the family planning programme with women-specific projects could help develop model households which shed poverty quickly, with a view to rescuing many more from poverty.

***Link the population programme and social programmes.*** Greater benefits can be achieved by linking the population programme with social welfare and other social programmes such as health services, maternity and child care, and the old-age social security programme, integrating more effectively the population and development plans.

***Eliminate violence against women.*** Reduction in and eventual elimination of violence against women require the stepping up of efforts to encourage better behavioural standards, advocacy of public attitudes of respect and protection for women, opposition to discrimination against women, and condemnation and punishment of all violent acts against women. Greater importance should be attached by government and NGOs to handling appropriately the complaints lodged by women through correspondence or personal visits, to ensure that victims are assisted, their difficulties are removed and justice is served.

***Support efforts to improve domestic routines.*** Efforts are also required to reduce pollution by toxic gas from cooking, to provide more high quality gas fuel, and to step up availability of central heating in cities, all of which will greatly benefit women's health. Active support should be given to women in their attempts to improve the supply of quality cereals and vegetable oil, dry and fresh fruits, forest products and natural produce.

### **Population prospects and policy issues**

Even though the family planning programme led to a series of positive socio-economic consequences, the basic situation for China as a country is still one of high population density and limited natural resources. China's share of the world's arable land is a little over nine percent. The amount of arable land per person in China is 0.09 hectares, much less than the 0.81 hectares of the United States and the 0.3 hectares on average for the world as a whole.

More than 300 cities in China suffer from a water-supply shortage. In rural areas, there are 50 million people and more than 30 million livestock none of which can be guaranteed adequate supplies of potable water. Shortages of food, employment, housing, transportation, education and in many other socio-economic areas all arise from overpopulation.

Many scientists in China have studied the population issue from different angles but all have reached a similar conclusion: the present-day carrying capacity of China is about 1.6 billion to 1.7 billion people, and from the economic development perspective, a population of 0.7 to one billion people is probably more appropriate as the optimum-sized population for China. These numbers may be modified over time with developments in science and technology, but there is no doubt that China is approaching its population limits. To guarantee that the Chinese people can live in some degree of economic, social and physical safety, the government has no choice but to maintain its antinatal policy. Such a policy benefits not only China but the whole world.

The successful implementation of the family planning programme has provided a solid basis for China to maintain its low fertility level. Stable low infant mortality, increasing life expectancy and sustained economic development provided the necessary psychological assurance encouraging more and more people to believe in the viability of the small-family norm and that it would benefit them in a number of ways. Surveys conducted in different regions showed that even in rural areas, more than 80 percent of women of reproductive age do not want more than two children. High proportions of women are even in favour of a one-child family. These young women were born after the introduction of the family planning programme, learnt about it as part of their schooling, and expect to adopt a different lifestyle from their parents, including the benefits of having only a small family.

**Table 7.6 Women of reproductive age (in millions), 1981 to 2000**

<b>Year</b>	<b>Number of women aged 15-49</b>	<b>Number of women aged 20-29</b>	<b>Number of women aged 23</b>
1981	245.4	81.26	8.14
1982	252.0	83.68	6.88
1983	260.0	88.27	6.01
1984	268.5	90.85	6.18
1985	276.7	93.90	11.02
1986	284.5	96.70	13.39
1987	291.7	98.44	11.97
1988	298.9	102.10	12.18
1989	305.2	109.44	11.66
1990	310.4	116.32	11.17
1991	314.8	122.72	12.79
1992	318.9	123.72	13.25
1993	323.0	122.17	12.94
1994	326.8	121.17	12.63
1995	329.5	119.04	12.03
1996	332.6	116.87	11.83
1997	335.8	114.69	10.97
1998	337.3	111.06	10.05
1999	338.4	106.77	9.49
2000	339.4	102.06	9.01

Consequently it is much easier to motivate them to accept this family planning philosophy and, partly as a function of their higher education levels, to use contraceptive methods more effectively.

Another factor in favour of low population growth is that the proportion of women of reproductive age, particularly women aged 20 to 29, has declined sharply due to the lower birth rates pertaining to their birth cohorts (Table 7.6). Since the mid-1990s, the number of women aged 20 to 29 in China has gradually declined. After 1998, this trend accelerated. The number of women aged 23 (which is the age experiencing the highest age-specific fertility rate) has

also declined. This demographic circumstance therefore favours a lower birth rate.

### **Towards the twenty-first century**

Future prospects for population change can be inferred from current population projections, and those adopted here are based on the medium variant for China. These projections are based on five major assumptions or conditions. The first assumption is that socio-economic development will continue at a reasonable level so that the desired number of children will not change dramatically in the next half century. This implies that it may be possible for fertility to remain at its present level. The changing age structure of the population will enable China to reach its zero growth population target.

A second assumption is that mortality in China will continue to decline during the twenty-first century due to the improvement of medical science, health services and living standards. However, there is no reason to attribute a high probability to life expectancy rising beyond the present-day life span at best.

Sustainable development is a major concern of the Chinese government. A variety of measures will be taken to persuade people to accept small-family size as the norm and ensure farmers benefit from the family planning programme. Some projects, such as delivery of quality service, promotion of the prosperous family, and implementation of the new family project, are proving very successful in many of the provinces of China and will serve to consolidate family planning in China in the future.

Growth of the urban way of life is expected to continue, and this is a positive feature since urbanization encourages people to change their lifestyles and consequently their views on reproduction. Progress in education will also be a strong factor in promoting modern perspectives on population growth among the Chinese.

**Table 7.7 Population projections by different research agencies**

Research agency	Year of reaching maximum population	Size of maximum population (billions)
SFPC <sup>a</sup> variant 1	2039	1.531
SFPC <sup>a</sup> variant 2	2046	1.603
SSB <sup>b</sup>	2050	1.599
Information Centre	2044	1.550
Information Institute	2040	1.548
CPIRC <sup>c</sup>	2043	1.557
Peking University	2041	1.569
Chinese People's University	2031-2035	1.520

<sup>a</sup> SFPC: The State Family Planning Commission of China.

<sup>b</sup> SSB: The State Statistics Bureau of China.

<sup>c</sup> CPIRC: China Population Information and Research Centre.

Finally, population momentum commits the Chinese population to continuing growth for the next 30 to 40 years. There is some debate among research agencies as to what precisely that growth may be (Table 7.7), although all agree that China will reach something approaching a zero-population growth rate somewhere between 2030 and 2040 with a maximum population size in the region of 1.45 billion to 1.61 billion. Adoption of the medium variant projections to 2050 and the assumed levels of fertility (Table 7.8) indicate that the proportions aged 65 and over will increase steadily throughout this period, approaching twenty percent of the population by 2050. Early action to develop a viable social security system to deal with these huge numbers of elderly and make appropriate adjustments to the socio-economic structure is imperative.

**Table 7.8 Medium variant population projection for China**

Year	Total Population (millions)	Number of births (millions)	Birth rate (per thousand)	Death rate (per thousand)	Natural increase rate (per thousand)	Proportion of population aged 65 and over
1995	1211.21	20.63	17.12	6.57	10.55	6.25
1996	1223.88	20.67	16.98	6.56	10.41	6.38
1997	1238.09	22.39	18.20	6.66	11.54	6.51
1998	1251.60	21.87	17.57	6.71	10.86	6.67
1999	1264.40	21.31	16.95	6.77	10.18	6.81
2000	1276.53	20.80	16.37	6.83	9.55	6.95
2001	1288.07	20.36	15.88	6.88	9.00	7.08
2002	1299.12	20.03	15.49	6.95	8.54	7.20
2003	1309.78	19.80	15.18	7.01	8.17	7.30
2004	1320.10	19.63	14.93	7.08	7.85	7.39
2005	1330.16	19.54	14.75	7.16	7.59	7.49
2006	1340.07	19.57	14.66	7.23	7.42	7.59
2007	1349.94	19.70	14.65	7.31	7.34	7.67
2008	1359.85	19.93	14.71	7.39	7.32	7.75
2009	1369.86	20.21	14.81	7.48	7.33	7.84
2010	1379.95	20.49	14.91	7.57	7.34	7.96
2020	1468.66	19.97	13.63	8.57	5.07	11.05
2030	1520.84	18.70	12.31	10.08	2.23	14.67
2040	1538.25	18.95	12.32	12.05	0.27	19.08
2050	1528.60	18.10	11.84	12.84	-1.00	19.38

## Conclusion

The experience of China illustrates that a sound overall development policy should be formulated to include population issues. The fundamental basis for national policy decisions is the value system of a nation. Through thousands of years, Confucianist teaching has become the centre of the value system of many East Asian countries. Confucianism asserts that people should prioritise the stability and prosperity of the country above individual interests,

and the ruler of the country should treat his people kindly. Even today, the basic concept persists. Only when there is a prosperous country and a stable society is it possible for a person to be certain that the interests of the family will be safeguarded. The moral criteria of such societies tend to encourage people not only to work for themselves, but also to take their share of responsibility for society by appropriately regulating their behaviour. This is the grass-roots approach of the integrated population and development policy of China. The modified expectations regarding the number of children each family should have has demonstrated that the present population policy is generally accepted by the Chinese people.

From the viewpoint of socio-economic development, the goal for China's maximum population size in the long run is 1.5 to 1.6 billion people which, as noted earlier, will be reached toward the middle of twenty-first century. If this upper limit is not to be exceeded an appropriate population size for China in the year 2000 would be below 1.3 billion. The longer-term economic development target for the middle of the twenty-first century is to catch up with the intermediate developed countries. The immense numbers generated by the population growth of China are a serious constraint on socio-economic development and the improvement of people's livelihood. They exert great pressure on the country's employment, education, housing, transportation, natural resources and ecological environment.

In China, the measures that have been and will continue to be taken to solve these problems, include the following. The family planning programme of China is a combination of target-oriented and client-oriented style with the emphasis increasingly on services. Successful examples of this approach can be found in all provinces of China. The improvement in the quality of family planning and maternal and child health care will also be much more strongly emphasized.



High priority will be given to promote the status of women by various means including improvements in education levels achieved, to strengthen the implementation of the “Law on Protection of Rights and Interests of Women” and similar provisions.

Programmes will actively implement the basic national policies on resources and environmental protection so as to ensure a sustainable development process. Appropriate industrial and technological policies will be formulated and implemented.

The population programme will increasingly be linked with social welfare and other social programmes such as poverty alleviation and health-care services in order to make the population and development plan a more integrated one.

Rural-urban migration and urbanization will be promoted in a coordinated manner. Through urbanization, people can be expected to change their lifestyle and hence change their views on expectation of family size. Planned migration will also lead to a better population distribution and optimise socio-economic development.

## References

### Sources of information

- Census Bureau of China. *The 1990 Census of Population*.  
China Population Information and Research Centre.  
Public Health Ministry. *Statistics of the People's Republic of China*.  
State Family Planning Commission of China.  
State Statistics Bureau of China.  
State Statistics Bureau. 1988a. *China Population Statistics Year Book*.  
\_\_\_\_\_. 1988b. *China One Percent Population Sample Survey*.

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## 8. Consequences of Low Fertility and Policy Responses in Thailand

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Napaporn Chayovan

### **Introduction**

During the 1960s and 1970s when population growth was rapid, many international agencies and governments in developing countries considered that rapid population growth was an obstacle to development. One of the principle policies adopted was to encourage reduction in the fertility rate in order to reduce the population growth rate. Each developing nation has its own strategic planning in order to attain a fertility decline. Some have succeeded in achieving reductions even below the level they expected, and some are still struggling to reach their targets. Increasing evidence has shown that recently several developing countries have succeeded in fertility reduction, and some have already gone through all the transition phases experienced in developed nations. Experiences of the successful countries are often cited as a paradigm for countries where fertility levels are still high.

However, being in the post-transition phase does not mean that all population problems are gone. New challenges also emerge. In developed countries, low fertility, especially that below the replacement level, leads to population ageing, which leads to the challenges of welfare, health care, and labour shortage problems. For developing countries, low fertility has also led to changes in the age structure of the population resulting in issues which seem to be even more complex than in developed countries. Each developing nation seems to have different outcomes from low fertility and these also vary from culture to culture. Some have even started to worry whether low fertility in developing countries will also

lead to the same challenges that developed countries face, and what should be done to prevent or cope with the problems.

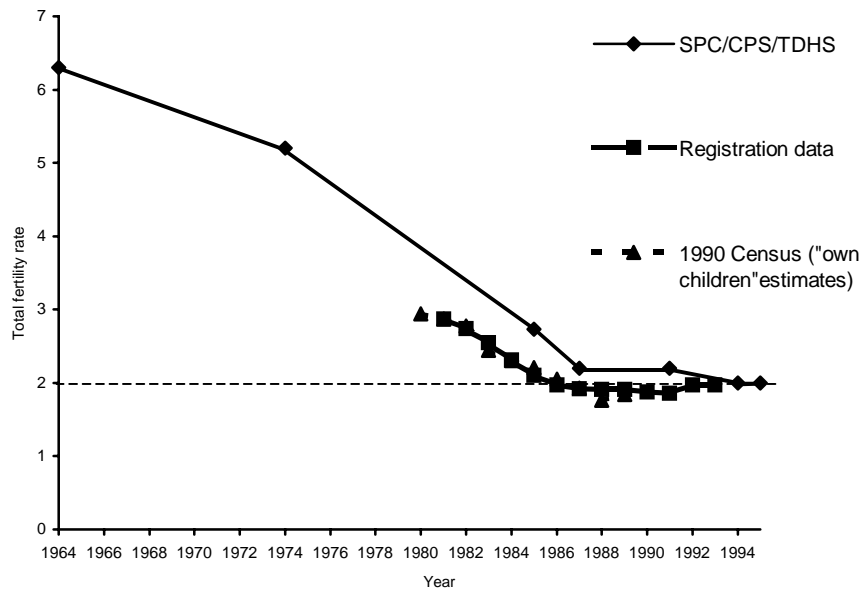
Thailand is one of the countries that has experienced drastic demographic changes. This chapter begins with an overview of the fertility transition in Thailand, and follows with an assessment of the consequences of the rapid fertility decline and possible policy responses.

### **Has Thailand's fertility already reached replacement level?**

The fertility transition in Thailand has been one of the most rapid among Asian countries not yet categorised as a newly industrialized country. The rapidity of the Thai fertility transition is its distinctive feature. Despite the various levels estimated from different sources and by different estimation methods, all evidence is consistent in indicating a virtually continuous decline in fertility through the 1980s. Figure 8.1 presents estimates of the TFR during the 1960s to 1990s based on various sources. In the early 1960s, in the pre-transition period, the estimated TFR ranged from 6.5 to 7.4 births per woman.

The first sign of fertility decline in Thailand appeared in the late 1960s / early 1970s. However, it was not until a decade later that clear evidence of substantial fertility decline was documented. By the early 1970s, the TFR was reported to be about six births or fewer per woman. Once fertility started to decline, the speed of its decline was so dramatic that the TFR dropped from about six children per woman in the early 1970s to 3.4 births per woman in the 1980s, representing a reduction of about 40 percent during the decade 1970 to 1980 (Knodel, Chamrathirong and Debavalya 1987). Fertility in Thailand continued to decline through most of the 1980s and probably the 1990s.

**Figure 8.1 Estimated total fertility rates, 1964-1995<sup>a</sup>**



<sup>a</sup> The TFRs from the registration data represent three-year moving averages of the composite based on Ministry of the Interior results; the "own children" estimates are based on the 1.2 percent sample of the 1990 Census.

Source: Hirschman et al. 1994.

The first evidence to indicate that Thai fertility was close to replacement level came from the results of the Thailand Demographic and Health Survey (TDHS) conducted by the Institute of Population Studies (IPS) in 1987. The TFR of 2.2 per woman reported by the TDHS was met with widespread skepticism, anticipating that this estimate might be too low. However, subsequent surveys and own-children estimates using 1990 Census data provided consistent results confirming that Thai fertility had already reached replacement level during the late 1980s (Hirschman et al. 1994). Recent evidence indicates that Thai fertility has continued to decline through the 1990s (although at a slower pace

than in the 1970s and 1980s) and that below replacement fertility is now a reality. The latest Survey of Population Change by the National Statistical Office showed that the TFR in 1995-96 was about 2.0 children per woman. This rate is close to the rate recorded in the 1996 Contraceptive Prevalence Survey which indicated a TFR of about 1.98 for the period 1994-95, with urban, rural and regional fertility differences still occurring. The TFR for urban areas was 1.70 births per woman, while for rural areas it was 2.08 births per woman. The northeastern region recorded the highest TFR followed by the southern, central, and northern regions (Chamratrithirong et al. 1997). In view of the recent survey results, there is no doubt that fertility in Thailand is now below replacement level.

Over the course of the fertility decline, marriage and childbearing patterns in Thailand have changed. Family formation has been postponed to older ages as reflected by the rise in the age at marriage for both men and women. During the period 1960 to 1990 the singulate mean age at marriage has increased from 21.6 to 23.5 years for women and from 24.5 to 25.9 years for men (National Statistical Office no date). The level of celibacy in Thailand also increased. During the period 1970 to 1990, the proportion never married at age 40-44 rose from 2.9 percent to 4.3 percent for men and from 3.9 percent to 6.8 percent for women. Childbearing was compressed into a narrow reproductive span (Figure 8.2). The mean childbearing age decreased from 30.5 in 1964-65 to about 27.4 in 1985-86, and since then it has stabilized at around 26-27 years (National Statistical Office 1996).

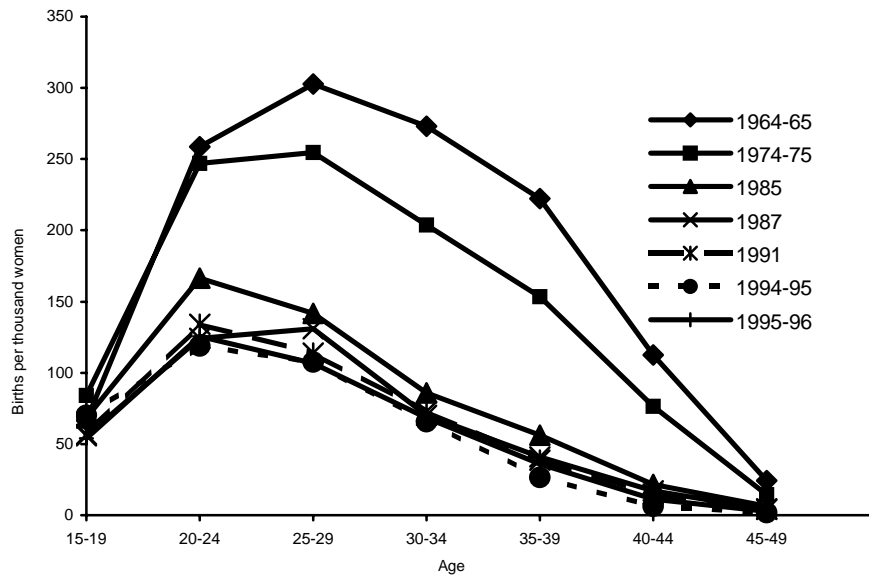
The dominant factor to which the rapid fertility reduction in Thailand can be attributed is the use of contraception. The level of contraceptive prevalence (percent currently using contraception among currently married women aged 15-44) increased from about 14 percent in 1969/70 to 34 percent in 1975, 68 percent in 1987 and 72 percent in 1996. Regional differences in the level of contraceptive prevalence still remain: it is lowest in the south and highest in Bangkok and the central region (Chayovan et al. 1988; Chamratrithirong et al. 1998).

### **Future trends in fertility**

Future trends in fertility in Thailand are issues of concern and interest to both policy makers and demographers. The issues have been debated widely among Thai and foreign experts. While all available evidence confirms the completion of Thailand's fertility transition, uncertainty about the future still remains. At the present time, there are different views regarding the future trends of fertility in Thailand. The first group, which has a pronatalist view, believes that fertility in Thailand will continue to decline further and that Thailand may face the problem of very low fertility that has occurred in European countries, the phenomenon known as the second demographic transition (van de Kaa 1987). The extreme interpretation of this view claims that such low fertility implies the extinction of the Thai race (Pardthaisong 1996). Recently, this view has received extensive attention from the media, but there has been some confusion about the implications of replacement-level fertility and zero population growth.

The annual rates can be affected by temporary changes in reproductive behaviour. Women may simply postpone their family formation by delaying their marriage and childbearing, as reflected by trends in age at marriage and the mean age of childbearing data presented earlier. Consequently, period rates can be deceptive guides to underlying cohort trends. Also, the media often confuse replacement-level fertility with zero population growth, while in actual fact fertility is now slightly below the replacement level, but births still outnumber deaths by 3 to 1 (United Nations 1995). Therefore, Thailand's population, now just over 60 million, is generally expected to increase up to 70-80 million by the year 2020 because of population momentum, representing a large population for the country's limited land area and resources (United Nations 1994).

**Figure 8.2 Age-specific birth rates by five-year age groups, 1964-65 to 1995-96**



Sources: National Statistical Office, Survey of Population Change.  
 Thai Demographic and Health Survey 1987.  
 Contraceptive Prevalence Survey 1996.

Another group considers that Thai fertility will stay around the replacement level and is unlikely to fall far below replacement level in the foreseeable future. The evidence that supports the latter view includes data on fertility preferences. Knodel et al. (1996), based on the Social Attitudes Toward Children Surveys in 1988 and 1993, found a consistent picture of declining family-size preference, but the preference seems to have a lower limit of two children for the vast majority of regional or socio-economic groupings. Moreover, recent trends based on a comparison of the 1988 and 1993 data, do not show evidence among any group for an increased proportion of women wanting fewer than two children. The reason for the resistance to a reduced family size below two children appears to be a pervasive cultural desire to have at least one child of each sex, in sharp contrast with the Confucianist preference for at least one son.



A third group argues that the prediction of future fertility should not overlook marriage patterns. Guest and Jones (1996) argue that in the case of Thailand, the change in marriage patterns may also result in further fertility reduction.

At this stage, it is not easy to predict the future trends of fertility for Thailand. There are several factors that need to be considered for short-term and long-term trends. In the short term, Thai fertility will probably remain or stabilize at the present level which is slightly below replacement. There are two important factors which seem to have a strong impact on such a trend. One factor is the current Asian economic crisis that started in July 1997 and has hit hardest in Thailand, Indonesia, and Korea. The economic crisis may exert pressure toward lower fertility. Such pressure for low fertility is likely to continue or even increase as a result of the economic downturn and the increase in inflation. Costs associated with children, such as child care and child education, will definitely be on the rise.

However, there is another factor that may counterbalance such pressure: the cost and accessibility of family planning services. The family planning programme may also be subject to some reduction from budget cutting due to the economic crisis and may be ranked lower in priority than other programmes such as the priority for HIV/AIDS prevention. In addition, the Thai government has also started to consider privatizing some family planning services. The move to reducing subsidization of the cost of family planning may result in less accessibility to effective contraceptive methods, especially in poor, rural areas which contain the majority of the Thai population. There are still many couples who rely on subsidized contraceptive services; therefore, even the modest cost of effective contraception can be a significant expense for them (Knodel et al. 1996). This situation may lead to higher fertility because of less accessibility to effective contraceptive methods. Further research is needed in order to investigate the effects of the economic crisis and privatized family planning services on fertility.

In the long term, it is anticipated that Thailand's fertility rate will probably fluctuate around the replacement level. Fertility preferences seem to be changing to support such a prediction, although uncertainty is introduced by current and potential changes in marriage patterns. Not only has the two-child ideal persisted as the minimum family-size preference for the vast majority of Thais, but the decline in the TFR appears to have levelled off at about replacement level. This does not guarantee that the fertility decline will not resume. Furthermore, the high value of education for children among Thai couples may inhibit them from having more children. However, it is noteworthy that there is evidence that reproductive preference constitutes an important determinant of aggregate fertility levels, especially for countries such as Thailand where significant proportions of married women want no more children and where contraception is widely practiced (Bongaarts 1992).

While the evidence presented earlier on reproductive preferences and fertility trends suggests that Thai fertility is likely to fluctuate around replacement level in the future, there are still several unpredictable factors that could possibly induce a further fertility decline. One such factor, as already noted, is the change in marriage patterns which could potentially contribute to lower fertility in the future (Guest 1994; Guest and Jones 1996). If a tendency toward later marriage and increasing proportions of women remaining permanently single continues, and substantial proportions of women forego marriage in the future, childlessness could increase. In addition, delayed first marriage may lead to childlessness even when women prefer to have two children, due to the decline in fecundability that comes with age. Furthermore, with a longer postponement of marriage, women may take on other obligations or activities, such as a career. These may conflict with childbearing and child rearing roles, finally leading to childlessness.

While an increase in the proportion of single women is likely to depress cohort fertility in the long run, it also exerts a temporary effect on the timing of births that depresses annual period fertility measures below levels that any real cohort eventually experiences. In the case of Thailand, changing marriage patterns may be rendering period fertility artificially low when compared with true cohort rates, although the effect is likely to

be less striking than that observed so far for Taiwan or Korea, where nuptiality change has been more pronounced.

Another factor that contributes to a lower fertility level in some Asian countries, is sex-selective abortion as a result of gender preference. Such a practice is permitting couples to fulfill their gender preferences without needing to compromise on their number preference. The increase in this practice is evident from rising sex ratios of male to female births in several populations where strong son preference exists (Korean Institute for Health and Social Affairs 1996). Although hypothetically the increasing use of abortion to regulate the sex composition of children could contribute to some lowering of fertility in the future, at this point no evidence of an abnormal range of sex ratios at birth has been found in Thailand, to suggest that such a practice is likely to occur to any substantial extent.

The experience from developed countries shows that post-transition fertility does not generally remain constant at the replacement level. The range of fluctuation seems to be influenced by the cultural setting and socio-economic situation. As increasing numbers of developing countries complete the fertility transition, distinctive differences in fertility patterns are also likely to emerge. In the case of Thailand, as long as predominant views of married couples regarding the preference for both genders of children exist there is good reason to expect future fertility will not fluctuate far from replacement level.

## **Consequences of fertility decline**

### **Changing age structure**

Thailand's rapid decline in fertility has led to major demographic, social, and economic changes. Like other countries that have experienced fertility declines, one of the obvious demographic outcomes is a substantial shift in the age structure of the population. Beginning from the youngest age group, the number of infants had already begun to decline in the late 1970s. Then a decade later, the size of the primary-school aged group started to decline (Guest and

Jones 1996). By 1990, the number of high-school aged children had also started to decline.

The reduction in the growth of younger age groups has undoubtedly contributed to Thailand's rapid economic development by reducing the dependency rate and enabling a rapid expansion of education and an improvement in the quality of human resources. The series of research surveys conducted by the Institute of Population Studies at Chulalongkorn University indicates that families with fewer children can afford to educate them better (Knodel et al. 1996). For the government, low fertility reduced pressure to expand primary education, which in turn has facilitated the expansion of secondary schooling. According to the National Statistical Office, in the five-year period 1988 to 1993, the total number of classrooms in Thailand used for elementary education declined by about 800. At the same time, however, the total number of classrooms used for secondary education drastically increased by a huge 23,000, many of them in schools that were originally intended only for primary grades.

### **Impact on the labour force**

A second group is that of labour force age (15-59). High fertility in the past led to an increase in the population size in the labour force age group, and because of recent low fertility, the proportion of the population in the labour force age groups increased as well. Recently, however, the lower fertility has started to have the reverse effect. The number of people in the labour force entry ages (15-24) is currently declining (NESDB 1995). This encourages some pessimists to consider that Thailand will soon face the problem of a labour shortage, as has happened in more developed countries.

The major problem, as stressed in study after study, is one of quality, not sheer quantity. Thailand lacks sufficient skilled labour to keep up with the changing labour force needs associated with its economic development. Factories are increasingly demanding at least lower-secondary education as the minimum for most jobs. These days, most adult Thais still have only a primary education. This would therefore be a problem even if Thailand had higher fertility. Actually, the fact that

fertility is now low is a major advantage for meeting the future needs for an ever more skilled work force since, as mentioned earlier, parents with small families can better afford to educate their children and with less pressure on primary schools, the government can better expand secondary and higher education.

Moreover, the reduction in the pace of growth of the labour force age group helps to alleviate problems stemming from the economic crisis. If Thailand had as high a labour force growth as it used to, then a larger number of people would have had to be laid off. At present, the unemployment level is rising rapidly and it was estimated that by the end of 1998 about two to three million of the population in the labour force age group would be unemployed, mainly because of this crisis (Ministry of Labour and Social Welfare 1998).

### **Growth of the older population**

Another inevitable consequence of the rapid fertility decline and improvement in life expectancy is the phenomenon of population ageing and growth of the elderly population, which has already begun in Thailand and will persist in future decades. The proportion of the population aged 60 years and over increased from 4.8 percent in 1970 to 6.3 percent in 1990, and is projected to be about 10 percent in 2010. Even more dramatic will be the rapid increase in the absolute size of the elderly population. The number of old persons increased from 1.7 million in 1970 to 3.4 million in 1990.

Based on the United Nations medium variant projections, the number of elderly Thais will reach ten million in 2020 and the population aged 75 and above is projected to increase proportionately even faster than the population aged 60 and over as whole. For the period 1980 to 2020 the increase was estimated to be about 300 percent for the age group 60 and over, and 321 percent for the age group 75 and over, compared to 52 percent for all ages (Chayovan, Knodel and Siriboon 1990). Thus the Thai population will be noticeably older in the next few decades, assuming fertility remains low and mortality continues to improve.

### **Care of the aged**

While population ageing represents a success story for the family planning programme in Thailand, it poses new challenges for individuals, families, communities and the government in terms of providing care and support to meet the needs of the increase in the elderly population in the near future. In Thailand, as in many other Asian countries, family and adult children are expected to assume the prime responsibility in taking care of their elderly relatives. A central feature of the family-support system for elderly members in Thailand is coresidence with one or more adult children.

### **Residential welfare of the aged**

In view of the rapid social and economic changes many Asian countries are undergoing, there are wide concerns at the prospect of the erosion of family-support systems and the need for the state to increase its share of support which currently is at a very low level. Among the most prominent forces thought to undermine familial support for the elderly is the reduction in the number of children couples have. Fertility decline is seen as having the most impact on reducing the extent to which future generations of elderly will be supported by their families. Reduction of fertility or family size, implies that couples will have fewer children available to provide care and support during old age. However, in the case of Thailand, it has been demonstrated that the impact of the fertility decline on coresidence and other types of support is moderate since it requires only one child to coreside with the elderly parents and most Thai elderly live with at least one child (Knodel et al. 1992).

In addition, unlike many other Asian countries where a son preference is relatively strong and the pattern of living arrangements is to coreside with the eldest son, Thais demonstrate no or only a modest son preference and are flexible in their living arrangements. In fact, it was found that the proportion of elderly living with a married daughter is higher than that living with a married son (34 percent versus 20 percent) and the proportion who

live with a single son is about the same as that living with a single daughter. Although forces of demographic and socio-economic change may modify the situation in the future, the evidence thus far suggests that a widespread abandonment of Thai elderly by their children or kin is unlikely to occur in the foreseeable future (Knodel and Chayovan 1997). The impact of a rapid fertility decline on the family support for the elderly in Thailand is likely to be less serious than in other countries where a son preference is strong.

### **Health and income of the aged**

Survey results indicated that health and finance are the two main problems facing the majority of Thai elderly (Chayovan et al. 1988). The magnitude of these problems will definitely increase as the size of the older population increases. So far the costs for the care and support of the elderly in Thailand have been entirely shouldered by families or the individuals themselves, but in the foreseeable future and in the light of current economic conditions, it is unlikely that families will be able to provide the full financial support and health care for their elderly members that they used to. In addition, types of family care and support are likely to change. Involvement of the community and the government in providing assistance to the elderly is thus essential for the improvement of their welfare in the future.

### **Implications for policy responses**

In the light of fertility dropping below replacement level, the issue of what population policy Thailand should adopt becomes quite complex. In 1970, when the national family planning programme was formulated, the goal was relatively straightforward: to reduce population growth rates as quickly as possible. Voluntary contraception was promoted by expanding family planning services throughout the country. Subsidized family planning has been the main strategy for fertility reduction, under the auspices of the Ministry of Public Health. In the case of Thailand, the family planning and maternal and child health programmes are part of the

primary health-care system and are completely integrated into the existing health infrastructure (NESDB, 1994). The success of the government's National Family Planning Programme resulted in a much higher awareness of the need for fertility regulation in a modern society. Contraceptive methods were made widely available and were commonly used.

Since the Third Five-Year Plan (1972-1976) the population policy has been integrated into the Five-Year National Economic and Social Development Plans. The goal of the Third Plan was to reduce the population growth rate from three percent per year to 2.5 percent by 1976. The next plan (1977-1982) still concentrated on reducing the population growth rate, from 2.5 percent to 2.1 percent per year. In this plan, the population distribution policy also received attention. The government attempted to create regional urban centres in order to attract rural migrants from each region, and reduce the volume of migrants to Bangkok. The main focus of the Fifth and the Sixth Plans was still reduction in the population growth rate. These plans started to show more concern for improvement in the quality of population. There was also concern about the too rapid growth of Bangkok and environmental problems.

The Seventh Five-Year National Economic and Social Development Plan has established the goal of reducing the population growth rate from 1.4 percent in 1992 to 1.2 percent by 1996. Government activities, including expanded family planning services, enhanced the quality of the services, especially for the urban poor and rural residents. The intention of these population policies from the Third to the Seventh Five-Year National Economic and Social Development Plans has been to set reduction of the population growth rate as the first priority for action, and redistribution of population away from the large primate city of Bangkok as a secondary goal. Such actions are emphasized in order for the Thai population to grow at a slower rate and to facilitate economic growth. Policy makers have attempted to reduce fertility in order to achieve the target population growth rate.

Alternative policy directions



Currently the lower population growth rate and low fertility have led to diverse views on the call for a change in population policy. Those who are concerned about actual or speculative negative consequences of a changing population age structure suggest that the Thai government should dismantle the family planning programme out of fear of imminent population decline.

One may argue against this by pointing out that the Thai Family Planning Programme has been completely voluntary from the start. The programme has enabled Thai couples to choose the number of children they want to have by themselves. Thais are motivated by fundamental social and economic forces to limit the number of their children. The programme, rather than forcing contraception on couples, has actually given them the freedom to act according to their wishes.

From another point of view, it is not clear that it is necessary or desirable to take action to prevent a decline in fertility below replacement level, since such a decline is not necessarily bad for an overcrowded, developing society, and a decline well below replacement level may be prevented anyway by socio-cultural factors.

Such contrasting views on low fertility, together with the ICPD recommendations, resulted in some changes to population policy in the Eighth Plan (1997-2001). Instead of setting a target in terms of reduction of the annual population growth rate, the Eighth Plan has no clear policy on whether the population growth rate should be below 1.2 percent per year, nor views on how the future growth rate will be affected by trends in the TFR. The main theme of the Eighth National Plan is human resources development as both the means and the goal for the sustainable development of the nation. In contrast, the previous Five-Year plans stressed economic development as the end and considered demographic factors as merely the means of economic development.

The population target related to fertility in the Eighth Plan is that ...the Thai families are to reduce to have an appropriate size. The advocacy for an appropriate family size is to adjust the intensity of family planning promotion activities in accordance with the local situation, and give priority to increase such activities in areas where fertility remains

significantly higher than the target; expedite family planning areas where birth rates remain high; heighten the efficacy of family planning service delivery and encourage gender equality in sharing the responsibility for family planning; to campaign continually and promote public awareness of the benefits of an appropriate family size; and to promote the private sector involvement in social projects... (Rachapaetayakom 1998).

So far, the response to low fertility and the ICPD Programme of Action has been the integration of the family planning programme with reproductive health services. In addition, the goal of family planning has shifted from increasing the number of the acceptors to improving the quality of services. Recently, the Ministry of Public Health has announced a reproductive health policy. The main content is that ...all Thais, regardless of gender or age, should have good reproductive health and receive appropriate family planning services in order to have a happy family... (MOPH 1997).

The details of the planned services seem to follow the ICPD recommendations. The specified services are as follows: counselling and services on reproductive health; information, education and counselling (IEC) for the family planning programme; education and services for prenatal care; safe delivery and postnatal care; prevention and treatment of infertility, prevention of abortion, treatment of reproductive tract infection and STDs and HIV; information, education, and counselling on human sexuality; preventive health care for mothers, children, and adolescents; and health promotion for the menopausal age group.

### **Directly influencing demographic trends**

With these points in mind, there are several policy alternatives concerning Thailand's population growth and fertility. Guest and Jones (1996) suggested various policy responses, either to adapt to demographic changes or to attempt to directly influence demographic trends. To influence such trends, they discussed several possible alternatives. The first would be to force continuation of the fertility decline regardless of the

ultimate result. If the fertility rate does fall below the replacement level, this policy may eventually result in a decline in actual population size.

The second possible alternative is to reach zero population growth as soon as possible, and to then maintain a stationary population afterwards. The main difficulties with this approach are in implementing the policy to rapidly push fertility to below the replacement level in order to reach zero population growth immediately, and then to ensure that fertility rises back to the replacement level later so as to maintain a stationary population.

Note that the Thai government has been successful in promoting a fertility decline mainly because it made contraception more widely available, which helped families to achieve their desired number of children, and because socio-economic changes have put pressure on families to have fewer children. It would be much more difficult to suddenly stop and reverse the fertility decline if socio-economic factors continue to encourage a fertility decline. If that were the case, parents would have to be persuaded to have more children than they desire, which is almost antithetical to the past and present policy of improving the status of women and enabling couples to make their own fertility choices. The experiences of countries that switched to pronatalist policies have not been very successful.

A third possible approach is to concentrate on keeping the number of births stable, which may lead to the problem of a very large increase in population size. Aside from the obvious disadvantages of such an increase, difficulties would be encountered in manipulating fertility to maintain a fixed number of births.

The fourth and final option presented by Jones (1992) is to set an optimum population size, and to attempt to reach such a size as quickly as possible. The optimum population size could be defined as that which is necessary for or can be sustained by such factors as a country's resources and economy. Thus, if one wants to define an optimum population size, one needs to consider many factors, such as trends in infrastructure, pressures on the environment, trends in economic growth, social welfare and a population's quality of life. While optimum population size may be a

useful hypothetical concept, it is difficult to define, and even more difficult to attain, such a goal.

### **Alternative perspectives**

As noted with regard to Thai government policy (in the Eighth Plan), there is now essentially no official attempt to influence the fertility level. Thai fertility has moved into the post-transition phase, being determined by the choices of individual couples. Neither a pronatalist nor an antinatalist intervention policy would be expected to be successful in this current climate of free choice. As mentioned earlier, the country should take advantage of the positive consequences of low fertility so as to improve the quality of its population, while preparing for the negative consequences that no free nation has been able to avoid. Therefore, the policy should continue to encourage free choice without fertility intervention and to concentrate more on human resource development, population distribution and the environment in order to achieve sustained and equitable development.

### **Issues of access to services**

#### **Family planning services**

In terms of the family planning programme, the recent ideas proposing privatization of some services should be considered cautiously. While Thailand has experienced several decades of impressive economic growth, there is great variation in the extent to which different segments of Thai society have benefited, resulting in an exacerbation of income inequality. Among the poor, especially in rural areas, there are still many couples who rely mainly on government subsidized contraceptives. Indeed, acquiring contraceptive supplies and services is likely to be a self-selective process in which mainly those most in need are willing to make the effort to obtain subsidized family planning for the government outlets, while those better able to pay for family planning themselves will choose a more convenient, unsubsidized source (Knodel et al. 1996).

However, the economic crisis may be an obstacle for the majority of the population who are in need of family planning services. As mentioned earlier, the cost of contraceptive service may lead to less accessibility to effective methods. Moreover, in the current economic crisis, an increased inability to pay the costs of contraception, coupled with any reduction of contraceptive subsidies, may lead to problems of reproductive health such as increased abortion. Therefore, the government should ensure that those who need family planning services can obtain effective and affordable services in order to promote reproductive rights and the reproductive health of the population.

Moreover, the integration of reproductive health and family planning requires more cooperation and more commitment among organizations within the Ministry of Public Health and other governmental organizations and NGOs. At present, the main purpose of the reproductive health policy is very broad and coverage of services is very wide ranging. With the country facing the economic crisis, policy makers may need to prioritise and limit the scope of the necessary services.

In terms of human resource development, education is one of the key factors. Education should not only be for children, but for every age group for life-long learning. Since a large proportion of the ageing population has only primary education or less, the life-long learning programme will help the elderly of the present and future to have more knowledge to help themselves in terms of economics and health care.

### **Services for the elderly**

Other issues related to human resources and the quality of life concern the elderly. Although there is an increased recognition of the importance of population ageing and the need for policies and programmes to address the rapidly growing population in older age groups, compared to other problems, issues of ageing have thus far been considered of low priority and by and large have received less attention among scholars, policy makers and planners in Thailand. This is partly reflected in the earlier (Third to Seventh) Five-Year Plans in which the issues of ageing were not mentioned. Fortunately,

the Eighth Five-Year Plan (1997-2001) specifically addresses the need to promote proper health care and welfare benefits for the destitute elderly (those who are poor or do not have families to take care of them), though any systematic assessment of this plan has yet to be implemented.

Thus far policies and programmes to ensure the well-being and financial security in old age for the general population are either lacking or uncertain. Despite the limited coverage, the old age pension is not yet incorporated in the current private social security scheme, which is now in its eighth year. A new development regarding the state's response to the ageing of the Thai population can be seen in the new (1997) Thai Constitution which explicitly states the rights of the elderly (who do not have subsistence income) to seek assistance from the state (Section 3 Article 54) and the state must provide welfare for the elderly in order to improve their quality of life and enable them to support themselves (Section 5 Article 80). The current constitution appears to assume the State's responsibility for its elderly population without considering the readiness of its social and economic situation.

The feasibility of implementing the guidelines stated in the constitution will depend largely on the organic laws yet to be drafted. At present, although free medical services are provided for all elderly, this provision is likely to face serious problems due to the current financial crisis. Similarly, there are doubts that a monthly pension of 200 baht given to 200,000 needy or destitute elderly nationwide could be continued under the present economic circumstances. In Thailand, rather than focusing only on the tiny minority who are truly deserted by their children and kin, it is necessary that programmes and policies intended for assisting the elderly should in many cases consider aid to poor families with elderly members

Government policies should also give more attention to the health of the population, including preventive health care promotion for children, the labour force, and the aged. More preventive care could reduce the burden of health care for individuals, families, and the government, especially in such a situation as that of the present economic crisis.

## **Migration and population redistribution**

Population distribution is another issue that still needs serious attention. Even though the Thai government has expressed concerns about this issue for quite some time, the policies, such as expanding secondary cities in each region and creating industrial regions, have not had much impact on preventing people from moving to Bangkok. This may be due to substantial inequalities in wealth and resource allocation. Among urban areas, Bangkok is still a centre of modern life that attracts migrants from all parts of the country. Compared with fertility, the migration and population distribution issues are much harder to target. In the case of fertility, Thai couples already had a latent demand for contraception before family planning programmes were introduced. Therefore, the family planning services helped to fulfill the individual wish for a small family size.

By contrast, migration policy may sometimes run counter to individuals' present desires. However, such desires are often based on television images or exaggerated stories instead of real knowledge of the consequences of migrating. To be successful, a migration policy must improve the quality of life in desired target areas, and give potential migrants accurate information about working conditions in various occupations and locations, and the social consequences of being separated from relatives and friends. At present, little progress has been made in this regard. In addition to problems of internal migration, Thailand also has international migration problems. The unbalanced development in the region and the past rapid economic growth in Thailand have resulted in an influx of foreign labourers. This is becoming a more sensitive issue in terms of economics and politics.

## **The environment and sustainable development**

Recently, the environment and sustainable development have received a great deal of attention. The rapid population growth in Thailand in the past was one of the factors that affected the environment. For example, the rapid population growth in rural areas resulted in the increasing demand

for land in agriculture, which in turn led to problems of deforestation. Later on, even when population growth declined, environmental problems continued to escalate. This may be due to the mismanagement of economic expansion by the modern industrial and service sectors, leading to the exploitation of natural resources. The result of such exploitation is environmental degradation (Wongboonsin et al. 1994). To solve these problems, both a cogent economic policy and an effective information, educational and counselling programme are required to change attitudes and behaviour towards conserving the environment.

## **Conclusion**

During the past thirty years, the population situation in Thailand has radically changed. The TFR used to be higher than six births per woman, but now it has reduced to about two or slightly below replacement level. Consequently, it is hard to predict what will happen with the future trend in fertility. There are many factors that need to be considered cautiously: fertility preferences, the current economic crisis, the idea of privatizing of family planning services, and the changes in marriage patterns. However, if the fertility preference and marriage patterns still remain the same as at present, the future fertility level in Thailand can be expected to fluctuate around replacement level.

Changes in demographic processes have had a profound impact on the age structure of the Thai population, especially the higher proportion of elderly people. In particular, low mortality and low fertility are here to stay. No one wants to stop the medical progress which reduces mortality, and low fertility is a result of the freedom of people to choose the number of children they want in a modernizing society. Both pronatalist and antinatalist policies to reverse this trend would have to fight against the people's will, which is unreasonable and simply not feasible. Migration, again, is an expression of freedom of choice: many rural people see cities as a source of wealth and happiness and want to share in them. So, like it or not, Thai societies are faced with new challenges. The development of policy to respond to such changes will be much more complex than in the past. The issues of concern are reproductive rights, human resource



development, migration and population distribution, and reallocation of resources.

## References

- Bongaarts, John. 1992. "Do reproductive intentions matter?" *International Family Planning Perspectives* 18(3): 102-108.
- Chayovan, Napaporn and John Knodel. 1997. *A Report on the Survey of the Welfare of the Elderly in Thailand*. IPS Publication 248/97. Bangkok: Institute of Population Studies, Chulalongkorn University.
- Chayovan, Napaporn, John Knodel, and Siriwan Siriboon. 1990. "Thailand's elderly population: A demographic and social profile based on official statistical sources". Research Reports No. 90-2. Population Studies Center, University of Michigan.
- Chayovan, Napaporn, Malinee Wongsith, and Chanpen Saengtienchai. 1988. *Socio-Economic Consequences of the Aging of the Population in Thailand*. IPS Publication No.161/88, Bangkok: Chulalongkorn University.
- Chayovan, Napaporn, Peerasit Kamnuansilpa, and John Knodel. 1988. *Thailand Demographic and Health Survey 1987*. Institute of Population Studies, Chulalongkorn University and Institute for Resource Development/Westinghouse.
- Chamrathirong, Apichat, Pramote Prasartkul, Varachai Thongthai, and Philip Guest. 1997. *National Contraceptive Prevalence Survey 1996*. Institute for Population and Social Research, Mahidol University.
- Guest, Philip and Gavin Jones. 1996. "Policy options when population growth rate slows: The case of Thailand". *Research and Policy Review* 15(2): 109-130.
- Guest, Philip and JooEan Tan. 1994. *Transformation of Marriage Patterns in Thailand*. Institute for Population and Social Research, Mahidol University.
- Guest, Philip and Anchalee Varangrat. 1996. "Marriage: The forgotten component of fertility change", *Proceedings of the Annual Meeting of The Thai Population Association*. Bangkok: Chulalongkorn University Printing, pp. 87-104.
- Hirschman, Charles, JooEan Tan. 1994. "The path to below replacement-level fertility in Thailand" *International Family Planning Perspectives* 20(3): 82-87.

- Jones, Gavin. 1992. "Population trends and policy issues for Thailand". Paper presented at the UNFPA/NESDB Workshop on Population on Programme Policies. Thailand: New Directions, Chiang Mai.
- Knodel, John. 1994. "Population aging and fertility: Some implications for Thailand," in *Future of Thailand's Population Policy: Potential Directions*. Bangkok: Institute of Population Studies, Chulalongkorn University.
- Knodel, John, Apichat Chamrathirong, and Nibhon Debavalya. 1987. *Thailand's Reproductive Revolution: Rapid Fertility Decline in a Third World Setting*. Madison: University of Wisconsin Press.
- Knodel, John and Napaporn Chayovan. 1997. "Family support and living arrangements of Thai elderly", *Asia-Pacific Population Journal* 12(4): 51-68.
- Knodel, John, Napaporn Chayovan, and Siriwan Siriboon. 1992. "Impact of fertility decline on the familial support systems of elderly: An illustration from Thailand." *Population and Development Review* 18(1): 79-102.
- Knodel, John, Vipan Prachuabmoh Ruffolo, Pakamas Ratanalangarn, and Kua Wongboonsin. 1996. "Reproductive preferences and fertility trends in post-transition Thailand". *Studies in Family Planning* 27(6): 307-318.
- Korea Institute for Health and Social Affairs. 1992. *Impact of Fertility Decline on Population Policies and Program Strategies*. Seoul: Korean Institute for Health and Social Affairs.
- Ministry of Labour and Social Welfare. 1998. Interview of the Permanent Undersecretary for Labour and Social Welfare, *Promotional Investment*.
- Ministry of Public Health. July 10, 1997. Health Department, Family Planning and Population Division, Report on the First National Seminar on Reproductive Health (in Thai). Bangkok.
- National Statistical Office. 1996. Office of the Prime minister. The Survey of Population Change.
- \_\_\_\_\_. No date. Office of the Prime Minister. Nuptiality of Thai Population: 1990 Population and Housing Census, Subject Report No. 4.

- National Economic and Social Development Board (NESDB). 1995. Human Resources Planning Division. Population Projections for Thailand 1990-2020.
- Pardthaisong, Tieng. 1991. "Population policy and the national future: Should we go forward or reverse in reducing the fertility rate? in population and development". Institute of Population and Social Research, Mahidol University, (in Thai). Newsletter 12(2): 1-2.
- \_\_\_\_\_. July 8, 1996. "The collapse of society and the end of the race due to family planning." Paper presented at the seminar on Change in Thai Population Policy in the Next Decade, Bangkok (in Thai).
- Rachapaetayakom. 1998. *Population Policy in Thailand: Progress and Perspectives*. Bangkok: National Economic and Social Development Board.
- Thailand, National Statistical Office. 1994. Nuptiality of Thai Population, Subject Report No. 4, 1990. Population and Housing Census. Bangkok: Office of the Prime Minister.
- United Nations. 1995. *World Population Prospects: The 1994 Revision*. New York: United Nations.
- van De Kaa. 1987. "Europe's second demographic transition". *Population Bulletin* 42(1).
- Wongboonsin, Kua and Vipana Prachuabmoh Ruffolo. 1993. "The future of Thailand's population policy: Potential direction". *Asia-Pacific Population Journal* 8(3): 3-18.

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## 9. Replacement Level Fertility Issues and Policy Implications for Indonesia

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This chapter examines the current level of fertility in Indonesia, discusses the possibility of further decline and its effect on age composition and family, the demographic dimension of family changes, the issues of and policy responses to lower fertility, and responses to the ICPD Programme of Action.

### **Indonesian fertility by the 1990s**

The early years of the 1970s marked the onset of the fertility transition in Indonesia. The total fertility rate (TFR) declined from 5.6 children per woman in 1971, to 2.8 children per woman in 1997 (Table 9.1). The pace of decline, however, varied according to the stage in the fertility transition. The population censuses (utilising estimates based on the “own children” method) recorded the pace of the decline in fertility as 1.4 percent per annum for the period 1967 to 1976 and 3.0 percent per annum for the period 1977 to 1989. The 1990s Indonesian Demographic and Health Surveys (IDHS) recorded a continuing but slower pace of decline in the TFR. Direct calculation of fertility rates from these surveys demonstrated that, for the period 1991-1994, the TFR declined by a further 1.8 percentage points per annum. This decline continued at only 0.7 percent per annum from 1994 to 1997 when the TFR reached its lowest point to date of 2.8 children per woman.

**Table 9.1 Trends in the total fertility rate by province**

Province	Census 1971 1967-70 <sup>a</sup>	Census 1980 1976-79 <sup>a</sup>	Census 1980 1987-90 <sup>a</sup>	Supas 1995 1992 <sup>a</sup>	IDHS 1991	IDHS 1994	IDHS 1997
Jawa Bali	-	-	-	-	2.68	2.61	2.57
DKI Jakarta	5.18	3.99	2.33	1.93	2.14	1.90	2.04
Jawa Barat	6.34	5.07	3.47	2.87	3.37	3.17	3.03
Jawa Tengah	5.33	4.37	3.05	2.58	2.85	2.77	2.64
DI Yogyakarta	4.76	3.42	2.08	2.00	2.04	1.79	1.85
Jawa Timur	4.72	3.56	2.46	2.27	2.13	2.22	2.33
Bali	5.96	3.97	2.27	2.01	2.22	2.14	2.12
Luar Jawa Bali I	-	-	-	-	3.50	3.26	3.10
D I Aceh	6.27	5.24	4.37	3.29	3.76	3.30	2.99
Sumatera Utara	7.20	5.94	4.29	3.53	4.17	3.88	3.74
Sematera Barat	6.18	5.76	3.89	3.35	3.60	3.19	3.40
Sumatera Selatan	6.33	5.59	4.22	3.14	3.43	2.87	2.64
Lampung	6.36	5.75	4.05	3.29	3.20	3.45	2.91
Nusa Tenggara Barat	6.66	6.49	4.98	3.68	3.82	3.64	2.95
Kalimantan Barat	6.27	5.52	4.44	3.47	3.94	3.34	3.35
Kalimantan Selatan	5.43	4.60	3.24	3.09	2.70	2.33	2.57
Sulawesi Utara	6.79	4.91	2.69	2.66	2.25	2.63	2.61
Sulawesi Selatan	5.71	4.88	3.54	3.05	3.01	2.92	2.88
Luar Jawa Bali II	-	-	-	-	3.75	3.33	3.20
Riau	5.94	5.44	4.09	3.25	-	3.10	3.45
Jambi	6.39	5.57	3.76	3.11	-	2.97	2.89
Bengkulu	6.72	6.10	3.97	3.19	-	3.45	2.97
Nusa Tenggara Timur	5.96	5.54	4.61	4.10	-	3.87	3.45
Timor Timur	-	-	5.73	5.10	-	4.69	4.43
Kalimantan Tengah	6.83	5.87	4.03	3.15	-	2.31	2.73
Kalimantan Timur	5.41	4.99	3.28	2.96	-	3.21	2.85
Sulawesi Tengah	6.53	5.90	3.85	3.28	-	3.08	3.04
Sulawesi Tenggara	6.45	5.82	4.91	3.69	-	3.52	2.93
Maluku	6.89	6.16	4.59	3.68	-	3.70	3.31
Irian Jaya	7.20	5.35	4.70	3.78	-	3.15	3.33
Indonesia	5.61	4.68	3.34	2.80	3.02	2.86	2.79

<sup>a</sup> reference period.

Sources: Central Bureau of Statistics.

The fertility rates and the pace of decline varied among Indonesia's 27 provinces. Provinces in Java, with lower TFRs in 1994, recorded increases in their TFRs in 1997, namely DKI Jakarta (from 1.90 to 2.04), DI Yogyakarta (from 1.79 to 1.84), and East Java (from 2.22 to 2.33). In the outer islands, South Kalimantan experienced a similar pattern, the TFR increasing from 2.32 to 2.56, and in Central Kalimantan from 2.31 to 2.73 children per woman in 1997. By contrast, provinces having high fertility rates in the 1970s, such as West Java, DI Aceh, North Sumatra, South Sumatra, Lampung, Bengkulu and West Nusa Tenggara demonstrated a continuing fertility decline in 1994.

These regional variations indicate that in Indonesia the fertility transition was rather protracted (especially among provinces with high fertility in the 1970s) and that the country had still not achieved the average of the two-child family even by 1994. In regions with a TFR above 2.2 in 1994 any further decline appeared to have stagnated in the period to 1997. Under such circumstances, what is the likelihood of Indonesia as a whole experiencing further fertility decline?

It has been hypothesized that fertility decline will stall if the desired family size fails to continue to fall once most women of reproductive age have been provided with contraceptives. The campaign stating that "two children are enough" changed people's perception from the view that family size is not a matter of choice to one that numbers matter in relation to family size (Adioetomo 1994). However, the internalisation of small-family size norms and their implementation through the practice of contraception to limit fertility have to be carefully examined. In Indonesia, the reported mean desired family size dropped from 4.2 children in 1976 to 2.9 in 1994.

The overall percentage of women wanting to have fewer than three children remained virtually constant through the 1990s. This proportion was 56.1 percent in 1987, 57.6 percent in 1991, and 57.2

percent in 1994 (CBS et al. 1995). But, when examined more closely at the provincial level, the situation varies. Generally the regional pattern of average desired family size parallels that for the TFR (Table 9.2). Provinces with lower TFRs were shown to have lower average desired family size and higher percentage of women wanting to stop childbearing after having three children.

**Table 9.2 Parameters of the fertility transition by province 1994, and 1997**

Provinces	TFR 1994	Desired family size 1994	No more Children at Parity three (per cent) 1994	Contraceptive use (per cent) 1994	TFR 1997
<i>Low fertility, achieved desired fertility, stagnant decline/slight increase in fertility</i>					
Jakarta	1.90	2.4	80.3	53.9	2.04
Yogyakarta	1.79	2.1	93.9	59.7	1.84
East Java	2.22	2.2	87.5	53.5	2.33
Bali	2.14	2.2	93.2	66.5	2.12
<i>High fertility, lower desired family size, further fertility decline</i>					
West Java	3.17	2.5	65.4	56.0	3.02
Central Java	2.77	2.4	80.4	59.6	2.64
North Sumatra	3.88	3.5	57.4	40.2	3.74
Bengkulu	3.45	2.6	74.6	60.2	2.97
Lampung	3.45	2.6	71.7	57.9	2.91
West Kalimantan	3.34	2.8	58.3	49.5	3.35
East Kalimantan	3.21	2.6	73.6	54.7	2.85
West Nusatenggara	3.64	2.9	40.8	47.9	2.95
North Sulawesi	2.63	2.1	77.6	69.1	2.61
Central Sulawesi	3.08	2.8	55.5	48.3	3.04
Southeast Sulawesi	3.52	2.8	63.5	41.8	2.93
East Nusatenggara	3.87	3.0	45.4	39.3	3.45



( Continued )

Provinces	TFR 1994	Desired family size 1994	No more Children at parity three (per cent) 1994	Contraceptive Use (per cent) 1994	TFR 1997
East Timor	4.69	4.3	22.6	20.7	4.43
Maluku	3.70	3.0	52.3	33.4	3.31
<i>Higher desired family size, declining fertility</i>					
DI Aceh	3.30	3.7	40.90	30.1	2.99
South Sumatra	2.87	2.9	67.8	50.1	2.64
South Sulawesi	2.92	3.0	48.7	35.2	2.88
Jambi	2.97	2.9	63.5	38.6	2.89
<i>Increased fertility</i>					
Riau	3.10	3.1	51.0	41.8	3.45
West Sumatra	3.19	2.9	55.3	41.1	3.42
South Kalimantan	2.32	2.3	63.6	51.2	2.57
Central Kalimantan	2.31	2.8	68.0	41.1	2.73
Irian Jaya	3.15	2.9	54.3	29.1	3.33

Sources: IDHS 1994, IDHS 1997.

Comparing fertility trends by region in 1994 and 1997 and the related desired family size<sup>1</sup> we may expect to witness stalling fertility decline in the near future in three provinces of Java and in Bali. These provinces seem to have reached a relatively low level of fertility, widespread acceptance of small family size, and a high percentage of women who do not want any more children beyond the third parity. Nevertheless, fourteen provinces with high fertility in 1994 still experienced fertility decline in 1997, and are expected to decline further because the desired family size has not been achieved. Some provinces such as North Sumatra, East Timor, East Nusa Tenggara and Maluku have not fully accepted the small-family norm of two children, but fertility is declining. Other provinces like DI Aceh, South Sumatra, South Sulawesi and Jambi

experienced fertility declines between 1994 and 1997, although the average desired family size is higher than actual fertility.

What then is the impact of stalling fertility decline likely to be on future population growth? The low level of fertility does not inevitably reduce the population growth rate. Mortality plays an important role in determining whether or not a lower fertility rate will be accompanied by a lower growth rate.

### **Replacement level fertility**

The TFR is associated with reproduction and hence with the capacity of the population to replace itself. When the reproduction rate is high it is expected that the population will grow to exceed the original number. When it is too low, the number of people will decrease. The Net Reproduction Rate (NRR), defined as the average number of daughters born to a hypothetical female cohort subject to current age-specific fertility and mortality rates (United Nations 1958), is an indicator of replacement. An NRR of one means that a mother has just one daughter who can survive to give birth to the following generation.

The calculation of the NRR incorporates mortality in order to determine the survival of daughters. Based on the estimated infant mortality rate (IMR) for the relevant years, female survival ratios are applied to the female age-specific fertility rates. The Indonesian IMR declined steadily from 1971 to 1991 (Table 9.3). Among one thousand babies born in 1967, 145 did not survive beyond their first birthdays. But in 1991, only 51 infants per thousand live births did not reach age one, which may be a reflection of improved health facilities and infrastructure, and of other socio-economic development. Before the “Asian economic crisis” hit Indonesia in August 1997, this rate was expected to decline further by 2000, but the outcome is now less certain.

Variations in the IMR among the provinces also exist. The lowest IMRs were found in Jakarta (22.4), Central Java (39.0) and DI Yogyakarta (23.0). The rates for the other provinces vary widely, from 34 and 36 for Central Kalimantan and DI Aceh respectively, to the highest in West Nusa Tenggara, East Timor and Central Sulawesi, namely, 101.2, 73.0, and 72.0 per thousand live births respectively. The pattern of variation in IMRs by province does not conform to the variation in provincial TFRs. The impact of the economic crisis is expected to reduce people's access (especially of the poor and the newly poor) to health services such as child immunization, and to obtaining a sufficient quantity and quality of food, which in turn may hamper the continuation of the decline in the IMR.

Based on the TFR calculated from the Intercensal Population Survey (SUPAS) 1995 (referring to the 1992-1994 period), it is estimated that the NRR of Indonesia at this time was 1.37. This means that for every 100 Indonesian women already in the population there were 137 baby girls born between 1992-1994 to replace them. In other words, the population will still grow, substantially exceeding the original number. Because of the role of mortality, a high fertility rate does not always lead to a higher NRR.

Bali, East Java and South Kalimantan are provinces in Indonesia approaching replacement level, with an NRR approaching one. South Kalimantan women have a higher TFR of 2.67 (compared to 2.17 for East Java and 2.12 for Bali), but apparently have a much higher infant mortality of 77.6 deaths per thousand live births. The high IMR in South Kalimantan results in lower population growth. The highest NRR of 2.6 is found in East Timor, meaning that every one hundred East Timorese women will be replaced by 260 daughters.

**Table 9.3 Estimates of infant mortality and life expectancy by province, 1967 to 1991**

Province	Expectation of life at birth			
	1971 1967 <sup>a</sup>	1980 1976 <sup>a</sup>	1990 1986 <sup>a</sup>	1995 1991 <sup>a</sup>
DI Aceh	46.2	55.2	62.7	67.8
Sumatera Utara	49.9	56.1	62.1	65.8
Sumatera Barat	44.6	49.9	59.2	62.2
Riau	45.6	52.0	61.2	67.2
Jambi	44.3	50.0	59.3	65.9
Sumatera Selatan	44.1	53.6	59.6	63.7
Bengkulu	42.3	51.8	60.2	62.3
Lampung	45.6	54.0	60.2	65.1
DKI Jakarta	48.6	57.6	66.3	71.9
Jawa Barat	42.3	46.7	55.8	63.2
Jawa Tengah	45.9	54.1	61.2	67.3
D I Yogyakarta	53.5	61.8	66.6	71.9
Jawa Timur	50.1	54.4	61.5	63.2
Bali	48.3	55.4	64.3	68.5
Nusa Tenggara Barat	35.0	39.1	45.9	53.7
Nusa Tenggara Timur	44.4	48.7	58.6	62.6
Timor Timur	-	-	57.0	59.4
Kalimantan Barat	45.9	50.4	57.7	62.9
Kalimantan Tengah	48.4	53.9	62.8	68.5
Kalimantan Selatan	42.6	49.6	55.7	58.4
Kalimantan Timur	53.2	53.8	62.4	65.7
Sulawesi Utara	51.3	55.2	61.6	66.8
Sulawesi Tengah	45.0	48.3	55.4	59.6
Sulawesi Selatan	43.2	51.9	60.0	63.2
Sulawesi Tenggara	42.3	50.8	58.5	63.4
Maluku	46.0	49.6	58.7	62.8
Irian Jaya	56.7	53.0	57.9	62.7
Indonesia	45.7	52.2	59.8	64.4

( Continued )

Province	Infant mortality rate			
	1971 1967 <sup>a</sup>	1980 1976 <sup>a</sup>	1990 1986 <sup>a</sup>	1995 1991 <sup>a</sup>
DI Aceh	143	93	58	37
Sumatera Utara	121	89	61	45
Sumatera Barat	152	121	74	60
Riau	146	110	65	39
Jambi	154	121	74	45
Sumatera Selatan	155	102	71	54
Bengkulu	167	111	69	60
Lampung	146	99	69	48
DKI Jakarta	129	82	40	22
Jawa Barat	167	134	90	56
Jawa Tengah	144	99	65	39
D I Yogyakarta	102	62	42	23
Jawa Timur	120	97	64	56
Bali	130	92	51	34
Nusa Tenggara Barat	221	189	145	101
Nusa Tenggara Timur	154	128	77	59
Timor Timur	-	-	85	73
Kalimantan Barat	144	119	81	57
Kalimantan Tengah	129	100	58	34
Kalimantan Selatan	165	123	91	78
Kalimantan Timur	104	100	58	46
Sulawesi Utara	114	93	63	41
Sulawesi Tengah	150	130	92	72
Sulawesi Selatan	161	111	70	56
Sulawesi Tenggara	167	116	77	55
Maluku	143	123	76	58
Irian Jaya	86	105	80	58
Indonesia	145	109	71	51

<sup>a</sup> reference period.

Source: Central Bureau of Statistics.

In areas where the IMR is expected to decline further, efforts to continue fertility reduction, especially in regions of high fertility, are highly recommended in order to further curb the high population growth rate. With a TFR of 2.8 for Indonesia, and an IMR of 51 per thousand live births, it is expected that the population growth rate will still exceed one percent per annum. With 202 million people, even a very low growth rate results in provinces still achieving replacement level and, as a consequence, there will be an enormous increase, not only in population numbers but in demand for social and economic services. It is projected that Indonesia's population increase will be about three million people a year in the period 2005-2010 (Ananta and Anwar 1995). Sustaining a lower fertility rate for the low fertility regions, and pursuing further decline for the high fertility regions, must therefore be given high priority.

### **Family planning in the 1990s**

In the early 1970s the government of Indonesia launched its first National Family Planning Programme starting with Java and Bali, and in 1975 expanded it to cover ten additional provinces in Sumatra, Nusa Tenggara, Kalimantan and Sulawesi. Eventually, by 1979, all provinces of Indonesia were included in the programme. Backed up by strong political commitment, this programme legitimised the idea of fertility control among government bureaucrats, communities and religious leaders who had been influenced by pronatalist ideology and by the false perception of birth control as equivalent to abortion.

The legitimisation of the idea of fertility regulation among women was promoted through the rapidly improving administrative system in which the provincial governors and their subordinates were made responsible for the implementation of birth control initiatives. The idea of fertility regulation was introduced to the

community through the process of “learning by doing” embedded in a paternalistic culture. This implies that family planning acceptance in the early stages of the national programme was determined by external motivation, and raises the question of whether members of the community had really internalised the concept of family planning before accepting contraceptives.

The number of family planning acceptors increased very rapidly from 24 percent in 1976 to 43 percent in 1987 (CBS et al. 1994), but, the prevalence rate increased rather slowly in the 1990s. The Indonesia Demographic and Health Survey (IDHS) reported that modern contraceptive use was 47.1 percent in 1991, increasing to 52.1 percent in 1994 and to 54.7 percent in 1997 (Table 9.4). The rapid increase of contraceptive use during the late 1970s and 1980s was probably due to the existing latent demand for fertility regulation before and during the 1970s.

The literature indicates that latent demand for fertility regulation already existed during the first two decades after independence. Educated women wanted to limit their family size because of growing social and economic aspirations (Subandrio 1963; Hull 1975), and the less-educated rural women wanted to stop childbearing because of the health and economic burden imposed by frequent pregnancies. Initially, because the means of fertility regulation were not available and the concept of birth control was not socially acceptable, the opportunity for the adoption of effective means of contraception was limited. When it began, the fertility decline occurred at all reproductive ages. The onset of fertility decline commenced when older women curtailed their childbearing, and continued later when younger women began to space their pregnancies.

The pattern of regional variation in contraceptive prevalence appears to be consistent with the timing of the launching of the programme. The highest rates of usage, about 60 to 70 percent, were found among provinces in Java and Bali where family

**Table 9.4 Trends in contraceptive use by province, 1991, 1994 and 1997**

Province	1991		1994		1997	
	Any method	Modern method	Any method	Modern method	Any method	Modern method
Java Bali	53.4	51.1	58.4	56.4	60.6	58.5
DKI Jakarta	56.0	51.8	59.7	54.8	58.9	53.9
West Java	51.0	49.7	56.7	56.0	57.6	56.5
Central Java	49.7	48.1	61.1	59.6	62.4	61.4
D I Yogyakarta	71.3	57.0	69.5	59.7	72.9	63.7
East Java	55.4	53.0	55.9	53.5	61.1	58.0
Bali	71.9	70.2	68.4	66.5	68.1	66.2
Outer Java Bali I	43.5	40.3	49.5	45.5	52.2	49.0
DI Aceh	28.9	24.9	32.3	30.1	37.1	36.3
North Sumatra	37.2	34.0	47.0	40.2	45.8	42.0
West Sumatra	40.3	37.8	44.2	41.1	44.8	41.8
South Sumatra	47.1	44.6	52.9	50.1	57.9	54.8
Lampung	53.8	50.8	59.3	57.9	66.5	64.7
West Nusa Tenggara	39.0	38.2	49.8	47.9	56.5	54.3
West Kalimantan	44.4	42.9	50.6	49.5	58.1	55.4
South Kalimantan	51.9	47.2	54.7	51.2	60.2	58.5
North Sulawesi	68.5	62.8	72.5	69.1	71.2	63.5
South Sulawesi	37.1	32.9	42.6	35.2	41.4	36.6
Outer Java Bali II	42.8	39.3	45.7	41.8	51.3	46.9
Riau	39.8	35.2	41.0	38.6	48.0	44.1
Jambi	47.9	46.3	55.1	54.1	61.8	60.3
Bengkulu	58.3	55.9	61.6	60.2	66.6	62.3
East Nusa Tenggara	39.2	35.0	37.3	32.6	39.3	35.2
East Timor	25.1	20.4	22.6	20.7	26.7	25.1
Central Kalimantan	44.6	42.9	44.5	41.1	63.8	57.4
East Kalimantan	57.9	54.6	60.5	54.7	59.3	54.5
Central Sulawesi	50.4	47.5	52.5	48.3	51.7	50.2
Southeast Sulawesi	41.9	37.9	46.3	41.8	53.1	46.7
Maluku	43.2	36.5	34.9	33.4	40.1	36.1
Irian Jaya	20.6	18.9	41.3	29.1	50.1	38.1
Indonesia	49.7	47.1	54.7	52.1	57.4	54.7

Sources: IDHS and PULDU, BKKBN.



planning was first introduced (Table 9.4). This was followed by provinces in Sumatra (except North Sumatra), Kalimantan and Sulawesi which comprise the outer islands. Apart from Jambi and Bengkulu, the lowest rate of use occurred among the remaining areas covered by the programme in 1979.

Although the rate of contraceptive prevalence seems to be moving up slowly, the increment in the number of women using contraception increased dramatically. In 1997, current users numbered 27 million women. The family planning programme started with a service of free contraceptive provision. In 1989, a more “self-reliant” or client self-funding service was introduced.

There are three categories of acceptors according to the degree of self-reliance in provision of family planning services. These are the partially self-funding, that is those who pay for the services but the contraception itself is supplied free by the government; the fully self-funding acceptors who pay both the cost of services and the price of contraception; and the fully subsidized acceptors. It was reported in 1994 that about 50 percent of contraceptive users were partially or fully self-funding, meaning that at least 50 percent, that is about 13.5 million women, were fully dependent on the government subsidy – a very substantial burden for government funding. There is some doubt whether the government can sustain free contraceptive supplies at the requisite level during the economic crisis.

### **Sustainability of the family planning movement**

The Indonesian National Family Planning Movement can be sustained under circumstances where economic growth is positively stable (more than four percent a year). However, from August 1997, the Asian currency crisis hit the Indonesian economy very hard and the impact is expected to be felt for a lengthy period. The devaluation of the rupiah in terms of the US dollar (US\$1 = Rp.

2,400 in August 1997, and US\$1 = Rp. 15,000 in July 1998), created a chain reaction in government administration and people's lives. The negative growth of the Indonesian economy necessitated government measures to implement deficit funding, making it difficult to expand or even to maintain its development programmes, including the family planning programme which was cut by 20 percent. Contraceptive prices more than doubled because most were either imported or, where locally produced, depended on imports for 80 percent of raw materials.

In the past, the family planning programme was conducted on a supply-oriented strategy, which gave a full subsidy to acceptors. The 1989 "self-reliant" programme did not completely convert acceptors to full responsibility for the cost of their family planning services. Now the monetary crisis has reduced the government's ability to continue to provide contraceptive subsidies because of shortages in funding and increases in contraceptive costs. But the number of acceptors in need of government subsidy is expected to increase because middle-income people who were self-reliant may have reduced incomes and need to seek the government subsidy for their contraceptives. Thus it is expected that the monetary crisis may hinder the poor and the newly poor continuing from using contraception.

A crash programme was adopted to enable the continuation of local contraceptive production. The requisite raw materials were subsidized at the rate of Rp. 5,000 per US\$1 at a time (March, 1998) when the exchange rate was Rp. 10,000 to the US\$1. For the first two years the government, supported by USAID, UNFPA and other donor agencies, is expected to be able to continue providing free contraceptive devices for the poor. But uncertainty remains over the availability of contraceptives over the longer period.

Another way to reduce the government burden in subsidizing family planning services is through a stronger effort to increase the numbers of fully self-reliant users (those who pay both for

contraceptive methods and the services). However, the monetary crisis has reduced the affordability of such items to Indonesian users. In May 1998, the Consumer Price Indexes for food, health and education had increased to 183, 168 and 138 respectively. This meant that by this date the price of food, and the cost of health and education respectively were 83, 68 and 38 percent more expensive than before the crisis. By that date, the poverty line, which was 38,246 rupiah in urban areas and 27,413 rupiah in rural areas in 1996, had risen to 52,470 rupiah in urban areas and 41,588 rupiah in rural areas. By then the number of poor people, which was 22 million or 11 percent of the 1996 population, had increased to about 80 million or 40 percent. As a result, contraception must compete with other basic needs, especially food, in decisions on family expenditure.

Another problem faced by the Indonesian national family planning movement (GKBN) is how to meet the needs of those who have the resources to pay for contraceptive materials but for whom suitable methods are not readily available. This is expected to encourage the practice of natural family planning methods such as the rhythm method or withdrawal, methods that are likely to fail because of human error. Such practices will be successfully implemented only by those who have high motivation to regulate their fertility, generally reflecting a high level of acceptance of the small family-size norm. Others will use less effective traditional methods such as herbs to induce menstruation (*jamu pluntur*). Practices of illegal abortion, leading to a higher risk of maternal mortality, are also expected to increase, and many unwanted births must be anticipated. Consequently, services for complications from abortion and for counselling will also have to be increased.

At this stage, no one can predict how long the crisis will last. However, it is almost certain that the impact of the crisis on the sustainability of family planning and contraceptive use will be much longer than the economic crisis itself.

## **Other challenges**

### **Discontinuation rates and the hard-to-reach**

Even before the onset of the Asian economic crisis, discontinuation rates for contraceptive use were very high. The 1994 IDHS reported that 27 percent of acceptors discontinued contraceptive use within one year of acceptance because of wanting more children, method failure, health side effects or service quality concerns. The reasons reported in the 1993 Indonesian Family Life Survey (IFLS) were related mainly to the desire to have children, but many stated that they discontinued because of side effects or health reasons.

Another challenge is to motivate non-users and never users to control their fertility. Among the 45 percent of women not using family planning, 16 percent were previous users and the rest (that is, 29 percent) have never shown any effort to control their fertility. The reason for not using contraception between former users and never users are very different. The reasons given by the never users are mainly the desire to have children, but a substantial number of women stated that they were not using contraception because of disapproval, religious reasons or lack of knowledge. They are mostly from rural areas, uneducated and poor, coming largely from the lowest expenditure quintile group. Thus family planning managers have to direct their efforts at targeting this hard-to-reach group of women. These women will probably also need a government subsidy for contraceptive services.

The percentage of women with an unmet need, that is, those who said they do not want any more children, but are not using contraception, is relatively small. Nevertheless, they number about four million women a year. The significance of this group is that if they remain unprotected by contraceptive use, there is the potential for the next year's births to double, to eight million.

### **The implementation of the ICPD Programme of Action**

Concern over the quality of service in family planning has increased during the past decade. There is a growing contention, especially after the 1994 International Conference on Population and Development (ICPD) in Cairo, that family planning programmes should be oriented more toward fulfilling client demand, rather than single mindedly emphasizing the demographic goal which can be viewed as a largely supply-oriented approach. The Indonesian family planning programme was able to persuade couples that family size is now a matter of choice and that the means to achieve desired family size are available. Therefore the task of the programme is to help couples meet their reproductive goals through the provision of quality care, which in itself will perpetuate fertility decline.

Quality of care, however, is difficult to measure or even to define. Bruce's (1989) study selected client perspective indicators to measure quality of care. Choices of method indicate accessibility of method mix which is critical to continuation of use (Pariani 1994). Information to clients relates to the right of clients to obtain proper information about positive and negative aspects of contraception, and the technical competence of providers which protects clients' safety during the process of delivery of services. Interpersonal relationships between providers and clients stress the way clients are treated, mechanisms adopted to encourage continuity of use, and an appropriate constellation of services. However, not all of these indicators are fully applicable to the Indonesian setting (Iskandar and Dharmaputra 1996; Hull 1996), because they are considered too Western, placing too much emphasis on the process of service delivery, and tending to neglect other factors such as the health-care system, and the social and political context of a national family planning programme in a developing society.

Studies on quality of care using the 1993 IFL Survey have found that quality of family planning services in Indonesia is far from satisfactory (Adioetomo 1996; Raintung et al. 1995; Wibowo 1995). Standard operational procedure is not properly followed, commitment and responsibilities of providers leave much to be desired, while facilities and equipment are of too low a standard to provide the requisite quality of services. Furthermore, indicators of the quality of care in family planning should be further developed in order to be able to measure the quality of care in terms of client satisfaction.

Uncertainties about the economic crisis remain and it is difficult to predict the magnitude of drop out in numbers of acceptors which may we lead to an increase in fertility. However, one thing is certain: in the near future, the Indonesian GKBN will have to work harder to maintain contraceptive use and to sustain fertility decline, which seems to be a very difficult requirement under present economic conditions.

### **The changing Indonesian family**

Socio-economic development and family planning programmes promoted by the government of Indonesia have expedited the demographic transition. Changes in age composition have severely affected family changes in Indonesia. While socio-economic progress undoubtedly increases the people's welfare, changes in household composition, living arrangements, patterns of family formation, reproductive attitudes towards parenthood, and an increase in the female labour force participation rate have positive as well as negative impacts on family welfare.

The readiness of young couples to enter parenthood and to better plan their families reflects their higher education levels, increased age at marriage, the narrower age difference between husband and wife, and availability and affordability of contraception. The

smaller number of children, the increase in children's education and the adaptation to modern life are changing the pattern of communication between parents and children which is becoming more democratic and egalitarian. The numbers of young couples with just of two or three children increased very sharply, but they tend to stay with parents or parents in-law until they can afford to establish their own homes (Table 9.5).

**Table 9.5 Average number of persons living in the same household (per hundred households), 1980, 1990 and 1995**

Relation to head of household	1980		1990		1995	
	Urban	Rural	Urban	Rural	Urban	Rural
Head of Household	100	100	100	100	100	100
Wife	79	81	79	83	79	84
Children	254	233	223	208	203	193
Children-in-law	7	8	6	7	6	7
Grandchildren	16	18	15	16	13	14
Parents/parents-in-law	10	11	9	10	7	9
Other relatives	35	17	29	13	23	12
Maids	7	1	6	1	4	0
Other persons	9	3	10	3	4	1
Household numbers	6,326,704	24,197,539	11,548,706	28,139,544	15,203,720	29,027,372
Population numbers	32,845,769	113,930,704	55,433,790	123,813,993	69,937,110	124,817,698
Average household size (numbers)	5.2	4.7	4.8	4.4	4.6	4.3

Source: Central Bureau of Statistics.

The prevalence of families comprising three generations will continue to increase until the older generation, living with their small family group, ages. Tension and problems of communication between generations living under one roof are also emerging due to the younger generation's conflicting perceptions and lifestyles that are very different from those based on traditional value systems.

Consequently, seniors of the low-fertility generation are likely to face more problems of living arrangements, because fewer children (just two or three compared with five or six) will be responsible for their accommodation.

In addition, an increasing degree of modernization is tending to erode the existing value of respect for the elderly. Solutions are having to be sought. These include the maintenance and strengthening of family ties that encourage the younger generation to continue to accommodate their seniors and allow them to live together. Government regulation is required to support the living arrangements of older people in such a way that while the older generation may not live together physically with their adult children, they can still live in close proximity. For example, different generations may live in nearby units of the same apartment block, so that frequent contact can be maintained. Government intervention is also required to establish more institutions for the dependent elderly.

As a product of demographic and social change, households are increasingly characterized by the presence of older children still undertaking their education. However, because of increasing numbers of mothers working outside the home, communication with parents is becoming less frequent. In such cases quality time spent between parents and children has to be prioritized. More positively, since the limited extended family is unlikely to prevail in the near future, the presence of relatives and other people makes division of labour in the house, especially child care, easier for working women. But there are also many cases of working mothers, especially those engaged in the formal sector, whose children are looked after by poorly educated maids. With the increasing number of working women in the modern sector, better alternative solutions need to be found.

Although frequency of divorce is decreasing, the impact of divorce or death of a spouse on the high proportion of children



living without their parents or with only one parent is substantial. A particular area of concern relates to the security of increasing numbers of street children. A satisfactory solution to this problem is reliant upon intersectoral coordination.

One concomitant of the increasing age at marriage has been the increase in premarital sexual relationships, and therefore increased risk of teenage pregnancy and sexually transmitted diseases, including HIV/AIDS. Campaigns and counselling about reproductive health and family-life education have been initiated by the private sector including NGOs. However, this cannot be optimally implemented without the support of the government. Bureaucrats seem to be reluctant to be open in their acknowledgment of teenage sexuality issues.

A report on a study to enhance reproductive health in Indonesia acknowledged this problem: *The issue of adolescent sexuality and reproductive health is very sensitive in Indonesia, with the result that many policy makers choose to avoid discussion in any but the most moralistic terms. There is a widespread belief that teenagers should not be sexually active before marriage, despite an awareness that this rule is often broken, among young people in all sections of the society. Older people fear that discussion of sexuality, or description of contraceptive devices, will encourage immoral behaviour. Their response is thus to turn a blind eye and repeat the rule* (Demographic Institute, 1997: 38).

### **Government intervention to increase family welfare**

The government of Indonesia has already made considerable effort to increase family welfare. Activities to promote family welfare are scattered through the bureaucratic system but the Coordinating Ministry of Social Affairs is responsible for their coordination.

In 1984 the Ministry of Social Affairs (MOSA) laid the foundation for dealing with social welfare including issues on family and children. This Ministry was challenged with such issues as: rapid population growth which hampers family welfare; the increasing numbers of poor families; the increasing numbers of working mothers and the impact on the physical and mental growth of children; the increasing numbers of family break-ups due to rapid social and technological changes; the increasing individualism and materialism which erode the traditional principle of tolerance and cooperation (*gotong royong*); an imbalance between education and training facilities for those in need; the prevalence of street children, school drop out that leads to juvenile delinquency and the misuse of drugs (MOSA 1984).

The implementation of family welfare programmes has been targeted at families' social problems and their social environment, eligible young families, and members of the younger generation with social-psychological problems. The programme takes the form of an information system continuously collecting data on families with social problems, promoting community participation, improving intersectoral collaboration, and providing information and guidance of youth. In terms of sectoral collaboration within government, the Ministry of Social Affairs has increased its collaboration with the Ministry of Education, the Ministry of Health, the Ministry of Industry and Trade, and the Ministry of Religious Affairs. At the village level, MOSA works together with the Family Welfare Movement (PKK) and the Institute of Community Resilience (LKMD), both of which report to the Ministry of Home Affairs.

The Ministry of Home Affairs is responsible for the improvement of family welfare at the village level, mainly through the PKK (Family Welfare Movement). The PKK was established to coordinate the activities of other sectors targeted at improving family, including women's, welfare. Among its activities, the PKK

coordinates improvements in child health and nutrition; provision of family planning information, education and communication (IEC); extracurricular training for women; and various other information and campaign activities. The PKK is headed by the wife of the village head, and has proved to be a useful vehicle in dealing with family and social welfare.

The Ministry of Health mounts programmes for mother and child care, family planning, integrated family health, school health and teenagers' reproductive health. Recently the Ministry of Health conducted a national immunization programme to eradicate poliomyelitis. It is hoped that in the near future the prevalence of disability due to polio will be eliminated, reducing family and social problems. The Ministry of Religious Affairs is responsible for any advocacy measures for couples who are having problems in their marriages. This is called the BP4K (Institute for Marriage and Divorce Counselling) which is accessible in any sub-district. The Ministry of Women's Affairs collaborates with other Ministries, and has an advocacy programme called the Mothers' Friendly Movement. The objective is to empower and support women in their search for reproductive health services, and to enhance community development in order to increase awareness about safe motherhood and hence reduce the incidence of maternal mortality leading to orphanhood.

These activities were strengthened by the enactment of the Law on Population Development and the Development of Happy and Prosperous Families, Government of Indonesia, No. 10, 1992. Article Number 15 of this law states that –

1. *The Government shall enact policies for the carrying out the development of family quality to be set forth in laws and regulations.*
2. *The enactment of policies as intended by section (1) shall be directed toward the realization of family quality characterized by family self-reliance and resilience as human resource potential, as*

*users and conservers of the environment, and as builders of human harmony in order to achieve continuous development.*

*3. The policies as intended by section (1) shall be carried through by guidance and / or family services.*

This article was then incorporated into the 1994 Government Regulations, Number 21, on the Implementation of the Development of Happy and Prosperous Families. This regulation distinguishes eight important family functions.

- o Religious function: family is the place to promote a high degree of religiosity in its members.
- o Social-cultural function: family is an agent to maintain the high quality of traditional culture.
- o Love and affection functions: family is a foundation for strengthening family ties, to promote respect among family as well as community members.
- o Reproduction function: family is the vehicle for continuing regeneration, and looking after and protecting the new generation for the betterment of mankind.
- o Education and socialization function: family is a place for children's education and for developing their potential to adjust to their social and physical environment.
- o Economic function: family is the basis for support and for meeting the need of its members, and to direct them to be self-reliant in the future.
- o Protecting function: family, as the smallest unit for protection of its members, gives peace, safety and happiness.
- o Maintaining the quality of environment function: family is the place for educating members to improve and sustain the high quality of environment.

Regarding these functions, however, the government has not been able to fully implement the activities required to cope with problems related to family changes and modernization. Currently, intervention is focused on empowering the economic function of

the family, which is consistent with the national priority for poverty alleviation. Income generating projects were conducted by several ministries, including the Ministry of Population and National Family Planning Coordinating Board that initiated the TAKESRA/KUKESRA scheme of saving and borrowing small amounts of capital for home industries. Recently these activities have been conducted under the auspices of the Coordinating Ministry for Social Affairs in order to strengthen intersectoral collaboration.

Although activities promoting the economic empowerment of the family are crucial, intervention to reduce social problems faced by families due to demographic change, socio-economic development and globalization, are equally important and need immediate action. Therefore, alternative solutions have to be sought, for example, encouraging more extensive community participation and greater collaboration with the private sector.

## **Conclusion**

Optimism anticipating a further fertility decline in Indonesia has been somewhat dampened by the economic crisis which has reduced government resources and affordability for clients to obtain family planning services. Efforts to achieve replacement level (a TFR of about 2.2 by 2005), have been hampered by the unavailability of contraceptive services, and by many remaining challenges faced even before the onset of the crisis, such as the hard-to-reach and the never users, who have to be motivated to adopt family planning. A customized IEC strategy is required, and contraceptive subsidies from government need to be specifically directed toward these people.

The 1994 ICPD Plan to increase reproductive health care explicitly oriented towards clients' needs, is being fully accommodated by the government of Indonesia. However, due to

the economic crisis the pace of achieving reproductive health for all by 2015 has slowed. Changes in implementation need to be made if the target for Indonesia is to be achieved.

**Note**

1 To avoid bias in calculating the number of children, desired family size is taken from the responses of women aged 20-24 years at the time of the Survey.

## References

- Adioetomo, Sri Moertiningsih. 1996. "The quality of care in family planning services. Indonesia Family Life Survey 1993. A Summary Report". Jakarta: Demographic Institute of University of Indonesia.
- Ananta, Aris and Evi N. Anwar. 1995. *Projection of Indonesian Population and Labor Force 1995-2025*. Jakarta: Demographic Institute of University of Indonesia.
- Bruce, Judith. (1989). "A fundamental element of the quality of care: A simple framework". *Studies in Family Planning*, 21 (2: March/April):61-90.
- CBS, NFPCB, MOH and Macro Int. 1995. *Indonesia Demographic and Health Survey 1994*. Calverton, Maryland: Macro Int.
- Hull, Valerie J. 1975. *Fertility, Socio-Economic Status, and the Position of Women in a Javanese Village*: Unpublished Ph.D. thesis. Canberra: Australian National University.
- \_\_\_\_\_. 1996. "Improving quality of care in family planning: How far have we come?" *South-East Asia Regional Working Papers*, Population Council, Jakarta.
- Iskandar, Meiwita B. and Nick G. Dharmaputra. 1996. *Quality of Care in Family Planning. An Analytical Review for Future Policy Oriented Research in Indonesia*. Depok: Center for Health Research, Research Institute of University of Indonesia.
- Raintung, Agustini E., Agus Suwandono and Budi Haryanto. 1996. *Penilaian terhadap peranan Puskesmas terutama untuk kesehatan dan kelangsungan ibu dan anak* [Evaluation of the Role of Health Center especially for the Health and Survival of Mothers and Children]. Unpublished Research Report. Depok: Center for Health Research, Research Institute of University of Indonesia and the Ministry of Health.
- Subandrio, Hurustiati. 1963. "The perspective role of men and women in Indonesia", in Barbara Ward, ed., *Women in the New Asia: The Changing Social Roles of Men and Women in South and South-East Asia*. Paris: UNESCO, pp. 230-242.
- United Nations. 1958. *Future Growth of World Population*, (Population Studies, No. 28). New York: UN.

Wibowo, Adik. 1995. *Analisis Lanjut dari Studi Analisis Pelaksanaan dan Pelayanan Keluarga Berencana pada "Service Delivery Points" Pemerintah Indonesia* (Further Analysis on the Implementation and Family Planning Services at Public Service Delivery Points). Jakarta: Population Council.

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## **IV. Thematic Case Studies of Societal Responses to Low Fertility**

### **10. Development of Family Welfare Policies in Europe**

*Anne Hélène Gauthier*

#### **Introduction**

If the 1960s were the golden years of welfare policies in Europe, the 1990s were the years of major reforms. Severe budget restrictions, together with fundamental demographic transformations, have led governments in most European countries to review their support for families. Measures which were developed in earlier decades were clearly no longer suited to the new economic and demographic realities of families.

This chapter reviews the policies and reforms introduced by governments in European countries in three main spheres: cash transfers to families, services for families, and benefits for working parents. The analysis reveals a fundamental change of direction in governments' policies during the past decade including a partial abandonment of the concept of universal benefits and a greater emphasis on means-tested benefits. Trends also reveal an increasing endorsement of the objective of reconciliation of work and family life, as well as a diversification of sources of family support including a greater involvement of non-governmental actors.

The chapter is divided into six sections. The first discusses the concept and measurement of family welfare policy. The second, third and fourth sections analyse state support for families with respect to the three spheres referred to above. Section five examines

some of the new directions in family policies, notably those of decentralization and diversification. Section six concludes the chapter by discussing the implications of recent reforms on the nature and level of state support for families.

### **Concept and measurement**

The notion of family welfare policy refers generally speaking to the benefits and services provided by governments for families and aimed at increasing families' well-being and standard of living. There is however no established definition of family welfare policy. Instead, the way it is defined in each country tends to reflect national practices and ideologies, as well as the specific orientations of each government. In order to carry out the comparative analysis presented in this chapter, two questions had therefore to be answered. First, what policies and benefits should be included in the analysis of family welfare? Secondly, how should these benefits be measured?

With regard to the first of these questions, the International Labour Office Social Policy (Basic Aims and Standards) Convention, 1962 offers some guidelines in referring to *measures to promote improvement in such fields as public health, housing, nutrition, education, the welfare of children, the status of women, conditions of employment, the remuneration of wage earners and independent producers, the protection of migrant workers, social security, standards of public services and general production*. According to the Convention, these measures should be implemented within the general framework of social progress and the improvement of standards of living. Viewed from such an angle, the scope of family welfare policies is therefore very wide.

Within this general framework, scholars of comparative family welfare and family policies have developed their own definition, oftentimes dictated by the nature of the study, but above all by the

**Table 10.1** Components of family welfare

Sectors	Specific benefits
<i>Cash transfers</i>	Universal benefits Means-tested benefits Tax relief for children Child support Housing benefits
<i>Services</i>	Education Health care Reproductive health Child care Legal aid Public transportation Family home help
<i>Work-related benefits</i>	Maternity and parental leave Child care leave/family career break Flexible work schedule Leave for sick child Part-time work
<i>Family law</i>	Divorce Abortion Abuse and domestic violence Cohabitation Homosexual couples Children's rights Adoption

availability of data. The recent studies by Gauthier (1996), and Kamerman and Kahn (1997), and the reports of the European Observatory on National Family Policies (Dumon, Deneffe and Nueland 1995) are notable examples. For the purpose of this

discussion, family-welfare policies have been defined as encompassing four main categories of benefits: cash transfers, services, work-related benefits, and family law (Table 10.1). While a lack of data precludes the provision of detailed information on each of these components, this classification provides a general framework for the analysis presented in subsequent sections.

With regard to the second question, related to measurement, three different approaches have been proposed in the literature. The first one suggests the use of governmental expenditure data to estimate the support provided for families. Such an approach has been used, for example, by Pampel and Adams (1992) in their analysis of the determinants of family allowance expenditure. The expenditure approach, however, carries some serious limitations, notably its lack of control of the quality of benefits or services provided, and its lack of control of the coverage of the programmes.

The money spent on health care by the American government is a perfect example. While health expenditure (as a percentage of GNP) in the United States is the highest among industrialized countries, the corresponding figure hides the fact that 15 percent of children were not covered by any health care insurance in 1996 (US Census Bureau 1998). A further problem with the expenditure approach is that the statistics often do not distinguish the share provided for families and for other recipients. Expenditures on health, housing, and social assistance are good examples.

The second approach which has been suggested in the literature uses the value of benefits received by families as an estimate of state support for families. Data from income surveys could be used for this purpose. For example, the database developed as part of the Luxembourg Income Study project provides estimates of cash and near cash benefits received by families<sup>1</sup>. Information on the social assistance and social security programmes may also be used to estimate the value of benefits received by families. Such a source of information has been used by Gauthier (1996) in her analysis of

family policies in industrialized countries, and by Ditch, Barnes and Bradshaw (1996) in their analysis of family benefit packages in the member states of the European Union. While this "value of benefits" approach provides reliable and cross-nationally comparable figures for direct cash transfers, it is less adequate for indirect transfers, that is, benefits not paid directly to the families. For example, this approach is not particularly well suited to making estimates of the value of services provided for families (either free or at subsidized cost).

The third approach relies on outcome or well-being indicators to estimate state support for families. For example, the Kids Count Foundation relies on key indicators such as poverty, welfare receipt, unemployment, and female-headed families to identify the neighbourhoods which are most highly deprived (Kids Count 1998). Similarly, the Department of the Environment in Britain provides estimates of county-level deprivation based on key indicators including overcrowding, unemployment, mortality and education (Robson, Bradford and Tye 1995). The United Nations' Human Development Index relies on similar methods of evaluation (UNDP 1991). Such an approach obviously provides only an indirect estimate of the level of state support for families. Furthermore, it is clear that the discrepancies observed between neighbourhoods, counties and countries, capture not only differences in state support for families but also other economic and social inequalities.

The following analysis utilises all three approaches to provide a comprehensive picture of family welfare policies in Europe. However, the study is limited by a lack of comparable statistics which has necessitated the use of data from different sources, and has precluded a detailed examination of each of the family welfare components identified earlier.

## Cash transfers to families

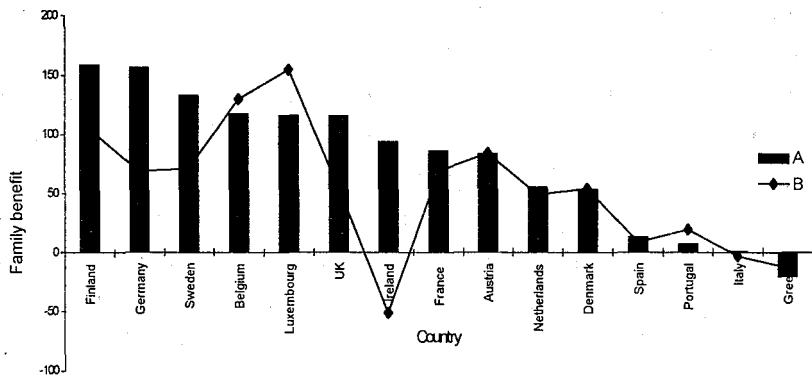
Financial support is one of the core elements of state support for families. Introduced from the 1920s or 1930s in numerous countries, cash transfer programmes aimed at partly compensating families for the cost of raising children. At that time the coverage of the programmes was limited, however, and programmes were often seen as temporary. They were considerably expanded and consolidated in the 1950s following a widely endorsed principle of universal state support for families. By 1961, all European countries with the exception of Germany, had introduced a universal family allowance scheme<sup>2</sup>.

At the time of their introduction, cash transfer programmes were designed to ensure a horizontal redistribution of income (from small to large families). In recent years, programmes have instead emphasized a vertical redistribution of income (from rich to poor families). In the context of severe budget restrictions, means-tested benefits have been given preference over universal benefits. In recent years, a means-test has been imposed on previously universal family allowances in ten European countries (Croatia, the Czech Republic, Greece, Hungary, Italy, Lithuania, Poland, Slovakia, Slovenia and Spain). In the history of family-welfare policies, such reform constituted a major landmark.

Inter-country differences in the level of financial support remain wide. As part of the work done for the European Observatory on National Family Policies, Ditch, Barnes, and Bradshaw (1996) have estimated the monthly value of the benefit package provided for families. They took into account six different types of benefits: child tax allowances/credits, non-means-tested child benefits, means-tested child benefits, health costs, school costs, and other benefits. In their calculation, benefits related to health and school have been entered as negative benefits if families are expected to contribute to the services provided by the state. This is notably the

case in Austria, Belgium, Greece, Ireland, Italy, the Netherlands, and Portugal, although the amounts tend to be small. The estimated value of the family benefit package for a two-child family at two different levels of income is depicted in Figure 10.1. The amounts are expressed in US dollars and have been adjusted to take into account inter-country differences in purchasing power.

**Figure 10.1 Value of family benefit packages for two-child families (in US dollars), 1995**



Series A: One-earner families with 50 percent of average earnings.

Series B: Two-earner families with one earner at average earnings and one earner at 66 percent of average earnings.

Source: Ditch, Barnes and Bradshaw 1996.

The vertical bars in the graph correspond to the value of the family benefit package for a two-child-one-earner family at low income and ranges from around \$160 in Finland to negative \$20 in Greece. The continuous line corresponds to the value of the package for a two-child-two-earner family at above average income. It ranges from \$150 in Luxembourg to negative \$50 in Ireland. In all countries, with the exception of Belgium and Luxembourg, the value of the package for the low-income family exceeds that for the higher-income family. This greater support provided to low-income

families illustrates the emphasis on the vertical redistribution of income mentioned earlier.

In the context of recurrent high unemployment levels and increasing proportions of single-parent families, family and child poverty have been major issues on the agenda of European governments in recent years. However, the ability and willingness of governments to combat poverty have been shown to vary substantially across countries. Using data from the Luxembourg Income Study, Rainwater and Smeeding (1995) were able to compute the pre-transfer and post-transfer income<sup>3</sup> of families and the resulting levels of poverty. Results are depicted in Figures 10.2 and 10.3 for one-parent and two-parent families. For the sake of comparison, the United States and other non-European countries have been included in these graphs.

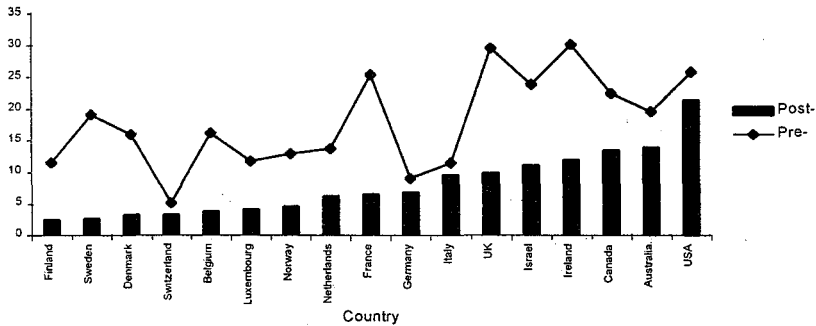
In Figures 10.2 and 10.3 the pre-transfer poverty rates are represented by the continuous line, and the post-transfer poverty rates by the horizontal bars. The difference between these two series corresponds to the degree of governmental success in the reduction of poverty. Canada, Australia, and the United States fare badly on these indicators with the highest levels of post-transfer poverty for both two-parent and one-parent families. By contrast, Finland, Denmark, and Sweden show remarkably low levels of post-transfer poverty suggesting very successful transfer policies. It should also be noted that the scales used in these two graphs are different. In most countries, child poverty among single-mother families tends to be much higher than among two-parent families.

In order to complete this inter-country comparison of cash transfers to families, Figure 10.4 shows the value of family allowances for two children expressed as a percentage of the average male wages in manufacturing. While family allowances constitute only one specific form of cash transfer, it is important to bear in mind that for families with an average or high income, they



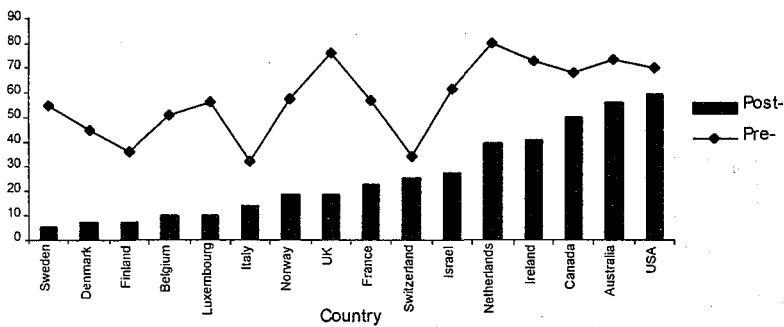
may be the only form of cash transfer received (together with tax relief).

**Figure 10.2 Pre-transfer and post-transfer poverty among children of two-parent families in the 1980s**



Source: Rainwater and Smeeding 1995.

**Figure 10.3 Pre-transfer and post-transfer poverty among children of single-mother families in the 1980s**



Source: Rainwater and Smeeding 1995.

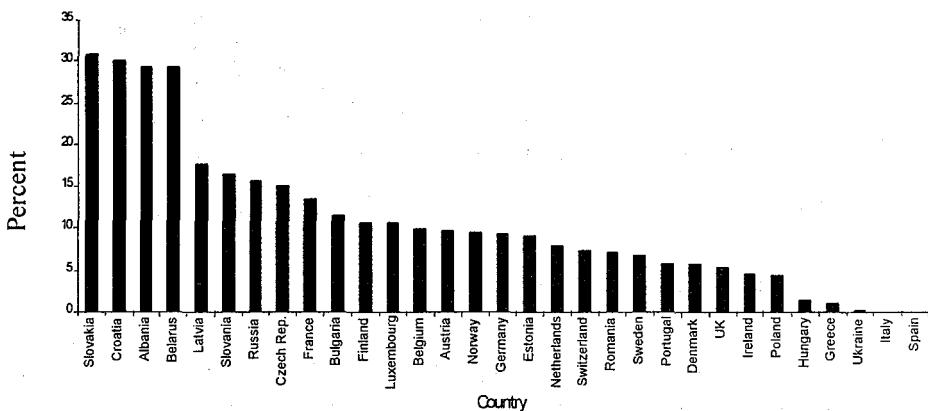
In 1997, across 31 European countries, family allowances for a two-child family represented 11 percent of the average male wages in manufacturing. The inter-country differences are obviously wide, ranging from 30 percent in Slovakia to one percent in Hungary, Greece, and the Ukraine. On this graph (Figure 10.4), the index of

family allowances takes the value of zero in Italy and Spain because of means-tested eligibility criteria. While the inter-country ranking reveals the leading position of some Eastern European countries, it should be kept in mind that family allowances represent only one form of financial support for families. The inclusion of other forms of benefits could potentially lead to a very different ranking of countries.

### Services for families

Numerous services for families were introduced in the early 1950s as part of, or in parallel to, the expanding welfare states. This major component of family-welfare policies is often omitted from comparative analyses of family policies partly because of a lack of relevant data. The following analysis is therefore affected by the same constraint. Two major sectors are covered: education and health.

**Figure 10.4 Family allowances for a two-child family (as a percentage of male wage in manufacturing), 1997**



Source: United States 1997.

See also Appendix.

The provision of free or near free education at primary and secondary school levels constitutes a major form of support for families in European countries. In order to provide estimates of this form of state support, the amount devoted to education is calculated for each country as a percentage of Gross National Product (GNP). In 1994, an average of 5.7 percent of GNP was devoted to education in 30 countries. Although data are not strictly comparable across countries (because of differences in the age structure of the population), they ranged from just over eight percent in Denmark and Norway to less than three percent in Romania.

As discussed in the first section, the use of expenditure data to compare levels of state support for families is not entirely satisfactory as it ignores issues of quality and coverage of the programmes. In order partly to compensate for this problem, data on the percentage of adults aged 25 to 29 having ever completed upper secondary education can be added. Hypothetically one would expect a positive correlation between this indicator and the expenditure data. In practice, since expenditure data do not necessarily capture the effectiveness of the educational system the absence of a perfect correlation is not surprising. This correlation may also be affected by the fact that the indicator refers to a cohort of people who were in upper secondary education some ten years ago and who are therefore unaffected by the current expenditure.

Among member states of the European Union in 1995, 70 percent of adults in the age group 20-29 had ever completed upper secondary education. There is not a perfect correlation between this indicator and the expenditure data. In particular, the completion rates in Austria, Germany, and the Netherlands exceed what would be expected on the basis of the expenditure data, while that in Portugal is lower than expected.

The provision of health-care services is another major form of state support for families. Unfortunately, the available data do not distinguish between expenditure for families and that for families

without minor children or non-family households. In practice, data for total health expenditure expressed as a percentage of GNP has to suffice. An average of 6.7 percent of the GNP was devoted to health among 30 countries in 1996. The levels vary from more than 12 percent in Germany to around seven percent in Latvia and Russia. Again, these statistics are not strictly comparable because of differences in the age structure of these populations.

In order to assess the quality of the health programmes, data on the mortality of children age 0 to 4 years old need to be included<sup>4</sup>. There is likely to be a high degree of correlation between these two sets of figures since high levels of health expenditure tend to be associated with low levels of child mortality. The major aberration in the data is the case of Albania where the very high level of child mortality exceeds what would be expected on the basis of its expenditure on health alone.

The previous data refer to the total expenditure on health. When discussing trends in family welfare policies, it is also important to consider the more specific sector of reproductive health. Data collected as part of the United Nations' Population Inquiry suggests that governments in most European countries provide direct support for the provision of contraception (24 governments out of 33)<sup>5</sup>. However, direct information on the actual level of support is generally lacking. An indirect indicator is provided by data on abortion rates. While recourse to abortion may result from couples' contraceptive failure, it may also result from limited access to modern forms of contraception. There are major inter-country differences in abortion rates in Europe. Romania is at the top of the distribution with 212 abortions per 100 live births, while Poland appears at the bottom of the distribution with fewer than one.

It should be stressed that abortion statistics refer to legal abortions and are therefore highly dependent on the abortion legislation in each country. As of 1992, out of 32 European countries, abortion was provided on request in 21 of them (Table 10.2).

## Benefits for working parents

Since the 1970s, benefits for working parents, or work-related benefits, have emerged as a major sector of governmental support for families. Fuelled by the increasing participation of women in the labour force, together with a global commitment to gender equality, work-related benefits have been part of the governments' goal of reducing the incompatibility between work and family responsibilities.

The provision of maternity leave has been one of the most salient forms of support for working parents. From a mere four to eight weeks of leave at its introduction in the 1880s, maternity leave in 1997 had an average duration of 25 weeks across 33 countries, during which benefits averaging 87 percent of the mother's usual earnings were paid. Figure 10.5 reports the data for each country using an index of maternity leave which represents the number of weeks fully paid for<sup>6</sup>. In 1997, provision for maternity leave was more generous in Scandinavian countries and in some Eastern European countries, approaching 52 weeks of leave with full compensation. It was the least generous in Greece, Ireland, and the United Kingdom with less than 10 weeks of leave.

A high level of commitment to gender equality has led some countries to extend the notion of maternity leave to fathers either in the provision of separate paternity leave, or in clauses allowing fathers to share part of the "maternity" leave. In Norway, for example, four of the 42 weeks of maternity leave are now reserved exclusively for the father and cannot be transferred to the mother. The imposition of such a minimum father's share marked a sharp departure from earlier decades when maternity leave was viewed as a way of preserving the mother's and child's physical health and their psychological bonding. In Sweden, parents may share the whole period of leave, while in Finland they can share about half of it.

**Table 10.2 Abortion legislation, 1992**

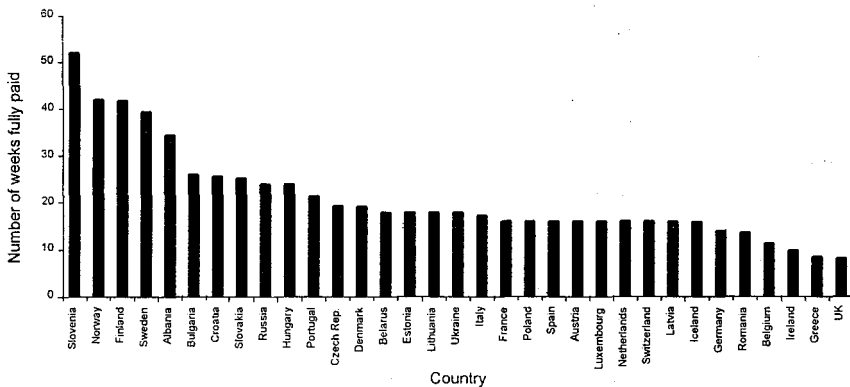
Region	Country	On request	Medical and socio-economic reasons	Other health reasons	Prohibited
<i>Western Europe</i>	Austria	X			
	Belgium		X		
	Denmark	X			
	Finland		X		
	France	X			
	Germany		X		
	Greece	X			
	Ireland				X
	Italy	X			
	Luxembourg		X		
	Netherlands	X			
	Norway	X			
	Portugal			X	
	Spain			X	
	Sweden	X			
	Switzerland			X	
	United Kingdom		X		
<i>Eastern Europe</i>	Albania	X			
	Belarus	X			
	Bulgaria	X			
	Croatia	X			
	Czech Republic	X			
	Estonia	X			
	Hungary		X		
	Latvia	X			
	Lithuania	X			
	Poland		X		
	Romania	X			
	Russia	X			
	Slovakia	X			
	Slovenia	X			
	Ukraine	X			

Sources: United Nations 1992.

Gauthier 1996.

In addition to maternity leave, numerous countries are nowadays offering child-care leave (also referred to as parental leave or education leave). In force in only two Western European countries in 1970 (Austria and Italy), child-care leave has since been introduced in all Western European countries but Switzerland. Child-care leave is also available in most Eastern European countries. The inter-country differences are, however, wide ranging from less than six months (unpaid) to 36 months (paid) (Table 10.3). For most countries such leave is a very recent addition to the governments' family policy and has been part of governments' efforts to lessen the incompatibility between work and family responsibilities. In some countries this child-care leave can also be shared between parents.

**Figure 10.5 Index of maternity leave, 1997**



Source: United States 1997.

The provision of public child-care facilities and the subsidies to child care have been another major area for action by governments in recent years. However, at that level the intervention of governments has been most severely restricted by budget limitations. In numerous cases, governments ended up not being able to fulfil their promises to considerably increase child-care

places or their promises to offer total coverage to all pre-school children. Promises and actions have nevertheless been significant.

**Table 10.3 Child-care leave schemes, 1997**

Region	Country	Months	Paid
<i>Western Europe</i>	Austria	24	x
	Belgium	12	x
	Denmark	36	x
	Finland	36	x
	France	36	x
	Germany	36	x
	Greece	6	-
	Ireland	3.5	-
	Italy	12	x
	Luxembourg	12	x
	Netherlands	6	-
	Norway	12	-
	Portugal	24	-
	Spain	36	-
	Sweden	18	-
	Switzerland	-	-
	United Kingdom	10	-
<i>Eastern Europe</i>	Albania	-	-
	Belarus	-	-
	Bulgaria	24	x
	Croatia	12	x
	Czech Republic	36	x
	Estonia	-	-
	Hungary	-	-
	Latvia	-	-
	Lithuania	12	x
	Poland	24	x
	Romania	12	x
	Russia	36	x
	Slovakia	36	x
	Slovenia	-	-
	Ukraine	36	x

Sources: United States 1997.

Gauthier 1996.

See also Appendix.

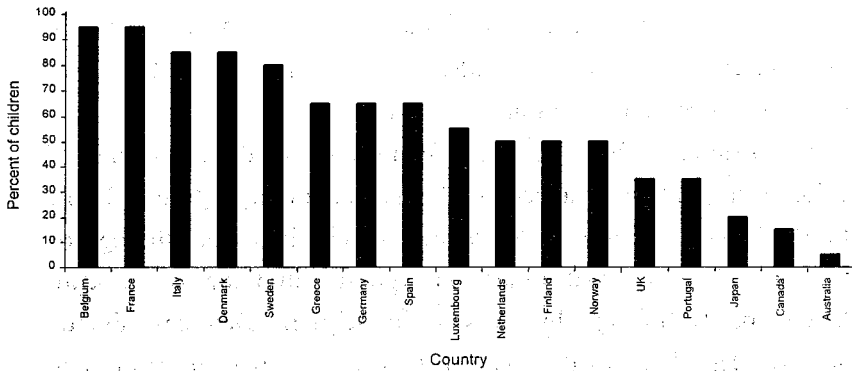


For example, responding to an increased demand for more places for children in day care, the Danish government promised a "guaranteed place" to all children aged between one and five years of age by 1996 (Ditch, Bradshaw and Eardley 1994). Similarly, in 1992 the German government adopted the policy of a "right to a place in child care" for all children between the ages of three and six (Ditch, Bradshaw and Eardley 1994).

The differences between countries in terms of the percentage of children in publicly financed child care remain large (Figure 10.6). In 1988, while more than 80 percent of children from the age of three to school age had a place in a public child care or day-care facility partly financed by the state in Belgium, Denmark, France and Sweden, this was the case for less than 40 percent of eligible children in the United Kingdom and Portugal<sup>7</sup>. In Central and Eastern Europe, the child-care situation has also been affected by serious economic constraints. Although up-to-date information is scarce, universal child care, which was put in place in the 1950s to encourage women to enter the labour force, seems to have largely disappeared, thus shifting the burden of child care back to the families.

One of the recent developments in the field of child-care provision has been the attempt of governments to increase parental choice. Instead of offering one type of child-care institution, the trend has been to provide parents with cash subsidies and allow them to decide on their preferred type of child-care arrangements. These cash subsidies have been provided either as monthly benefits, vouchers, or tax relief. In Finland, the issue of choice has even been taken a step further by offering parents with a choice between a guaranteed place in child care or a home-care allowance to enable them to look after their children themselves while receiving some financial compensation.

**Figure 10.6 Children three-to-school age in publicly funded institutions (in percent), 1988**



Source: Gauthier 1996 Table 10.6.

### **Decentralization and diversification**

In contrast to the so-called golden age of the welfare state when governments had established a virtual monopoly over the supply of benefits and services for families, the trend observed in recent years in numerous countries has been towards a higher level of decentralization and towards a diversification of the sources of support for families. While both trends have been part of governments' strategies to reduce the financial cost of family policies and to better meet the new needs of families, the actions of governments have varied across countries. While in some countries the move has come about through a genuine partnership with other social actors, either at the private or public levels, in other countries the move has come about through a retrenchment of the government from core family policy sectors, forcing other actors to fill the gaps. The following examples illustrate the different strategies used by governments in recent years to achieve a higher level of diversification in the provision of support for families.

In Denmark, the recent trend in family policy has moved the provision of services closer to the people via local authorities, in addition to establishing partnerships with voluntary organizations (Ditch, Barnes and Bradshaw 1995). This has been the case with child-care facilities which have been placed under the responsibility of local authorities with support from the central government. The same authors also note that the Danish government has also been actively pursuing the objective of creating family friendly workplaces through the involvement of public and private employers. The issue of partnership has also been prominent at the European Union level and has included the launch in 1994 of the "Families and Work Network" and the "European Social Innovation Award". While the former aims at stimulating and disseminating good family-friendly practices within companies and non-governmental organizations (Stewart 1995), the latter gives awards to companies which have adopted innovative projects for reconciling work and family life (Thozet-Teirlinck 1995). The so-called "innovative projects" include those related to child-care facilities, as well as arrangements for flexitime, career breaks, teleworking, and flexiplace.

Studies confirm that such measures are increasingly adopted by companies (Hogg and Harker 1992). It is important to note that such initiatives appear to be more readily endorsed by employers in countries where the government has already taken an active stance toward families and where it has therefore already established a family-friendly context. The "contrat-creche" and "contrat-enfance" in France are notable examples. Launched in the 1980s, these contracts between the Caisse Nationale des Allocations Familiales (institution in charge of administering family allowances) and employers in the public and private sectors included subsidies to support the setting up and maintenance of new child-care centres. Between 1984 and 1993, 215 contrat-creche were signed and led to the creation of 20,000 new places for children (Gauthier 1996).

In Britain, in contrast to the above examples which involved a real partnership between the government and other social actors, the diversification of sources has followed the government's philosophy of minimal support for families. Again, the example of child care is relevant. Under the Conservative government, the responsibility of caring for children was seen as an essentially private responsibility. For example, among women returning to work full time after childbirth in 1988, 71 percent relied on informal child-care arrangements, while only four percent of women sent their children to a formal nursery (McRae 1991). Acknowledging that such a great reliance on familial and informal arrangements may be problematic for families, the British repeatedly denied responsibility for better support and instead turned to employers in 1991 in an attempt to encourage them to provide child care for their employees.

The British government's "Opportunity 2000" initiative was aimed at the promotion of women workers and at the encouragement of employer-sponsored measures and services for families (Gauthier 1996). This initiative was also accompanied by tax relief for companies providing a workplace nursery. The immediate response of employers was far from overwhelmingly positive. In the Greater London metropolitan area, only 62 workplace nurseries were in place in 1991, offering places to less than 2,000 children (Wood 1991). Signs are however that this situation may be changing as employers are starting to realize the payoffs of providing so-called family-friendly benefits in terms of higher labour retention (i.e., lower labour turnover) and lower rates of absenteeism (Clement 1992). The cases of new employer-sponsored child-care initiatives have in fact been numerous in recent years, but have tended to be limited to large firms or large profit-making companies in view of the high cost involved in setting up workplace facilities. In contrast to the partnership examples reviewed above, the British case instead points to a

diversification of sources of support for families without a genuine partnership with the government.

## **Discussion and conclusion**

From the previous review of recent trends in family policies in Europe, several points emerge. First, across all countries the recent decade has seen major developments in family policies - developments which have marked a significant departure from earlier decades. Among them have been the abandonment of the universal family allowance in some countries, and the greater emphasis placed on targeted and means-tested benefits. Economic constraints, together with high unemployment and poverty levels, have seemingly fuelled this move away from universalism towards greater selectivity.

Secondly, all countries have given a high priority to the objective of reconciliation between work and family responsibilities. What is interesting here is that although maternity leave schemes have been in force in some countries since the beginning of the twentieth century, the concern in recent years has moved away from the strict issue of mother and child's physical health around the time of confinement, to the more general issue of parents' and children's mental health during the whole childhood period. This issue of compatibility between work and family responsibilities has been embodied in that of gender equality.

Thirdly, the recent developments have revealed a willingness by governments to promote more coordination between the different components of family policies, together with a greater level of parental choice. The example given earlier regarding the choice between a place in child care or a home-care allowance illustrates such a trend. The developments in terms of part-time work opportunities, flexitime, and child-care leave, are further examples aimed at increasing parental choice while at the same time being

directed at the issue of compatibility referred to previously. Finally, the other development which was discussed was that of decentralization and partnership which, although partly driven by economic constraints, has also been suggestive of a trend away from the idea of family-friendly governments to that of a family-friendly society.

What is particularly interesting here is the fact that these trends have been observed in most countries, and thus strongly suggest a convergence in family policies across countries. In particular, the developments observed in recent years have significantly blurred the boundaries between the discrete models of family policies suggested in the 1980s (Gauthier 1996). This includes the greater importance accorded issues of gender equality by governments traditionally espousing the male breadwinner ideology, and the increased receptivity to issues of state support for families in countries traditionally adhering to a model of minimal support for families.

Despite this apparent convergence, and as pointed out throughout this chapter, the inter-country differences remain large. In particular, these differences continue to divide countries between those which endorse a principle of public responsibility in the support for families, and those which endorse a principle of private responsibility (Gauthier 1996). What will be particularly interesting to monitor in future years is the extent to which non-governmental actors (non-profit or for-profit ones) will be involved in the development of a more family-friendly society. A cursory review of headlines in the popular press and magazines suggests that such a trend is already underway. Increasingly headlines refer to family-friendly "policies", "companies", "employers", and even "neighbourhoods" - terms which were rarely mentioned even ten years ago.

## Appendix

### Notes to Figure 10.4.

**Wages:** Data was obtained from the ILO *Yearbook of Labour Statistics*. Data from this source was available until 1995 for most countries. Wages for 1997 were estimated using the 1996 percent change in the consumer price index for each country (from the IMF *International Financial Statistics*). Such a method may have led to an under- or over-estimation of the real 1997 wages if the wage increase did not follow the increase in the consumer price index. Male wages in manufacturing for wage-earners were used whenever available. This was the case in about half the countries. In the other half, male wages in manufacturing for employees were used instead. Wages for employees tend to be slightly higher than for wage-earners.

In most Eastern European countries and in a limited number of Western European countries, only data for males and females wages combined was available. This data under-estimates male wages. When data on hourly wages was available, it was converted into monthly wages by assuming a 40-hour week. **Family allowances:** Data refers to two school-age children. It was obtained from the US *Social Security Programs Throughout the World*. In the countries listed below for which data on the minimum wage was required, information was obtained from the 1997 Human Rights Reports of the US Department of State (on-line information). **Austria:** Figures refer to children up to 10 years old. **Belgium:** Figures include the supplement for the 6-12 years old. **Belarus:** Allowances are set to 60 percent of the minimum wage (=200,000 roubles/month) if income less than 2 times the minimum wages. Allowances are set to 30 percent of the minimum wage if income is between 2 and 3 times the minimum wages. Higher income families are not eligible. The rate of 30 percent was used. **Croatia:** Allowances are means-tested and vary according to family type: The average between the stated maximum and minimum values was used. **Czech Republic:** Allowances are means-tested. Families with an income above 3 times the living minimum are not eligible. The rate (28 percent of living minimum) used corresponds to that of a family with an income equal to 1.1 to 1.8 of the living minimum (=2500 crowns / month).

**Denmark:** Figures refer to children age 7-17 years old. **France:** Figures refer to children less than 10 years old. **Greece:** Family allowances are means-tested with lower rates for higher income. The figures used are those corresponding to the annual earnings of a male worker in manufacturing. **Hungary:** Allowances are means-tested. The figures used are the lowest ones. **Iceland:** In 1993 the family allowances were integrated into the tax system. **Italy:** Family allowances are means-tested. Two-child families with an annual earnings corresponding to that of a male worker in manufacturing are not eligible.

**Lithuania:** Allowances are means-tested. Benefits not specified. **Netherlands:** Allowances vary with family size. An average of published figures was used. **Poland:** Allowances are means-tested. Families with an income above 50 percent of the national average are not eligible. **Russia:** Allowances are set to 60 percent of minimum wage for children age 6-16 (= 83,490 rubles/ month). **Slovakia:** Allowances are means-tested. Families with an income 2 times the subsistence level or more are not eligible. Benefits are set to a third to a half of the minimum wage (= 3000 crowns/ month). The average between these two figures was used. **Slovenia:** Allowances are means-tested and set to 7 to 22 percent of the minimum wage (= 59,150 tolar / month). The average between these two figures was used. **Spain:** Allowances are means-tested. Two-child families with an annual earnings corresponding to that of a male worker in manufacturing are not eligible. **Switzerland:** Allowances vary according to the canton. The figures used correspond to that provided under the federal scheme for agricultural workers. **Ukraine:** Allowances are means-tested.

### Notes to Figure 10.5.

In Denmark, Finland, Iceland, Sweden, and the United Kingdom all or part of the maternity benefit is paid as a flat rate payment instead of as a percentage of one's earnings. Data on female wage in manufacturing were used in those countries to compute an equivalent percentage. **Albania:** Benefits equal to 80 percent of earnings are paid for the first 185 days. Benefits equal to 50 percent of earnings are paid for the other 180 days. Combined they correspond to 65 percent of earnings. **Belarus:** Benefits



payable for 126 calendar days. **Belgium:** Benefits equal to 82 percent of earnings are paid for the first 4 weeks. Benefits equal to 75 percent of earnings are paid for the other 11 weeks. Combined they correspond to 77 percent of earnings.

**Bulgaria:** Benefits payable for 4 to 6 months depending on the number of children in the family. **Croatia:** Benefits payable for 180 days. **Estonia:** Benefits payable for 126 calendar days. **Finland:** Benefits payable 30 to 50 days before delivery, plus 105 work days (maternity allowances), and 158 weekdays (parent's allowance). **France:** Benefits payable for 16 weeks for the first child, and 26 weeks for subsequent ones. **Greece:** Benefits payable for 112 days at 50 percent of earnings, plus 10 percent for each dependent. **Hungary:** Benefits payable for 24 weeks at 100 percent of earnings if at least 270 days of insurance contribution within the last 2 years before confinement. Lower rate if shorter contribution. **Iceland:** Flat rate benefits payable for 6 months plus additional daily flat rate benefits of a value variable according to the number of hours worked in the last 12 months. Highest rate used. **Italy:** Benefits payable for 5 months at 80 percent of earnings. **Latvia:** Benefits payable for 112 calendar days.

**Lithuania:** Benefits payable for 126 calendar days. **Norway:** Benefits payable for 42 weeks at 100 percent of earnings (65 percent for self-employed) or 52 weeks at 80 percent. **Poland:** Benefits payable for 16 weeks for first child, and 18 weeks for subsequent ones. **Portugal:** Benefits payable for 150 days. **Romania:** Benefits payable for 112 days at 85 percent of earnings if over 12 months of continuous employment (lower rate if shorter employment). Benefits equal to 94 percent of earnings for third and subsequent child regardless of employment. **Russia:** Benefits payable 10 to 12 weeks before confinement, and 10 to 16 weeks after confinement. An average of 24 weeks was used. **Slovenia:** Benefits payable for 365 days. **Sweden:** Benefits equal to 75 percent of earnings are paid for the first 360 days. Flat rate benefits are paid for the other 90 days. Combined they correspond to 61.5 percent of earnings. **Switzerland:** Benefits payable up to 16 weeks and of value variable according to the insurance fund. **Ukraine:** Benefits payable for 116 days. **United Kingdom:** Benefits equal to 90 percent of earnings are paid for the first 6

weeks. Flat rate benefits are paid for the other 12 weeks. Combined they correspond to 45 percent of earnings.

### Notes to Table 10.3.

**Bulgaria:** Additional leave paid at minimum wage until the child is 2 years old. May be followed by leave without pay until the child reaches the age of 3. **Croatia:** Additional leave paid at 100 percent of salary until the child is 1 year old for the first and second child, and until the child is 3 years old for the third and subsequent child. **Czech Republic:** Additional leave until the child is 3 years old with flat rate benefits. **Greece:** Each parent is entitled to a non-transferable 3-month unpaid leave. **Italy:** Additional 6 month leave for either parent paid at 30 percent of earnings. **Luxembourg:** For families with 4 and more children, the leave is of 4 years. **Netherlands:** The 6-month leave is available to each parent (non-transferable) and allows each parent to reduce his/her hours of work down to 20 hours per week without financial compensation. **Poland:** Additional leave of 24 months (36 months for single parents) with flat rate benefits. **Romania:** Additional leave until the child is 1 year old with benefits equal to 65 percent of earnings. **Russia:** Additional leave until the child is 18 months old with benefits equal to 100 percent of earnings. **Slovakia:** Additional leave until the child is 3 years old with flat rate benefits (subject to some eligibility criteria). **Sweden:** Additional 18-month leave, independent from the parental/maternity leave. **Ukraine:** Additional leave until the child is 3 years old with benefits equal to 100 percent of the minimum wage for employed women and women on leave for education and training. For unemployed women, the leave is until the child is 2 years old with benefits equal to 50 percent of the minimum wage. **United Kingdom:** The 29-week unpaid leave with a right to reinstatement to the previous job was introduced in 1976.

### Notes

1. Near cash benefits include all forms of transfers that are, in a strict sense, in-kind payments (i.e., they are tied to a specific requirement

such as school attendance) but have a cash-equivalent value equal or nearly equal to the market value, including near-cash housing benefits.

2 Outside Europe, a universal family allowance scheme had not been introduced in Japan and the United States as recently as 1961.

3 Pre-transfer income refers to income prior to taxes, cash, and near-cash benefits.

4 The use of child mortality as an indicator of well-being has been suggested by Dasgupta (1995) and UNICEF (1987).

5 Of those not providing direct support, four said they were providing no support (Ireland, Luxembourg, Norway, Switzerland), and five said they were providing indirect support (Austria, Belgium, France, Germany, the Netherlands) (United Nations 1992).

6 This index ignores other inter-country differences in maternity leave schemes such as whether the benefits are calculated by reference to gross or net earnings, and whether the benefits are subject to a ceiling (i.e., a maximum).

7 Even lower percentages were observed in Japan, Canada, and Australia (Gauthier 1996).

## References

- Business and Economic Review. 1996. "Family-friendly firm", 1 Jan 1996. 42(2): 10.
- \_\_\_\_\_. 1993. "Is your company family-friendly?". 1 Apr 1993. 39(3): 13.
- Clement, B. 1992. "Family-friendly working can cut costs, study finds". *The Independent*. 21 July 1992.
- Dasgupta, P. 1995. *An Inquiry into Well-Being and Destitution*. Oxford: Clarendon Press.
- Ditch, J., J. Bradshaw and T. Eardley. 1994. *Developments in National Family Policies in 1994*. Brussels: European Observatory on National Family Policies and European Commission.
- Ditch, J., H. Barnes and J. Bradshaw. 1996. *A Synthesis of National Family Policies in 1995*. Brussels: European Observatory on National Family Policies and European Commission.
- Dumon, W., C. Deneffe and T. Nuelant. 1995. *Bibliography on National Family Policies in the Member States of the European Union (1990—1993)*. Brussels: European Commission.
- EONFP. 1991. European Observatory on National Family Policies. *Families and Policies: Evolutions and Trends in 1989—1990*. Brussels: Commission of the European Communities.
- Eurostat. 1997. *Youth in the European Union; from Education to Working Life*. Luxembourg: Eurostat.
- Gauthier, A. H. 1996. *The State and the Family; A Comparative Analysis of Family Policy in Industrialized Countries*. Oxford: Clarendon Press.
- Hogg, C. and L. Harker. 1992. *The Family-Friendly Employer: Examples from Europe*. London: Daycare Trust.
- International Labour Office. On-line database on international labour standards (ILOLEX). (<http://www.ilo.org>).
- Kamerman, S. B. and A. J. Kahn, eds. 1997. *Family Change and Family Policies in Great Britain, Canada, New Zealand, and the United States*. Oxford: Clarendon Press.

- Kids Count. 1998. *Data on the Well-Being of Children in Large Cities* (on-line document). Annie Casey Foundation (<http://www.aecf.org>).
- McRae, S. 1991. *Maternity Rights in Britain; The PSI Report on the Experience of Women and Employers*. London: Policy Studies Institute.
- Monnier, A. and C. Guibert-Lantoine. 1996. "La conjoncture démographique: L'Europe et les pays développés d'outre mer". *Population* 51(4/5): 1005—30.
- Pampel, F.C. and P. Adams. 1992. "The effects of demographic change and political structure on family allowance expenditures". *Social Service Review*. Dec: 524—46.
- Rainwater, L. and T.M. Smeeding. 1995. *Doing Poorly: The Real Income of American Children in a Comparative Perspective*. Luxembourg Income Study working paper no.127.
- Robson, B., M. Bradford and R. Tye. 1995. "The development of the 1991 local deprivation index" in G. Room, ed., *Beyond the Threshold; The Measurement and Analysis of Social Exclusion*. Bristol: The Policy Press.
- Stewart, T. 1995. "Aims and achievements of the European Commission" in B. Arve-Pares, ed., *Reconciling Work and Family Life – A Challenge for Europe?* Commission of the European Communities and Swedish National Committee on the International Year of the Family.
- Thozet-Teirlinck, M. 1995. "The network families and work and the social innovation award" in B. Arve-Pares, ed., *Reconciling Work and Family Life – A Challenge for Europe?* Commission of the European Communities and Swedish National Committee on the International Year of the Family.
- United Nations. 1993. *World Population Monitoring 1993*. New York: United Nations.
- \_\_\_\_\_. 1992. *Abortion Policies: A Global Review*. New York: United Nations.
- UNDP. 1991. *Human Development Report*. New York: UN Development Program.
- UNESCO. 1998. On-line indicators (<http://www.unesco.org>).
- UNICEF. 1998. *The State of the World's Children 1998*. On-line document (<http://www.unicef.org>).

- \_\_\_\_\_. 1987. *The State of the World's Children*. Oxford: Oxford University Press.
- United States. 1997. *Social Security Programs Throughout the World, 1997*. Washington DC.
- U.S. Bureau of Census. 1998. "Children without health insurance". *Census Brief CENBR/98-1*.
- U.S. News and World Report. 1997. "Family-friendly firms". 12 May 1997. 122(18): 64.
- \_\_\_\_\_. 1997. "Finding a family-friendly boss". 22 Feb 1993. 114(7): 59.
- Wennemo, I. 1992. "The development of family policy: A comparison of family benefits and tax reductions for families in 18 OECD countries". *Acta Sociologica* 35(3): 201-17.
- World Health Organization. 1998. On-line database (<http://www.who.org>).
- Wood, L. 1991. "Criticism over nursery provision". *Financial Times*. 28 October 1991.

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## 11. Ageing and Social Welfare Policies in Japan

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### **Introduction**

The terms for ageing (*koreika*) and hyper-ageing (*cho-koreika*) have been popular in Japan for a couple of decades. After the “1.57 Shock” in 1990 (the public sensation associated with the media coverage of the record-low total fertility rate (TFR) of 1.57 for 1989), low fertility has suddenly appeared on the public agenda. The term *shoshika* (“trend toward fewer children”) became popular after its first use in the 1992 White Paper on the National Life (published by the Economic Planning Agency) and often came to be used side by side with *koreika* by scholars, policy makers, politicians and businessmen, as well as the mass media.

At the same time, the measures to cope with these two interrelated demographic trends have become items on the policy agenda particularly because the changes in family structures and functions have made it difficult for families to keep supplying the care and support of the elderly and young children as they traditionally did, without further support from the larger society at large. The “Gold Plan” for the elderly and the “Angel Plan” for children were formulated several years ago. The new law for long-term care insurance was enacted as recently as 1997 for implementation in 2000. More effective support for child rearing is now debated within government.

Japan’s social policy has been criticized for its heavy reliance on the traditional family which gave most support for the care of the elderly, young children and other dependents. The modern intergenerationally extended household is also said to be a family adaptive strategy to cope with the lack of social policy measures for

the care of the elderly and young children as well as housing and income maintenance, in the light of higher labour force participation of married women in outside employment (Morgan and Hiroshima 1983). However, the Japanese family seems to be overburdened now due to the changes in itself as well as in its socio-economic environment.

One of the relatively unknown major changes which has come to limit the capacity of the family to support the elderly is the drastic change in the size and composition of “sibship” (which might be termed “sibling configuration transition”) among current middle-aged generations caused by the decline in fertility as well as infant and child mortality in the immediate postwar period. The sibling configuration transition has drastically changed the accessibility of parents to children for coresidence and support as well as the availability of children to parents because only one married child is expected to live with the parents and to give them major support. The social-policy measures have to be strengthened in response to both the current and previous fertility and mortality decline to provide adequate care for young children and the elderly for the welfare and reproduction of the population.

This chapter describes the trends in population ageing in Japan and its demographic determinants and consequences. It discusses the social policy implications of ageing, with special reference to the developments of health and income maintenance programmes<sup>1</sup>.

### **Trends in population ageing**

Japan's population, which was 84.1 million in 1950, had reached 125.6 million in 1995, making Japan the eighth most populous country in the world. The annual growth rate was about three percent during the immediate postwar period, but decreased to the order of one percent in the mid-1950s, and remained at this level through the mid-1970s. Then, it fell below one percent and has



continued to decline further to a level around 0.3 percent. The slower growth of population is mainly due to the decline in fertility and mortality. Both declined rapidly in the immediate postwar period. Then fertility stabilized at about replacement level but declined further from the mid-1970s. Mortality continued to fall, particularly in the older age groups.

These trends led to a sharp decline in the proportions in the child population (aged 0-14) while that of the aged population (aged 65 and over) continued to rise (Table 11.1). The share of the working-age population (aged 15-64) rose from 59.6 percent in 1950 to 68.9 percent in 1970, and virtually levelled off at around 70 percent thereafter. The share of the child population, which was 35.4 percent in 1950, had dropped to 15.8 percent by 1995. Conversely, the proportion in the aged population rose rapidly, from 4.9 percent in 1950 to 10.3 percent in 1985. The speed of ageing has been accelerated since then and the share of the aged population in 1995 was 14.5 percent. As a consequence, the median age of population increased by 17.5 years from 22.2 in 1950 to 39.7 in 1995 (Table 11.2).

The aged population is projected to increase further by the new series of official population projections for Japan, which was published by the National Institute of Population and Social Security Research (formerly, Institute of Population Problems), Ministry of Health and Welfare in 1997 (Table 11.1). According to the medium variant, the total population will increase continuously from 125.6 million in 1995 to 127.8 million in 2007, and decrease continuously thereafter to 125.6 million in 2017, 100.5 million in 2050 and 67.4 million in 2100. While both the child population and the working-age population will gradually decrease, the aged population will continue to increase from 18.3 million in 1995 to 33.4 million in 2021 and stay around the same level until 2050 before starting to decrease slowly. The median age of population will increase from 39.7 years in 1995 to 50.6 years in the late 2030s,

**Table 11.1 Trends in age composition, 1920 to 2100<sup>a</sup>**

<b>Year</b>	<b>Total (thousands)</b>	<b>0-14</b>	<b>15-64</b>	<b>65 and over (percent)</b>	<b>65-74</b>	<b>75 and over</b>
1920	55,963	36.5	58.3	5.3	3.9	1.3
1930	64,450	36.6	58.7	4.8	3.4	1.4
1940	73,075	36.1	59.2	4.7	3.5	1.2
1950	84,115	35.4	59.6	4.9	3.7	1.3
1960	94,302	30.2	64.1	5.7	4.0	1.7
1965	99,209	25.7	68.0	6.3	4.4	1.9
1970	104,665	24.0	68.9	7.1	4.9	2.1
1975	111,940	24.3	67.7	7.9	5.4	2.5
1980	117,060	23.5	67.3	9.1	6.0	3.1
1985	121,049	21.5	68.2	10.3	6.4	3.9
1990	123,611	18.2	69.5	12.1	7.2	4.8
1995	125,570	15.8	69.4	14.5	8.8	5.7
2000	126,892	14.7	68.1	17.2	10.2	7.0
2005	127,684	14.3	66.1	19.6	10.8	8.7
2010	127,623	14.3	63.6	22.0	11.6	10.5
2015	126,444	14.2	60.6	25.2	13.3	11.9
2020	124,133	13.7	59.5	26.9	13.4	13.4
2025	120,913	13.1	59.5	27.4	11.8	15.6
2030	117,149	12.7	59.3	28.0	11.5	16.4
2040	108,964	12.9	56.1	31.0	14.6	16.3
2050	100,496	13.1	54.6	32.3	13.5	18.8
2060	91,848	12.9	56.0	31.0	11.6	19.4
2070	83,773	13.5	56.5	30.0	12.5	17.5
2080	77,375	14.0	56.0	30.0	13.0	17.0
2090	72,068	14.2	56.3	29.5	12.0	17.5
2100	67,366	14.6	56.5	28.8	12.0	16.8

<sup>a</sup> The statistics are for 1 October each year, and include Okinawa.

Sources: National Institute of Population and Social Security

Research 1997a; 1997b.

Association for the Employment Development of the Elderly 1997.

decrease to 49.9 years around 2050, and then increase a little to 50.0 years in the late 2050s due to the echo effects of baby booms

and busts (Table 11.2).

The population of Japan is expected to experience rapid ageing not previously observed in the West. The proportion of the elderly among the total population will rise from 14.5 percent in 1995 to 27.4 percent around 2025, which will probably make Japan one of the most aged countries in the world. It is projected to rise further to the highest level of 32.3 percent around 2050 before starting to decrease. Among the elderly, the proportion of “older old” population (aged 75 and over) will dramatically increase from 5.7 percent in 1995 to 15.6 percent in 2025. It is projected to reach a peak of 19.5 percent in the late 2050s.

## **Demographic determinants and consequences of ageing**

### **Demographic determinants**

As mentioned earlier, the rapid ageing of Japan's population has been led by the rapid decline in both fertility and mortality. After falling below the replacement level at 2.05 in 1974, the TFR went into steady decline and reached the record low level of 1.42 in 1995 (it is estimated to have attained an even lower level of 1.39 in 1997 after a slight increase to 1.43 in 1996). This decline in the TFR is explained by the respective trends of its two components: the fertility rate among married women and the proportion of women marrying. While the former has remained fairly constant, the latter has declined greatly according to analyses based on demographic decomposition. However, a recent analysis based on different measures of marital fertility by Kojima and Rallu (1997) suggests that this component has also declined.

In other words, the trend toward higher age at marriage and higher proportion remaining never-married has greatly reduced the incidence of marriage among women in their twenties, and this may be regarded as the primary demographic determinant of the recent

**Table 11.2 Trends in mean age and age dependency ratios,  
1920 to 2100<sup>a</sup>**

Year	Median Age (years)	Dependency ratio			Aged/child ratio	Non-active/Active
		total	child	aged		
1920	22.2	71.6	62.6	9.0	14.4	105.3
1930	21.8	70.5	62.4	8.1	13.0	117.6
1940	21.9	70.9	62.7	8.2	13.1	125.0
1950	22.2	67.7	59.4	8.3	13.9	133.5
1960	25.6	55.9	47.0	8.9	19.0	114.1
1965	27.4	47.1	37.9	9.2	24.4	106.9
1970	29.0	45.1	34.9	10.3	29.4	99.0
1975	30.6	47.6	35.9	11.7	32.6	110.6
1980	32.5	48.4	34.9	13.5	38.7	109.7
1985	35.2	46.7	31.6	15.1	47.9	107.9
1990	37.7	43.5	26.2	17.3	66.2	100.2
1995	39.7	43.9	23.0	20.9	91.2	95.8
2000	41.3	46.8	21.5	25.3	117.6	91.2
2005	42.6	51.2	21.6	29.6	137.1	-
2010	43.9	57.2	22.6	34.6	153.6	98.8
2015	45.5	65.0	23.4	41.6	177.7	-
2020	47.3	68.2	23.0	45.2	196.2	-
2025	49.0	68.0	22.0	46.0	209.3	-
2030	50.0	68.6	21.4	47.1	220.2	-
2040	50.5	78.1	23.0	55.1	239.8	-
2050	49.9	83.0	23.9	59.1	247.0	-
2060	50.0	78.5	23.1	55.4	240.0	-
2070	49.3	76.9	23.9	53.0	221.8	-
2080	48.5	78.6	25.0	53.5	213.9	-
2090	48.4	77.5	25.1	52.4	208.3	-
2100	47.7	76.9	25.9	51.0	196.7	-

<sup>a</sup> The statistics are for 1 October each year, and include Okinawa.

Sources: National Institute of Population and Social Security

Research 1997a; 1997b.

Association for the Employment Development of the Elderly 1997.

TFR decline and of population ageing. In fact, in 1995, the

proportions never-married among women aged 25-29 and 30-34 (48.0 percent and 19.7 percent respectively) have more than doubled compared with those in 1975 (20.9 percent and 7.7 percent). It may also be noted that the mean age of women at first marriage rose consistently from 24.7 in 1975 to 26.4 in 1996.

Life expectancy at birth in 1995 reached 76.38 years for males and 82.85 years for females, older than in any other country in the world. It lengthened by two years over the last decade. In recent years, however, the number of total deaths has been on the increase due to population ageing which has increased the relative number of older persons with a higher mortality risk. At the same time, mortality has been declining at older ages.

An examination of lengthening life expectancy in the light of age-specific death rates shows that mortality decline among infants and children and among young people during the early 1960s made a major contribution to the lengthening in expectation of life. Since the 1970s, however, mortality decline in the middle and older ages has been responsible for most of the lengthening. In recent years, there has been a particularly large mortality decline in old ages, which is promoting population ageing. Life expectancy at birth is expected to reach around 78 years for males and 84 years for females early in the twenty-first century.

### **Demographic consequences**

One of the most direct demographic consequences of population ageing is the increase in the age dependency ratios and the aged-child ratio (Table 11.2), although some demographers regard them as indicators of ageing itself. The total dependency ratio is the ratio of the combined child population (aged below 15) and the aged population (aged 65 and over) to the working-age population aged 15-64 (per hundred), while the child dependency ratio and the aged dependency ratio represent the ratios of each of these populations to

the working-age population (per hundred). The total dependency ratio, which was 67.7 in 1950, kept decreasing until it attained the lowest level of 43.3 in 1991 and 1992, and then rose to 43.9 in 1995 (Table 11.2). It is projected to continue rising to the first peak of 68.3 in 2021, then to decline slightly before resuming its rise to reach the highest peak of 83.0 in 2049-2050. It will decline to 76.7 in the late 2060s to attain another peak of 78.6 in the early 2080s before it resumes its decline.

This fluctuation of the total dependency ratio occurs in tandem with fluctuations in both the child dependency ratio and the aged dependency ratio. However, it largely reflects the movement of the aged dependency ratio, because that of the child dependency ratio is much simpler although equally dramatic. The child dependency ratio has kept decreasing from 59.4 in 1950 to 23.0 in 1995, and is projected to attain its lowest level of 21.4 in the early 2000s. Thereafter it will fluctuate mostly below 25 until around 2080. The aged dependency ratio, which was 8.3 in 1950, rose to 20.9 in 1994. It is projected to continue its rise almost continuously to 59.1 in 2050, to decline to 53.0 around 2070 before resuming its rise to another peak of 53.5 around 2080, and then to resume its decline.

The aged/child ratio is the ratio of the number of aged persons to the number of children (per hundred), which simultaneously takes into account the numbers and changes at both ends of the age distribution. Its change is very dramatic, especially after 1970 when the proportion of the aged surpassed the ten-percent mark. It was only 13.9 in 1950 but rose to 91.2 in 1995. It is projected to continue its rise to the highest level of 247.5 in 2052 before starting its decline to 196.7 in 2100.

In contrast to the total dependency ratio, which is a measure of demographic dependency or age composition, the economic dependency ratio is a measure of economic dependency. It is defined as the ratio of the economically inactive population to the active population at all ages (per hundred). The economic

dependency ratio was 133.5 in 1950 and decreased to 99.0 in 1970 but increased to 110.6 in 1975. Then, it kept decreasing to 95.8 in 1995. It is projected to continue its decline to 91.2 in 2000 and to resume rising to 98.8 in 2010 which is the last year for the projection by the Employment Policy Research Committee (Ministry of Labour). It is expected to rise faster between 2000 and 2010 because it is based on earlier population projections which assumed a slower rate of population ageing. It is also expected to rise after 2010 because this measure, at least partly, moves in parallel with the total dependency ratio.

Other demographic consequences include the changes in sex ratio and marital status composition among older persons. Because mortality is generally lower among females than among males, females outnumber males among the elderly. The sex ratio (males per one hundred females) of the aged population was 69.8 in 1995 and decreased with age. Overall it was 72.5 in 1950, 76.6 in 1960, 78.3 in 1970, 73.2 in 1980 and 67.2 in 1990. These changes do not seem to be systematic, but the change by age group generally shows the trend toward a lower sex ratio, especially in recent years.

There is a trend towards higher proportions married among the elderly due to the mortality decline, especially among middle and older ages, although the level is much higher for males due to their higher mortality and older age at marriage. The proportion married was 64.6 percent among older males and 25.1 percent among older females in 1950, but it has increased to 84.0 percent and 43.1 percent respectively in 1995. Conversely, the proportion widowed has declined rapidly among males and “younger old” females (aged 65-74) due to the mortality decline. But the decline is much slower among “older old” females (aged 75 and over) due to the sex differential in mortality and the larger age difference between spouses. On the other hand, the absolute number of “older old” widows increased rapidly from 0.58 million in 1950 to 3.37 million in 1995, while their male counterpart increased from 0.19 million to

0.57 million. There is a growing concern as to who will take care of those “older old” widows because many of them previously would have been taken care of in intergenerationally extended households, but now the potential availability of kin to take care of them is said to be declining.

## **The family context of ageing**

### **Intergenerational household extension for the elderly**

While Japan has many individual demographic features in common with developed societies in the West, including low levels of fertility and mortality, it exhibits different developments in the area of family demography, which it seems to share more with newly industrializing and developing societies in Asia. Given that Japan does not lag behind other developed societies in socio-economic development, this suggests that family patterns do not necessarily change on the basis of socio-economic developments. It is even possible that some aspects of socio-economic and demographic development may facilitate the fuller realization of the traditional family patterns that vary from society to society. The rapid change in sibling configuration among adults in Japan as a result of fertility decline in the past, may be one of those aspects because of the normative pressure on the eldest child to live with older parents and support them.

In many parts of prewar Japan, the intergenerationally extended or stem family household was the normative living arrangement for the older parents and their eldest sons. When parents did not have any sons, they often lived with their eldest daughter and son-in-law. Coresidence was generally continuous, or began again when the eldest child married or the parents retired, and normally ended with the death of the parents. Living arrangements were closely related to the primogeniture custom which gave priority to males.



Although there has been a steady decline in the proportion of intergenerationally extended households in the postwar period, the majority of older persons aged 65 and above still live with their adult children in the extended household (Table 11.3). The proportion of older persons in one-person and couple-only households is on the rise, but lower than in the West. The percentage of older persons in institutions is levelling off at a lower level. Moreover, the large majority of “older old” persons still live with a married child in an extended household.

**Table 11.3 Trends in living arrangements of the elderly aged 65 and over, 1960 to 1995<sup>a</sup>**

Year	Total (thousands)	Institutional households	extended family	Ordinary households		
				Couple Only (percent)	With Non- relatives	Single- person
1960	5,398	1.1	86.8	7.0	0.2	4.3
1965	6,236	-	83.8	9.1	0.3	4.6
1970	7,393	2.2	78.7	11.6	0.2	5.8
1975	8,865	3.0	74.1	14.9	0.1	6.6
1980	10,647	3.6	69.8	18.1	0.1	8.3
1985	12,468	4.2	65.5	20.6	0.1	9.5
1990	14,895	4.3	60.5	24.1	0.1	10.9
1995	18,261	4.2	55.9	27.8	0.1	12.1

<sup>a</sup> The statistics are for 1 October each year, and include Okinawa after 1975.

Sources: National Institute of Population and Social Security Research 1997b.

While the proportion of older persons in the extended household decreased in the 1980s, the proportion of married males aged 20-39 in the extended household increased slightly (Hiroshima 1987). The two trends may seem contradictory, but the prevalence of intergenerationally extended households can differ according to whether the unit of observation is parents or married children.

Similarly, the postwar fertility decline has had different effects on the potential availability of kin to live with, for each generation, because only one married child is expected to live with the parents.

**Table 11.4 Annual income of aged households trends and composition, 1975 to 1994**

Year	Total Annual Income (thousand yen)	Earned Income	Property income	Public pension (percent)	Other social security Transfers	Remittances and other sources
1975	1,147	56.0	9.7	26.2	-	8.1
1980	1,981	44.2	7.8	40.3	2.2	5.6
1985	2,393	39.6	6.8	47.2	3.9	2.5
1986	2,593	39.5	8.2	48.6	2.0	1.8
1987	2,610	34.7	6.9	52.2	3.1	3.2
1988	2,731	34.4	9.5	49.9	3.0	3.2
1989	2,752	33.9	10.5	49.8	1.8	4.0
1990	2,898	30.4	9.2	54.8	2.1	3.5
1991	3,053	34.2	9.6	52.2	1.6	2.4
1992	3,171	33.9	8.3	54.1	1.2	2.5
1993	3,200	36.0	6.5	54.8	1.4	1.3
1994	3,322	33.4	7.2	55.1	1.5	2.8
1995	3,338	29.1	7.0	58.7	0.9	4.3

Source: Association for the Employment Development of the Elderly 1998.

### **Economic and housing situation of the elderly**

The coresidence of elderly parents and their adult children involves various economic and social factors. It may not necessarily represent one-sided help from either generation. Moreover, the motivations may be different between generations. Table 11.4 shows the changes in the annual income of “aged households”

(those consisting only of a man aged 65 and above and/or a woman aged 60 and above, allowing for the addition of never-married persons aged below 18) and its composition. The average annual income has kept growing relatively fast during the past two decades, considering that the nominal wage in 1995 is 2.24 times as high as in 1975. This is mainly caused by the rapid growth in the income from the public pension since the amount of earned income has been relatively stable since the early 1980s.

The relative share of each has changed drastically during the past two decades. The proportion of earned income has remained around one-third during the past decade after its rapid decline from 56 percent in 1975. By contrast, the public pension represented only 26 percent in 1975 but had grown rapidly to around one-half by the mid-1980s and has remained relatively stable through the 1990s after a slight increase. The proportion of property income has hovered around eight percent during the past two decades, while that of remittance and other income decreased from eight percent in 1975 to three percent in 1985 and has remained around the same level. This suggests that the transfer income from non-coresiding kin has become insignificant during the past two decades while the transfer income from the government (mainly originating from non-kin) has grown rapidly.

However, the majority of the elderly live with their adult children and possibly grandchildren. In such cases, the average household income and the proportion of earned income are much higher, which suggests that there is much more intergenerational transfer in cash or in kind within the same household although the data are not available. It is also likely that the direction of transfer may not always be from adult children to elderly parents within the same household even at a particular time. Parents may actually be paying a larger share of the living expenses. They can give in-kind help to their children in terms of housework and child care. They often do not collect any rent from their children for living in their house. It

may be that a certain level of wealth drawn from either generation is necessary for maintaining a larger house and expenditure, although it is also possible that the intergenerational household extension is a family adaptive strategy practised among the disadvantaged.

Another reason for the relatively high percentage of earned income is the relatively high labour force participation rate among the elderly (people aged 65 and over): 41.9 percent among males and 15.7 percent among females in 1995. Slightly less than 60 percent of them were either self-employed or family workers. This situation emphasizes the importance of the family business which is often an integral part of intergenerational household extension.

Data on housing are available for households with persons aged 65 and above. In 1995, 86.1 percent of these households were in owner-occupied housing, 7.8 percent in private rented housing, 0.4 percent in company housing, 4.3 percent in public housing, and 1.4 percent in rented rooms and other housing. The housing situation of single-person households among the elderly seems to be less favourable: 65.6 percent in owner-occupied housing, 19.4 percent in private rented housing, 0.7 percent in company housing, 10.0 percent in public housing, and 0.8 percent in rented rooms or other housing. By contrast, 96.5 percent of three-generation households are located in owner-occupied housing, which may suggest that home ownership (presumably of a larger house) is almost a prerequisite for parent-child coresidence.

## **Government responses to ageing**

### **Development of measures for the elderly**

Japan's universal medical insurance coverage was achieved in 1961 through the compulsory enrolment of those not covered by the employees' health insurance (e.g., the self-employed and farmers)

in the National Health Insurance system, a community-based insurance programme. Consequently, all the previously excluded elderly came to be covered by the medical insurance scheme. In parallel with the achievement of the universal medical insurance, efforts were made to develop medical-care facilities to meet the demand for medical care. This also benefitted the elderly.

The National Pension was also inaugurated in 1961 to cover those who had not been covered by employees' pension schemes (e.g., the self-employed and farmers). At the same time, welfare pensions started to be paid out from the national treasury to those who were already elderly and thus who were not eligible to receive contributory pensions. Around the same time, a system of nursing homes for the elderly was established for those needing nursing care.

In 1973, which is often referred to as "the first year of welfare", medical services became free of charge for the elderly aged 70 and above. In the same year the price indexation system of pension benefits was also introduced to improve the income security of the elderly. These measures were taken partly in response to the improved economic condition of the country during the course of its rapid economic growth. They were introduced also in response to the ageing of population, the nucleation of the family and the changing attitudes toward the support of the elderly.

However, health expenditures for the elderly (Table 11.5) have drastically increased since medical services were made free in 1973. This severely worsened the financial situation of the National Health Insurance scheme that covered most of the elderly. This made clear the imbalance in the sharing of the burden for the elderly which is unequally distributed among separately established social security programmes. Moreover, the slower pace of economic growth after the first oil crisis in 1973, and the faster pace of population ageing in the 1970s, also necessitated the reexamination of the social security system.

Consequently, the Health and Medical Service Law for the Elderly was enacted in 1982 for the fairer burden sharing of support for the elderly among medical insurance programmes, stipulating that each programme should make contributions to fund the medical expenses for the elderly. It required beneficiaries themselves to bear a certain amount as supplementary payments in order to enhance the awareness of the costs of maintaining the health of the elderly and to achieve proper levels of medical service utilization. It also stipulated that a separate fee schedule for the elderly should be established to ensure a medical care delivery system responding to the specific characteristics of the elderly.

In the area of welfare services, the emphasis shifted from measures centred on institutional care to measures centred on in-home care under the considerations of “maintaining and improving quality of life”. There was an increase in the number of home helpers visiting the elderly at home in need of long-term care and carrying out personal services for them, in addition to the start of “short stay” (respite care) programmes in institutions and day-service programmes for the elderly in need of long-term care.

In the field of old-age pensions, a major revision was introduced in 1985. Future benefit levels were reexamined to balance the burdens and benefits between the working generation and the elderly. The basic portions of various pension programmes were unified as the Basic Pension to balance the burdens and benefits between the pension programmes for employees and the National Pension Programme. Consequently, the pension programmes for employees were redefined as the providers of additional benefits on top of the Basic Pension. In 1994 the system was revised so that pensionable age would gradually be raised to 65 from the beginning of the twenty-first century along with a partial pension provided between the ages of 60 and 65, in view of the fact that mandatory retirement age was 60 or above in 80 percent of companies, and 70 percent of such companies had a scheme for extended employment

and reemployment.

**Table 11.5 Trends in social security expenditure related to the elderly, financial years 1975 to 1995**

Financial year	Pension Benefits (	Medical Care	Welfare services billion yen	Continued employment	Total for the elderly )	Share of total social security ( per cent )	national income
1973	1,070.1	428.9	59.6	-	1,558.6	24.9	1.6
1975	2,895.8	866.6	116.4	-	3,878.8	33.0	3.1
1980	8,359.1	2,126.9	256.0	-	10,742.0	43.4	5.4
1985	14,446.6	4,007.0	366.8	-	18,820.4	52.8	7.2
1986	16,306.4	4,358.4	407.5	-	21,072.3	54.6	7.8
1987	17,499.9	4,663.8	427.8	-	22,591.5	55.6	8.0
1988	18,581.1	4,982.4	456.9	-	24,020.4	56.6	8.0
1989	20,105.1	5,373.0	510.6	-	25,988.7	57.9	8.1
1990	21,611.0	5,733.1	574.9	-	27,919.0	59.1	8.1
1991	23,184.0	6,197.6	655.2	-	30,036.8	59.9	8.3
1992	24,972.8	6,668.5	745.6	-	32,386.9	60.2	8.8
1993	26,613.5	7,139.4	817.1	-	34,570.0	60.9	9.3
1994	28,624.8	7,780.4	906.6	-	37,311.8	61.7	10.0
1995	31,156.5	8,452.5	1,090.2	11.7	40,710.9	62.9	10.7

Source: National Institute of Population and Social Security Research 1998.

In the area of employment security for the elderly, 1971 marked the beginning of measures for positive improvement. In that year the employment quotas for the middle-aged and older employees were established by the Employment Promotion Law for Middle-Aged and Older Workers because the employment situation had not been favourable for them even after the rapid economic growth of the 1960s.

In 1986, however, it was revised as the Employment Security Law for Older Workers to assure employment until around age 65 as a measure to promote the employment of older workers. This law stipulated the obligation for employers to endeavour to have 60 as the earliest age of mandatory retirement and the establishment of Silver Human Resources Centres which aim to provide older persons with temporary and short-term jobs closely connected with the daily life of their local communities. Since 1995, grants have been paid to employers who introduce a system for continued employment, and subsidies are also available for preparing the workplace environment for employment of the elderly (Table 11.5). In 1998, it became a legal requirement to establish age 60 as the standard retirement age under provisions of the law revised in 1994.

Although it is mainly for the middle-aged and younger workers, the Child Care and Family Care Leave Act was enacted in 1995. This law is related to population ageing in two ways. First, it can help workers to care for an older parent or parent-in-law, as well as a spouse or child, for a three-month period. Secondly, these periods of leave can help younger workers to raise children and may have a pronatalist effect resulting in the slowing down of population ageing.

### **Comprehensive plans for the ageing society**

Comprehensive plans and programmes to cope with the ageing of population and society have been formulated by the different branches of the Japanese government since the mid-1980s. The Inter-Ministerial Committee on the Measures for the Ageing Society established in 1985 decided that the government as a whole should promote comprehensive measures for the ageing society and Cabinet adopted the General Principles Concerning Measures for the Ageing Society in 1986. Its ultimate goal was to build an affluent ageing society confident in its solidarity and vitality and its



objective was to promote comprehensive measures encompassing the five sectors including employment and income security, health and welfare, learning and social participation, housing and living environment, and research and development.

Each ministry formulated plans and programmes, including “the Gold Plan” by the Ministry of Health and Welfare, in response to the General Principles. In 1995, however, the Basic Law on Measures for the Ageing Society was legislated to further promote these measures in view of the faster pace of population ageing and the delay in changes in public attitudes and the social system. Accordingly, the General Principles were revised in 1996 to adapt themselves to the on-going ageing society with low fertility and to establish perspectives for the ageing society at the beginning of the twenty-first century.

In 1989 the Ministry of Health and Welfare formulated “the Gold Plan” or the Ten-Year Strategy (Plan) to Promote Health and Welfare for the Elderly for the financial years 1990-1999, which set concrete policy goals to build the infrastructure in the area of health and welfare for the elderly. This plan was formulated to establish a long-term care service system to allow the elderly in need of long-term care to be as independent as possible and to continue living in their homes and communities. It was also aimed at the enhancement of in-home and institutional care services and at the reduction in the numbers of bed-ridden elderly. In 1990, welfare-service administration was delegated to the local municipalities and it became mandatory for them to formulate a local plan of health and welfare for the elderly. In 1994 the “New Gold Plan” was formulated to meet the expanded needs at the local level after the implementation of the original plan, particularly to set a more solid foundation for the long-term care for the elderly.

### **Trends in social security expenditure for the elderly**

The trends in social security expenditure related to the elderly as well as social security expenditure as a whole, which has been estimated for each fiscal year (April to the following March) by the National Institute of Population and Social Security Research (formerly, the Social Development Research Institute) are listed in Table 11.5. The statistics for the elderly are available only from 1973 which date, as previously noted, is regarded as “the first year of welfare.” The expenditure is not deflated by the price index and thus showed a rapid increase, particularly after the two oil crises in the 1970s. But there has also been rapid growth in real terms as indicated by the percentage of the National Income (column (7)). It started from 1.6 percent in 1973, more than tripled in 1980, increased more than fivefold in 1990 and more than sevenfold in 1995.

During the past two decades, there has been a less drastic change in the percentage of social security expenditures devoted to elderly social security expenditure as a whole (column (6) of Table 11.5) because expenditure as a whole grew somewhat more slowly. This component comprised one-quarter in 1973 but more than 40 percent in 1980, slightly less than 60 percent in 1990 and about 63 percent in 1995.

Among the four kinds of social security expenditure for the elderly, the old-age pension (column (1) of Table 11.5) has by far the largest share - 70-80 percent. Medical care for the elderly (column (2)) has the second largest share of 20-30 percent. While these two accounted for most of the social security expenditure on the elderly, welfare services for the elderly represented only 2-3 percent, but are expected to increase rapidly as the numbers of elderly in need of long-term care are projected to escalate with the rapid pace of ageing.

The 1996 White Paper on Health and Welfare Administration

indicated that the number of those in need of long-term care is 2.0 million in 1993 (including 0.9 million bed-ridden, 0.1 million suffering from dementia with care needs and 1.0 million frail), but it is projected to be 2.8 million in 2000, 3.9 million in 2010 and 5.2 million in 2025 (2.3 million bed-ridden, 0.4 million suffering from dementia with care needs and 2.6 million frail). The White Paper provided one rationale for the legislation of the long-term care insurance in 1997 as an initial step towards the structural reform of social security, described subsequently. As mentioned previously, the grants for employers introducing a system of continued employment started in 1995 and details started to appear in 1995, but the weight being accorded this measure is still very low.

The rapid increase of social security expenditure for the elderly, in both absolute and relative terms, indicates that the structural reform of social security has been urgently needed to ensure sustainability in the face of the rate and scale of population ageing (cf. Table 11.1). The need for such reform is exacerbated by worsening economic and fiscal conditions, as well as by the government's goal to keep the "National Burden Proportion" (the ratio of the sum of tax payments and social security contributions at the national level over the National Income) below 50 percent in the next century, when it had already reached the upper thirty percentages in the 1990s.

### **Structural reform of social security**

According to the policy statement by the Ministry of Health and Welfare, the change in economic fundamentals and fiscal deficits as well as the increase in people's standard of living and the diversification of people's needs, the social security's indispensable role in the stability of people's lives and the inevitability of its increase in cost due to population ageing and low fertility, necessitate the structural reform of social security to get rid of

people's concern over the future and to develop the appropriate social security system for a mature society and economy.

The statement cites as principles of the reform the Chair's progress report of the discussion in the Advisory Council on the Social Security System announced in 1996, which suggested the following three basic directions for the reform with the 50 percent benchmark of "National Burden Proportion" in mind: to respond properly to people's demands for social security in harmony with the national economy; to make an efficient service delivery system emphasizing efficient user-oriented in-home service delivery while basically supporting the self-reliance of individuals; and to encourage the entry of the private sector through deregulation while clarifying the division of labour between the public and private sectors.

The policy statement, based on the projections of the "National Burden Proportion" by sectors of the social security system, concludes that although the costs for social security naturally tend to increase with population ageing, structural reform should promote efficiency and fairness, mainly in the area of medical care and pensions, while responding to the necessary demands in other areas including long-term care. It also indicates the scheduled steps of the reform: first, long-term care insurance will be introduced and the medical insurance system will be reformed; and secondly, the reform of medical care and pensions will be initiated.

The legislation establishing long-term care insurance provisions had been passed in 1997 for implementation in 2000. Its goals are as follows: to provide a system whereby the users can freely choose the services they require; to offer welfare and medical-care services related to long-term care in a unified and integrated fashion; to provide diversified and efficient services through the participation of private enterprises and non-profit organizations; and to substitute long-term stay in general hospitals for long-term care and creation of more efficient medical services.

The Health Insurance Law was revised in 1997 and became effective later that year. The revision raised the share of contributions by the insured from 10 to 20 percent and also the amount contributed by the elderly. The scheme introduced partial consumer payment for pharmaceutical drugs. The revision also indicated that basic measures for the comprehensive reform of the medical insurance system and of the elderly health system should be carried out in consultation with appropriate advisory councils.

According to the schedule suggested by the policy statement on the structural reform of social security, the reform of the pension (the recalculation of finances) was to be conducted in 1999 and the implementation of Long-term Care Insurance and the reform of medical insurance system would be realized in 2000. Policy statements for the reform of pension and medical insurance are already published by the Ministry of Health and Welfare. However, it is not certain if they will actually be implemented in their entirety because of reactions to the revision of the health insurance system, as well as current economic and political uncertainties. If people lose faith in the social security system, the system may not be sustainable, and the already ailing economy may suffer further from the increased savings driven by the concern about the future of the social security system.

## **Conclusion**

There is a possibility that some people will turn back to the family for care and support in their old age owing to their distrust of the social security system, and that the government will encourage such a reaction because of the lack of fiscal resources. However, such a reversal may not be feasible following the changes in the functions and structures of the family, particularly since the social security system was established some twenty-five years ago.

Recent studies suggest that there is a new tendency among older

parents to seek care and support from a daughter rather than from a daughter-in-law and that there is a corresponding tendency among their children's generation. Such shifts can sometimes lead to intragenerational and intergenerational conflicts or to lack of care and support for the elderly. If eldest sons are no longer unambiguously designated as the primary care givers or inheritors of responsibility for parents, children may compete for the care of rich parents in exchange for a larger share of the inheritance, resulting in conflict between children and parents with different preferences. Other children may compete to avoid responsibility for the care of poor parents who will leave no assets to inherit, resulting also in conflict. In either case, social policy interventions may be necessary. However, all these social policy measures, including those supporting child rearing, should be integrated as part of the comprehensive family policy for intergenerational support and societal reproduction.

In addition, some Western demographers including Höhn (1988) suggest that the impact of indirect policies on fertility (social policies) is much stronger than that of population policies designed explicitly to affect fertility. If this is the case, the comprehensive family policy for intergenerational support and societal reproduction may have favourable effects even on fertility, and ease the demographic and other constraints imposed on the family.

The comprehensive family policy should be based on a group of principles which defer both to universal and country-specific values. They should include intergenerational solidarity and gender equity as underlying universal principles (Kojima 1994-95), but their actual incorporation as policy measures may be modified to suit the demographic, social, economic and cultural contexts of the particular society. Modifications suited to Japan may have policy relevance to other countries in Asia and possibly those in the West.

## **Note**

- 1        The first half of this paper partly draws on Kojima (1997) and the second half on the home page of the Japan Ministry of Health and Welfare (<http://www.mhw.go.jp>).

## References

- Association of the Employment Development for the Elderly. 1997/1998. *Statistical Compendium on Ageing Society*. Tokyo: Association of the Employment Development for the Elderly (in Japanese).
- Hirosima, Kiyosi. 1987. "Recent changes in prevalence of parent-child co-residence in Japan," *Jinkogaku Kenkyu, Journal of Population Studies* 10: 33-41.
- Höhn, Charlotte. 1988. "Population policies in advanced societies: Pronatalist and migration strategies," *European Journal of Population* 3(3/4): 459-481.
- Kojima, Hiroshi. 1989. "Intergenerational household extension in Japan," in F. K. Goldscheider and C. Goldscheider, eds., *Ethnicity and the New Family Economy: Living Arrangements and Intergenerational Financial Flows*, Westview:Boulder. pp. 163-184.
- \_\_\_\_\_. 1990. "Variables associees a la cohabitation des parents et de leurs enfants maries au Japon," in France Prioux, ed., *La famille dans les pays developpes: Permanences et changements*. Paris: INED/PUF. pp. 231-242.
- \_\_\_\_\_. 1994, 1995. "Basic principles of family policy," *Kaigai Shakaihosho Joho, Overseas Social Security News* No. 109, 1994, pp.16-26; and No. 110, 1995, pp. 75-95 (in Japanese).
- \_\_\_\_\_. 1997. "Ageing and implications for social policy in Japan," Paper presented at the Symposium on Ageing an Social Policy: A German-Japanese Comparison. Bonn University, 27 October.
- Kojima, Hiroshi and Jean-Louis Rallu. 1997. "La fecondite au Japon et en France," *Population* 57(5)1143-1172.
- Morgan, S. P. and K. Hirosima. 1983. "The persistence of extended family residence in Japan: Anachronism or alternative strategy?", *American Sociological Review* 48(2)269-281.
- National Institute of Population and Social Security Research. 1997a. *Population Projections for Japan, January 1997*. Tokyo: NIPSSR (in Japanese).
- \_\_\_\_\_. 1997b. *Latest Demographic Statistics 1997*. Tokyo: NIPSSR (in Japanese).



\_\_\_\_\_. 1998. "Estimates of social security expenditures for FY 1995".  
Tokyo: NIPSSR (in Japanese).

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## 12. Ageing and Social Welfare Policies in the Republic of Korea

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### Introduction

Owing to continuous economic growth, a high standard of living, and the advancement of medicine in Korea, the life expectancy of Koreans increased from 69.0 years in 1985 to 71.3 in 1990, and is expected to reach 74.3 in the year 2000. Partly as a result the percentage of the population 65 years of age and over has increased from 3.1 percent in 1970, to 6.6 percent in 1998. The number of people 65 and over is expected to be 3,371,000 in 2000 or 7.1 percent of the total population, rising to 13.2 percent in 2020. Similar trends have been observed and are expected to continue for the old age dependency ratio and the index of ageing (Table 12.1).

**Table 12.1 Age composition of the Korean population, 1970 to 2020**

	1970	1980	1990	2000	2010	2020
Total population (thousands)	31,466	37,436	43,411	47,275	50,618	52,358
Population 65 and over (percent)	3.1	3.8	6.6	7.1	10.0	13.2
Aged dependency ratio <sup>a</sup> (percent)	5.7	6.1	9.2	10.0	14.2	18.9
Index of ageing <sup>b</sup> (percent)	7.2	11.2	29.9	32.9	49.9	76.5

<sup>a</sup> aged dependency ratio = population 65 and over / population 15-64.

<sup>b</sup> index of ageing = population 65 and over / population 0-14.

Sources: Economic Planning Board no date.

National Statistics Office 1996.

Korea is on the verge of being an ageing society and the rate of ageing is unprecedentedly rapid (Table 12.2). It is expected that it will only take 22 years for Korea to move from being an ageing society to becoming an aged society. Consequently, Korean society will soon be faced with an ageing population unprepared to cope with the issues ageing brings.

**Table 12.2 International comparison of becoming an ageing and an aged society**

Country	Ageing society (7 percent of the total population)	Aged society (14 percent of the total population)	Period elapsed (years)
Korea	2000	2022	22
Japan	1970	1995	25
Sweden	1890	1975	85
France	1865	1980	115

Sources: National Statistics Office 1996.

Japan Ageing Research Centre 1996.

**Table 12.3 Proportion of households with elderly aged 60 and over, 1985, 1990 and 1995**

	1985	1990	1995
Elderly households <sup>a</sup> / total households (percent)	2.7	3.7	5.8
Elderly only households <sup>a</sup> / total households with elderly (percent)	23.2	30.0	42.3

<sup>a</sup> single elderly or elderly couple.

Source: Chung 1997.

Along with rapid population ageing, the fact that a significant and expanding proportion of Korean elderly are living separately from their children indicates an increasing societal need to care for the elderly (Table 12.3). The proportion of the elderly who were

living in the households composed only of elderly was 23.2 percent in 1985 and 42.3 percent in 1995. The two most recent censuses have shown that the proportion of households composed of a single elderly person or an elderly couple grew from only 2.7 percent of all households in 1985 to 5.8 percent in 1995.

### **Welfare expenditure**

The Korean government has put a great deal of effort into developing elderly welfare policies to prevent social problems caused by ageing of the society; to improve the social status of the elderly; and to guarantee the security of the elderly. However, in spite of the effort to increase expenditure on welfare policies for the elderly, the proportion of welfare expenditure for the elderly was still only 4.6 percent of the Ministry of Health and Welfare's expenditure in 1997 (Table 12.4). Also, 62.1 percent of the expenditure on the programmes and policies for the elderly is for the old age allowance under the Livelihood Protection provisions. A further 25.3 percent is for institutional care (Table 12.5).

**Table 12.4 Distribution (in percent) of the welfare budget, 1990, 1995 and 1997**

	1990	1995	1997
Welfare expenditure for the elderly / national budget	0.11	0.12	0.19
Welfare expenditure for the elderly / Ministry of Health and Welfare expenditure	3.3	3.1	4.6

Sources: MOHW 1997.

Economic Planning Board 1997.

Therefore, expenditure on leisure activities and health and medical is only a small fraction of total expenditure for the elderly.

The proportion of the expenditure for home-care services is also very modest.

## **Health care programmes**

### **Health status of the elderly**

Morbidity is higher among the elderly than among the total population. The prevalence rate of illness in the "preceding two weeks" among the elderly aged 65 and over was 693.3 per thousand persons in 1992 and 924.7 per thousand in 1995, displaying a rapid increase. By comparison, the prevalence rate of illness in the "preceding two weeks" among the total population was 476.9 in 1995. The elderly suffer most from diseases of the musculo-skeletal system and connective tissue, diseases of the digestive system, and diseases of the circulatory system. Among the elderly, 86.8 percent suffer from chronic diseases, 51.9 percent have at least one difficulty described as an "instrumental activity of daily living"(IADL), and 33.5 percent experience difficulty with at least one of the "activities of daily living(ADL)" (Figure 12.1).

### **Present status of health insurance**

The National Health Insurance programme is comprised of three different schemes: industrial health insurance funds for industrial workers (there are 145 funds); a government health insurance fund for government employees and private school teachers; and regional health insurance funds for rural and urban self-employed workers (in 227 regions). Most funds are legally independent in terms of both administration and finance. The National Federation of Medical Insurance plays an important role in examining the invoices from medical care institutions and paying them.

Premiums are imposed at a proportional rate of the insured's

monthly earnings for industrial and government insurance funds, while for the regional insurance funds, several factors such as income, value of real estate and family size are taken into account in calculating the premiums. For the financing of the regional funds, the government provided subsidies, most of which are allocated by capitation. Some portion of the subsidies is distributed to the funds in different amounts depending on the amount of taxable income and the elderly dependency ratio for each of the funds.

**Table 12.5 Policies and programmes for the elderly, 1997**

<b>Programmes</b>	<b>Budget (thousand won)</b>	<b>Distribution (percent)</b>
Total	129,972	100.0
Old age allowance	80,760	62.1
Medical care and Health examination	233	0.2
Home helper	2,375	1.8
Day care	500	0.4
Short-term care	360	0.3
Institutional care	32,879	25.3
Leisure activities: senior hall	11,899	9.2
Other	9,667	0.7

Source: MOHW 1997.

### **Health and medical policies**

At present all Koreans are covered by health insurance or medical assistance programmes. As of 1995, 96.7 percent of those aged 65 and over were covered by health insurance and the rest of the elderly were covered by medical assistance. In spite of the high coverage of health insurance, the increasing medical expenditure due to the ageing population has become a major concern for Koreans. The elderly comprised 6.1 percent of the population

covered by health insurance, but 13.1 percent of health insurance costs were expended on the elderly in 1996. Also, the medical costs per elderly person aged 65 and over were approximately 2.1 times those of citizens under 65 years of age. Consequently the high medical costs resulting from population ageing have become a matter of considerable concern.

**Figure 12.1 Health status of the elderly**

Subjectively regard themselves as healthy (58.8 percent)		Subjectively regarding themselves as not healthy (41.2 percent)		
With no limitation in activities (48.1 percent)	Limitation in Instrumental Activities of Daily Living (IADL) (51.9 percent)			
	Limitation only in IADL (18.4 percent)	Limitation in Activities of Daily Living (ADL) (33.5 percent)		
		1 to 3 (21.7 percent)	4 to 5 (6.2 percent)	6 (5.6 percent)
With no Chronic Diseases (13.2 percent)	with chronic Diseases (86.8 percent)			

n = 1,371

Source: Rhee et al. 1994.

Currently, benefits are provided for medical examinations, drugs, surgery, nursing, and transportation by ambulance. Generally speaking, health insurance coverage is focused on curative health care rather than preventive care. Patients have to pay 20 percent of hospitalization fees, and certain rates of outpatient fees (30 percent at a clinic, 40 percent at a hospital, and 50 percent at a general hospital). These high percentages of payments by patients have led to a financial burden for many, especially the elderly and the poor.

Also, until recently there was a limitation on the reimbursable treatment period each year. Only since 1996 has the limitation of the reimbursable treatment period per year been abandoned for the

disabled and the elderly. This extension of the reimbursable treatment period provides more treatment opportunities for the chronically ill and the elderly, who need more medical care and longer treatment. In 1998 the limit of duration was 270 days a year, but with exception for the disabled and the elderly. This limit has gradually been extended each year, reaching 365 days a year in 2000.

### **Free health examination**

Free health examinations are provided for the elderly under Livelihood Protection programmes. To improve the health of the elderly through diagnosing the diseases at an early stage and for providing health education, the government has provided free health examinations that were extended in 1992 to incorporate various geriatric diseases including diabetes and cataracts. In 1996, they were further expanded from a general examination, including blood tests and X-rays, to special geriatric diseases such as cancer depending on the demand by the elderly. As a result, the health examination programme has become more effective.

In 1997, the budget for the free health examination was 342 million won (state government: 233 million won; local government: 109 million won), covering the requirements of about 30,000 elderly.

### **Long-term care**

The public provision of long-term care in Korea is in a very early stage. Therefore, the main policy concern now is not qualitative aspects such as the autonomy, privacy, and consumer rights of the elderly, but how to respond to increasing long-term care demand.

As the elderly population increases, the number of frail or disabled elderly Koreans who need assistance with day-to-day tasks



also increases. In Korea, physical needs of the elderly have traditionally been mostly provided by family care givers. The concept of family care for the elderly is still prevalent, but the role of the family in supporting the elderly is no longer taken for granted. It is also becoming more difficult to take care of frail elderly people in the home. This may be due to several factors such as the changing values of family life, the nuclearization of the family, the decrease in family size, and women's increasing participation in the workplace and social activities. Based on these changes, the government has recently begun giving attention to the provision of public long-term care services for the elderly.

There are seven categories of residential welfare facilities for the elderly in Korea. In 1997, 9,539 people (0.33 percent of those aged 65 and over) were cared for in 173 facilities (Table 12.6). These seven categories of welfare facilities can be divided into three broad types. First, in 1997, 3,626 people (0.1 percent of those aged 65 and over) were cared for in 68 *nursing-home* facilities. These comprised three private fee-paying nursing homes for wealthier elderly people, 12 homes provided by charitable groups, often at heavily subsidized prices for particular groups of the elderly, and 53 lower-quality old age nursing homes where poor elderly people are maintained as a form of social assistance. Secondly, in 1997, 5,083 people (0.17 percent of those aged 65 and over) were cared for in 101 *elderly-home* facilities and these comprised 13 private fee-paying homes, three low-cost homes, and 85 lower-quality free elderly homes. The government is also building many new public homes for the elderly. Thirdly, there are four free nursing homes for the elderly with *dementia*.

Specific policies relating to long-term care include the Special Ten-Year Plan for the Elderly with dementia, special governmental subsidies for the construction of hospitals for the elderly, and the expanded construction of nursing homes. In addition to those plans, because of the growing importance of health problems due to rapid

ageing, Welfare legislation for the elderly, enacted in 1981, has subsequently been amended to establish legal grounds for the more comprehensive provision of health services for the elderly.

**Table 12.6 Residential welfare facilities for the elderly  
(in numbers), 1997**

	Total	Free nursing home	Low- cost nursing home	Charged nursing home	Free elderly home	Low- cost elderly home	Charged elderly home	Home for dementia sufferers
Facilities	173	53	12	3	85	3	13	4
Residents	9,539	3,243	562	50	4,526	88	411	659

Source: MOW 1997.

Because provision for long-term care services is still not sufficient, there are many unmet needs for long-term care services. Also, there is no public financial system for long-term care; the majority of the elderly have to pay the full cost themselves. However, because of the growing costs for the elderly, the extension of social insurance cover to include long-term care is under consideration in Korea.

The government provides welfare service facilities for the poor elderly with no family, where services are provided at a very low cost, and pays for home care for the elderly, nursing homes, elderly communities, and hospitals for the elderly with dementia, depending on their economic situation. The long-term care service system in Korea is of a dual nature: one aspect deals solely with services for the poor elderly and the other is for the elderly who are above a particular income level. However, the range of long-term care services for the non-poor elderly is very small. Therefore, it could be said that welfare policies in Korea have been mainly just for poor people. Recently, private companies have begun to consider fee-paying long-term care, but the government already gives subsidies to long-term care service institutions for treating the

poor elderly. Because services for the elderly are very limited and most of them are provided based on financial support from the government, market-mechanisms have not yet come into play.

### **Social-care services for the elderly**

The government began devoting attention to social-care services for the elderly based on the recognition of the difficulties of caring for the frail elderly in the home. There are 52 home-help service centres, 31 day-care centres for the elderly and 15 short-term care centres currently operating. The programme is to receive major budgetary support, and this provision is expected to increase rapidly in the coming years.

Home-help services, day-care centres for the elderly, and short-term care centres, are available to elderly recipients of public assistance free of charge. The poor elderly can use them at reduced-cost, while others have to pay the full cost themselves.

### **Roles of public and private sectors**

Central government agencies give financial support for the construction of institutions or hospitals for the elderly. Also, the Elderly Persons Welfare Division of the Ministry of Health and Welfare outlines the goals of care services and provides the guidelines for care service agencies. Central government and local government agencies work together to provide subsidies for home care such as home-help services, day-care centres for the elderly, and short-term care centres.

Non-profit organizations manage nursing homes or residential homes at a low-cost with subsidies from central and local governments. Private-for-profit companies have not yet been involved actively in the provision of care services and institutional care. Only recently have those companies started to construct

retirement communities for the elderly.

## **Economic security**

### **Economic conditions**

Because policies and programmes to promote life-long preparation for old age are not fully in place in Korea, the elderly tend to rely on their children or their own income. Although elderly persons are relying more and more on their own income sources these days, children continue to be the most important financial providers for them. For instance, 44.3 percent of elderly persons' incomes were contributed by their children in 1994. Nevertheless, the income earned from elderly people's own employment has risen sharply in recent years (Table 12.7).

In addition, the labour force participation rate of those aged 60 and over was 25.9 percent in 1970, 28.3 percent in 1980, 35.6 percent in 1990, and 39.6 percent in 1996, showing a steadily increasing trend (Table 12.8).

**Table 12.7 Income sources (in percent) for the elderly, 1988  
And 1994**

<b>Main Sources</b>	<b>1988<sup>a</sup></b>	<b>1994<sup>b</sup></b>
Employment	26.3	37.6
Real estate / rental / savings	6.8	6.9
Pension	1.2	3.9
Children	63.7	44.3
Public assistance, old aged allowance	1.8	3.5
Others	0.2	1.5
None	-	2.3
Total	100.0	100.0

<sup>a</sup> n = 1,200

<sup>b</sup> n = 2,048

Sources: Rhee et al. 1989.

Rhee et al. 1994.

**Table 12.8 Labour force participation rates in percent for persons aged 60 and over by sex, 1970 to 1996**

Year	Total population participation rates	Participation rates for persons 60 and over		
		total	male	female
1970	57.6	25.9	41.7	14.8
1980	59.0	28.3	45.1	17.0
1985	56.6	29.3	44.3	19.3
1990	60.0	35.6	49.8	26.4
1996	62.0	39.6	54.5	29.2

Source: National Statistical Office 1994.

However, in 1994 most of the economically active elderly were engaged in non-salaried jobs in the form of self-employment or family businesses: 67.5 percent were self-employed or in a family business, whereas full-time paid elderly workers accounted for just 18.3 percent of the economically active. Moreover, in 1994, 55.8 percent of the economically active elderly 60 years of age and over were engaged in agriculture, forestry and fishing.

### **Present status of the national pension system**

The national pension system, public assistance based on Livelihood Protection Law, and the old age allowance are three provisions made by public policy to enhance the economic security of the elderly.

The national pension scheme provides financial security against ageing, disability and death. Although the Korean government had planned to amend the National Welfare Pension Act as early as 1973 and to introduce a pension scheme in 1974, it was postponed because of economic obstacles. Eventually, in 1986, the National

Pension Act was passed and became effective from 1988 in work places with ten or more employees. Later, in 1992, coverage was expanded to include work places with five or more employees.

The provision of the national pension was extended into rural areas in 1995. The insured are between the ages of 18 and 59 who work in such industries as farming, forestry, livestock raising and fishing. Under a special provision, those between the ages of 60 and 65 years old can also apply for the pension before they reach the age of 71. The fact that these provisions were made in only seven years following the introduction of the pension scheme demonstrates remarkable progress.

After the expansion of the national pension scheme to rural areas, the total number of insured radically increased from 5,450,000 in 1994 to 7,870,000 in 1997. At this point, the national pension covered 56.9 percent of the total population. The national pension scheme was to further extend its coverage to the urban self-employed by 1998.

Most public pension programmes are expected to show deficits in the future. Thus, financial adjustments will be necessary in cases where the financial disparity originates from structural factors, such as the age structure, the ability to pay, and so on. Because of the growth in the number of pension beneficiaries, the expenditure on the pension is increasing rapidly, and this factor becomes a significant consideration in attempts to establish an equitable pension system. Indeed, if the national pension scheme continues to be operated in the way in which it has been to the present, the reserve funds are likely to be exhausted by the year 2033. Therefore, mid-term and long-term financial contingency plans are essential.

**Table 12.9 Number of insured (in thousands) by sector in the national pension scheme, 1993 to 1997**

Year	Total	Salary workers	Rural-area self-employed	Local	Voluntary affiliation
1993	5,160	5,109	-	40	11
1994	5,445	5,385	-	48	14
1995	7,496	5,542	2,890	49	16
1996	7,829	5,678	2,085	50	16
1997	7,871	5,693	2,046	52	80

Source: The Editing Committee of the White Paper on Welfare Reform 1998.

### Old age allowance

The Livelihood Protection Law was enacted in 1961 to guarantee a minimum standard of living and to enhance the self-reliance capabilities of the elderly poor. The recipients of public assistance are selected annually by local governments based on the income/poverty criteria set up by the Ministry of Health and Welfare. In 1997, the number of the elderly receiving public assistance was 265,119 which covered 9.1 percent of the total elderly population aged 65 and over.

In addition, an old age allowance has been provided to poor elderly persons since 1991. The allowance system covered only a limited number of elderly and its level was deemed insufficient. Therefore, the government has expanded allowances to the elderly under Livelihood Protection provisions for those aged between 65 and 79 years (228,477 in 1997), providing 35,000 won a month, and to the elderly aged 80 years and over (36,642 in 1997), 50,000 won a month.

When the Welfare Act for the Elderly was amended in 1997, the old age pension replaced the old age allowance. The new system was devised to take account of the fact that the previous welfare

policy for the elderly under the Livelihood Protection provisions was too limited, merely providing them with minimal indirect support. The new old age pension system is still to be fully established and specifics on recipients and the coverage level to be determined. In 1998, 924,000 people aged 65 years and over (21 percent of the elderly) received from 30,000 won to 50,000 won per person per month.

### **Policies to enhance employment opportunities**

Ensuring income maintenance, including adequate financial support for the elderly, is one of the most important components of social welfare policy for the elderly. There are three job placement programmes that provide elderly people with an opportunity to earn money by making good use of their free time: the elderly job bank; the elderly workplace; and the elderly employment promotion (schemes under the Employment Promotion Law).

To provide the elderly with leisure time and opportunity to earn money, the elderly job bank programme was started in 1981, and 70 banks were being operated by local branch offices of the National Association of Senior Citizens in 1997. The government supports the 70 banks with 500,000 won (formerly 300,000 won) per bank towards operational expenses.

The elderly workplace programme was started in 1986 and by 1997, 461 workplaces were being operated by voluntary organizations with government assistance. The government supports the workplaces with essential construction fees which were increased from three million to five million won per centre in 1997 (supported 50:50 by state and local governments).

The government has established the elderly workplace scheme in the elderly welfare and elderly activity centres. As workplaces (which provide the elderly with work depending on their aptitude and capability) have been built, the elderly have been able to spend



leisure time at workshops with the opportunity to earn income.

The Employment Promotion Law enacted in 1991 encourages business firms to employ three percent or more of their employees from among the population aged 55 and over. In addition, this law stipulates that 40 jobs (selling bus tokens and cigarettes, working as parking lot and public parks attendants and the like) should be preferentially allocated to elderly persons.

### **Strategies for providing welfare services for the elderly**

Policy for an ageing society should take into account the importance of a continuing productive life in the economy and society as people grow older, accommodating longer working lives and job changes later in life.

### **Reform of the social insurance system**

*Reform of the pension scheme.* In 1997, the National Committee on Social Security discussed and reviewed ways to reform the national pension scheme to expand its coverage to all citizens. Because of the financial uncertainty of the pension fund and the equity problem between salaried workers and the self-employed in terms of contributions and benefits, the Korean government organized the National Pension Scheme Reform Committee in 1997 to resolve such issues.

There were six tasks the National Pension Scheme Reform Committee was required to focus on: extending the scope of coverage; developing methods for imposing pension premiums on farmers, fishermen, and the urban self-employed; restructuring the National Pension Scheme; stabilizing long-term pension funds; combining the national pension with other public sector pension plans; and providing coverage of the urban self-employed.

In order to create an equitable pension system, the pension benefits have to be adjusted adopting a long-term perspective. In so doing, however, both the needs of the beneficiaries and the stability of the financing of the premiums need to be considered. Since the current national pension scheme takes the form of a “low-contribution / high-benefit” system, it is expected that the next generation will have to carry the financial burden of the pension benefits for the preceding generation. Therefore, the reform of this unbalanced system to an “appropriate-contribution / appropriate-benefit” system is crucial for the equity of the scheme. In order to enhance the profitability of the reserve funds, the Public Funds Management Law needs to be implemented effectively. At the same time, investment in the welfare sector should be maintained and improved.

Full-time housewives are not covered under the current pension scheme except by survivors' benefits. Furthermore, when women get divorced or remarry, they forfeit entitlements to pension benefits, and consequently face insecurity of income in old age. Even if they become disabled, they are not covered by the national pension scheme. To solve this problem, the committee proposed a measure to guarantee women's rights to receive a pension.

In addition, the age for receiving the pension needs to be adjusted to match demographic trends and changes in retirement age. In the long run, the age at which a person begins receiving a pension should be flexible - somewhere between the ages of 55 and 65, and the pension benefits should be adjusted in accordance with the age at which beneficiaries choose to start receiving their pensions.

***Reform of the health security system.*** The present “low-fee / low-benefit” system should be replaced with an “optimal-fee / optimal-benefit” one. This would help decrease additional payments by patients and improve the quality of the current health-care system. Insurance benefit coverage should gradually be extended to match

the increases in income level. Preventive medical services such as prenatal diagnosis, regular health tests and monitoring, and traditional medical services should also be included in insurance benefit reimbursement. The private insurance system should take a complementary role to the public insurance system in covering specific medical services which the public insurance system cannot deal with.

### **Expanding opportunities for employment**

Making it mandatory for primarily public institutions to provide adequate jobs for the elderly and to hire a minimum proportion (three percent) of elderly employees is one way to create job opportunities for the elderly. It would also be beneficial to gradually expand the number of employment opportunity information offices (60 offices for elderly persons with general capabilities, and 25 offices for elderly persons with specialized capabilities) in the Ministry of Labour and the elderly job bank under the Ministry of Health and Welfare.

### **Family support policies**

There is no law that entitles family members who provide for long-term care of their elderly relatives (parents, husband, wife) to social security (health, pension) or any other social benefits. Currently, no attempt is being made to change this situation in the public policy arena. However, there is an attempt to extend legal financial responsibility for long-term care to children in Korea. The “Welfare Act for the Elderly”, which was passed in 1997, includes a chapter that allows the heads of the facilities caring for the elderly to ask the patient's children to pay fees.

There is an incentive system for those who take care of their elderly parents, through tax deductions, housing loans, and special

monthly allowances, but only for government officials. Therefore, the introduction of a family allowance or a nursing allowance is highly recommended to strengthen the function of the family as care giver for the elderly.

### **Expanding welfare services for the elderly**

#### ***Extending health protection programmes for the elderly.***

Examinations for detecting cancer, such as liver and stomach cancer, should be added to the list of Free Health Examinations for people aged 65 and over receiving livelihood assistance. Furthermore, health centres should be reorganized so that they can be used as primary care centres for geriatric diseases by adding the necessary personnel and equipment for rehabilitation rooms, and by creating centres for counselling and registration for those suffering from dementia.

Nursing facilities and private hospitals specializing in geriatric diseases should also be increased. Finally, the establishment and operation of a comprehensive dementia centre and telemedicine system is planned, and the training of doctors, nurses, tending personnel, and counsellors specializing in dementia will be required to operate such services.

***Expansion of home welfare services.*** The government should assume a greater share of the responsibilities of protecting and caring for the elderly. By strengthening social-care services for the elderly, such as home-help services, day-care centres and short-term care centres, the government could share the costs and responsibilities of caring for the elderly with individual families.

There are currently 334 welfare centres that provide home welfare services, 178 of which receive budget support. Each year the operation of these services will be enlarged and implemented by the social welfare centre, the welfare centres for the elderly, the

welfare centres for the disabled and the social centres for women. Institutional facilities, which supply home-welfare service providers, will be reorganized so that they can progressively expand home-welfare services.

From 1998, welfare centres providing home services will be supplied annually with more vehicles so that the elderly suffering from dementia and those with severe disabilities can be transported from home to clinic, to short-term day care facilities, or to the welfare centres.

***Introduction of a foster-care system focused on communal support.*** Under the enlarged concept of community as a communal family, the “community-family” will be encouraged to care for elderly members who are living alone, elderly persons who are financially supported by the government, and children who are in need of care in the community. Foster homes will be given support for the cost of care and a communal care network will be established to ensure a smoothly operating foster-care system.

***Establishing a comprehensive elderly welfare centre oriented to the community.*** The development of various programmes, such as recreation, community service and health counselling, that can be linked to the social welfare centres (comprehensive, elderly, disabled) as well as to health and welfare centres is also recommended.

## References

- Choi, J.S. et al. 1995. National Health Interview Survey. Seoul: Korea, KIHASA (in Korean).
- Chung, Kyunghye. 1997. "Family Changes and Policy Issues in Korea", *Health and Social Welfare Review* 17(1).
- Chung, Kyunghye and Meekyung Suh. *The Changing Structure of the Korean Family and Policy Issues*. Seoul: Korea, KIHASA.
- Economic Planning Board. 1960-1985. *Population and Housing Census Report* (in Korean).
- \_\_\_\_\_. 1970-1995. *Population and Housing Census Report*.
- \_\_\_\_\_. 1990, 1997. *Budget for Fiscal Year*.
- Editing Committee of White Paper on Welfare Reform. 1998. *Welfare Reform in Korea Toward the Twenty-First Century*.
- Han. "Health insurance for the elderly," in Current Status of Elderly Welfare and Policy Issues. Seoul: Korea, KIHASA (in Korean).
- Hong, K.E. et al. 1994. *National Fertility and Family Health Survey*. Seoul: Korea, KIHASA (in Korean).
- Japan Ageing Research Centre. 1996. *Ageing in Japan*.
- Ministry of Health and Welfare (MOHW). 1996. White Paper on Health and Social Affairs (in Korean).
- \_\_\_\_\_. 1996. *Major Programmes for Health and Welfare*.
- \_\_\_\_\_. 1996. *Annual Report on Welfare Facilities* (in Korean).
- MOW. 1997. *Annual Report on Welfare Facilities*.
- \_\_\_\_\_. 1997. *Annual Report on Welfare Facilities* (in Korean).
- \_\_\_\_\_. 1997. *Guidebook for Programmes and Policies for the Elderly* (in Korean).
- Nam, J. J. et al. 1995. *National Health Behaviour Survey*. Korea: Institute for Health and Social Affairs (in Korean).
- National Statistical Office. *Annual Report on the Vital Statistics* (in Korean).
- \_\_\_\_\_. *Annual Report on the Economically Active Population Survey* (in Korean).
- \_\_\_\_\_. 1990. *Population and Housing Census Report* (in Korean).
- \_\_\_\_\_. 1996. *Population Projection* (in Korean).

- \_\_\_\_\_. 1994. *Annual Report on the Economically Active Population Survey 1970*.
- Rhee et al. 1989. *A Study on Structural Characteristics of Households with Elderly* (in Korean).
- \_\_\_\_\_. 1994. *Living State and Its Policy Implications of the Korean Elderly* (in Korean).
- Song, K.Y. et al. 1993. *1992 National Health Behaviour Survey*. Korea Institute for Health and Social Affairs. pp. 99-130 (in Korean).
- \_\_\_\_\_. 1993. *Comprehensive Analysis on the Utilization of Health Facilities and the Health Behaviour*, Korea Institute for Health and Social Affairs (in Korean).
- Yeon, H.C. *A New Vision of National Welfare toward the Twenty-First Century*. Seoul: Korea, KIHASA.
- Yeon, H.C. et al. 1995. *Social Development in Korea, An Overview*. Korea Institute for Health and Social Affairs.

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### 13. Policy Issues of Population Ageing A United Kingdom Perspective

*Emily Grundy*

#### **Introduction**

The ageing of an increasing number of the world's national populations is an outcome of demographic changes that many policy makers have striven hard to set in motion. However, responses to population ageing have often been far from positive. The Royal Commission on Population set up in 1944 in the United Kingdom in response to the plummeting birth rates of the 1930s, warned that a society with a falling proportion of young people might become "dangerously unprogressive, falling behind other communities not only in technical efficiency and economic welfare but in artistic and intellectual achievement as well" (Royal Commission 1947: 21). Few contemporary commentators would so readily attribute particular behavioural characteristics to the population as a whole.

Nevertheless, ambivalence about older, and ageing populations, remains. The increase in the relative size of the elderly, and more particularly the very old, population is perceived as a major challenge on a number of counts. In 1997, the United Kingdom government established a new Royal Commission, not on population but on long-term care for elderly people, and a separate special enquiry into the financing of pensions; together, these concerns are indicators of the importance of policy issues raised by age structure changes. In a number of Western countries, fears about escalating health care and pension costs have been exacerbated by concerns that recent changes in family patterns, such as increased divorce and lone parenthood, will erode the

capacity of younger generations to support the old (Allen and Perkins 1995). Population ageing is also rising high on the agendas of many newly industrialised or still developing countries (Martin and Kinsella 1994; World Bank 1994).

There are some well-founded reasons for these concerns. In the United Kingdom, public expenditure on health and welfare services for those aged 85 and over, now the fastest growing age group of the population, is 15 times as great as expenditure on 15-64 year olds (Robins and Wittenberg 1992). In the European Union 45 percent of social protection benefits are devoted to old age with a further 35 percent accounted for by health and disability related expenditure (European Commission 1994). Moreover, there is still uncertainty about what proportion of the “extra time” added to later life through recent reductions in mortality rates at older ages, is spent in good health. However, there are other less valid reasons for society’s ambivalence, namely ageist assumptions that old people are invariably a burden and ageing a negative experience, even though there is ample evidence to show that older people make major contributions to the care and support of their peers and younger generations, and evidence also that the vast majority of older people, including very old people, report high levels of satisfaction with their lives (Bowling 1995).

This chapter first considers demographic aspects of population ageing before proceeding to examine in more detail information on the health status of the older population; family, household and intergenerational relationships; and finally, some of the economic aspects of population ageing. Data are drawn from the developed world, particularly Europe<sup>1</sup> as it is here that population ageing is the most advanced. There is no biological reason for choosing one particular age over another as the demarcation between elderly and other adults, but the conventional practice has been followed here in using either 60 or 65 (depending on data availability) as marking the threshold of later life.

**Population ageing and demographic characteristics of the older population**

The demographic determinants of a population’s size and age structure are fertility, mortality and migration. It has long been recognised that fertility is potentially the most important of these parameters in all but the highest of high mortality populations. Historically, and apparently paradoxically, improvements in mortality in the now developed world served to partially offset the trend towards population ageing, as they chiefly benefitted the young - and led to increases in the proportion surviving to have children themselves. *Primary* population ageing - a once and for all shift to an older age structure - is a consequence of long-term downward trends in fertility.

In much of the now developed Western World this shift, termed the demographic transition, occurred in the late nineteenth or early twentieth century, with the consequence that the relative size of the older population grew markedly in the first half of the twentieth century. Moreover, even prior to the demographic transition, some North West European pre-industrial populations had relatively “low pressure” demographic regimes, with levels of fertility held in check by late marriage and high rates of celibacy, and so a sizeable representation of older adults. The estimated proportion of the population aged 60 and over in seventeenth century England, for example, was eight to nine percent - much the same as the equivalent proportion in contemporary South Korea and Thailand (Wrigley and Schofield 1989; United States Bureau of the Census 1996).

**Table 13.1 Demographic indicators for selected countries of Europe, 1996**

	TFR (per woman)	Life expectancy at Birth(years)		65 and over (percent)	65 and over/ 15-64 (percent)
		Male	Female		
<i>Northern Europe</i>					
United Kingdom	1.7	74	79	15.7	24.2
Denmark	1.8	73	78	15.0	22.4
Ireland	1.9	72	78	11.5	17.8
Sweden	1.6	77	82	17.4	27.4
<i>Western Europe</i>					
Belgium	1.6	74	81	16.3	24.7
France	1.7	73	82	15.4	23.6
Germany	1.3	73	80	15.6	22.8
Netherlands	1.5	75	80	13.4	19.6
<i>Southern Europe</i>					
Greece	1.3	75	80	16.0	23.6
Italy	1.3	74	81	17.1	25.1
Portugal	1.4	71	79	14.9	21.9
Spain	1.2	73	81	15.8	23.1
<i>Central and Eastern Europe</i>					
Hungary	1.5	66	75	14.3	21.0
Poland	1.6	68	77	11.5	17.2
Czech Republic	1.2	70	77	13.5	19.6
Russian Federation	1.3	58	71	12.1	18.1

Source: Council of Europe 1997.

Today, as shown in Table 13.1, in virtually all of Europe, as well as in other developed countries, the proportion of the population aged 65 or over exceeds ten percent and in parts of Europe is greater than 15 percent. All the European countries shown in Table 13.1 have rates of fertility below the long-term replacement level. Fertility in Southern Europe and in much of Eastern Europe, is particularly low. In 1997, in terms of the share of the population

aged 60 and over, Italy was the world's oldest country. All these populations also have either very low, or (in Eastern Europe) moderately low mortality rates which in much of the developed world (except Eastern Europe) have recently fallen further. In the rest of the world, the proportion of elderly people is smaller.

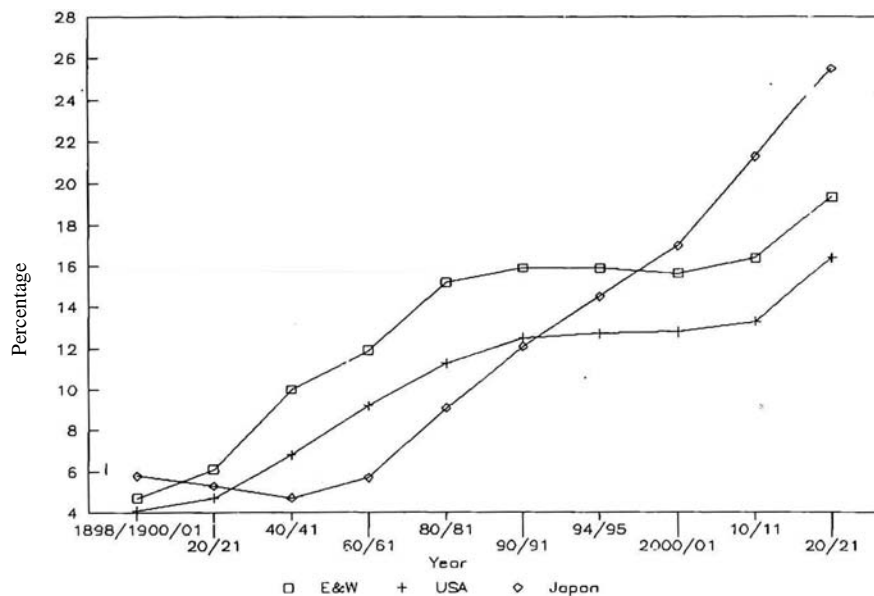
A transition to lower, deliberately controlled fertility - the precursor of population ageing - is now close to being a global phenomenon. In 1990, only 17 percent of the world's population lived in countries where no appreciable downturn in fertility was then evident (UNECE 1992), although in many there are now signs that this is occurring. Sixty percent of the world's population lived in countries such as South Korea, where there had been significant and sustained downturns in fertility since 1950. In most of these populations the proportion aged 65 and over is currently below ten percent (or even slightly below five percent in countries such as Turkey and India where the transition is relatively recent). However, population ageing in these countries is now proceeding apace.

The speed of this transformation, coupled with the rapid pace of other socio-economic changes and the often poorly developed infrastructure of support services for older people, means that the policy challenges faced by newer members of the world's "low-fertility club" may be greater than those previously faced by Scandinavian and other Northern European countries which experienced much earlier what Laslett describes as the "secular shift" to an older society (Laslett 1984).

Japan, with over 14 percent of its population aged 65 or older in 1995, was the first country outside the West to experience the demographic transition and the speed of its decline in fertility was unprecedented. During the period 1947 to 1957 the total fertility rate (TFR) fell by more than half from 4.5 to 2.0 children per woman. Largely as a consequence of this, the pace of population ageing in Japan has also been very fast, as illustrated in Figure 13.1, which compares the proportion aged 65 and over in England and

Wales, the United States and Japan over the course of the twentieth century, together with projections for the early decades of the twenty-first century. Recent trends in mortality have amplified this trend, as considered below.

**Figure 13.1 Population aged 65 and over (in percent) for England and Wales, the United States and Japan, 1900 to 2020**



### Trends in mortality

Trends in life expectancy at birth and at age 65 for England and Wales, France, Japan, Sweden, and the United States over the past century are illustrated in Table 13.2. Gains in life expectancy at birth have been more marked than gains in expectation of life at age 65. However, Table 13.2 also reveals remarkable recent improvements in later life mortality. Male life expectancy at age 65 in England and Wales and the United States increased more between 1970 and 1995, and in France by the same amount, than in the whole period from 1900 to 1970. Moreover, those generations

which benefitted from falling mortality at younger ages earlier in the century have now reached old age and improvements in survival to and beyond the age of 60, as well as variations in initial cohort size, have had a major impact on the size of the elderly population. Actual and projected survivorship curves for males and females born in 1905, 1915, 1925 and 1935 in England and Wales are shown in Figures 13.2 and 13.3. While 59 percent of the men born in 1905 survived to their sixtieth birthday, 71 percent of those born twenty years later did so.

Increases in the proportions of successive cohorts surviving to late old age are shown in Figure 13.4 and are even more remarkable. Only five percent of girls born in 1841 survived to age 85 (i.e., in 1926). Among girls born fifty years later this proportion was over three times higher, and higher still among those now reaching 85. Such changes have profound implications at the individual and family level, as well as for society as a whole. In a growing number of populations individuals can now expect, with a high degree of confidence, that their children will survive to adulthood and that they themselves will survive to witness this, and to participate in the lives of grandchildren, or even great grandchildren. Indeed in many Western populations the role of parent of an adult child (or adult child of a surviving parent) is now likely to extend longer in time than the role of parent raising minor children (or of being a minor child).

### **Mortality change at older ages and further population ageing**

These more recent improvements in mortality have been greatest in absolute terms in adult, including elderly adult, age groups where the scope for further improvement was greatest. As a result, changes in death rates at older ages have come to play an increasingly important role in overall mortality change. Myers

(1996) in a detailed examination of changes in six developed countries, found that in five of them the proportion of overall life expectancy increase in the 1980s due to gains among those aged 65 or more, was over 40 percent for males and nearly 60 percent for females. In Japan 48 percent of the female gain and 31 percent of the male gain in life expectancy at birth 1985-90 was due to falls in mortality among those aged 75 or over (Kono 1994).

Not only have changes in late life mortality come to play a much more dominant role in determining *overall* level and change in mortality, but in low fertility, low mortality populations with already relatively high proportions of elderly people, mortality changes are now the major determinant of *further* population ageing. Benjamin (1987) estimated that 38 percent of the increase in the proportion of elderly people in the United Kingdom between 1951 and 1981 was due to mortality change compared with 21 percent during the period 1911 to 1915. In developed countries with low vital rates, falls in mortality at older ages are now a major determinant of continued population ageing (Preston et al. 1989; Casselli and Vallin 1990).

**Table 13.2 Trends in life expectancy (in years) at birth and at age 65 by sex for selected developed countries**

Year and Country	Life expectancy					
	Male	At birth female	difference	male	At age 65 female	difference
1900/01						
England & Wales	44.8	48.7	3.9	10.1	11.1	1.1
France	43.2	46.9	3.8	10.0	10.9	0.9
Japan	42.8	44.3	1.5	n.a.	n.a.	n.a.
Sweden	50.8	53.6	2.9	12.1	13.0	0.9
USA	46.4	49.0	2.6	11.4	12.0	0.7
1950/51						
England & Wales	5.3	70.3	5.0	10.8	13.4	2.6



Wales						
France	63.4	69.2	5.8	12.2	14.6	2.4
Japan	57.6	60.9	3.3	10.9	13.0	2.1
Sweden	69.8	72.4	2.6	13.5	14.3	0.8
USA	65.6	71.1	5.5	12.8	15.1	2.3
1970/71						
England &						
Wales	68.8	75.0	6.2	11.9	15.8	3.9
France	68.4	75.8	7.4	13.0	16.8	3.7
Japan	69.3	74.7	5.4	12.5	15.4	2.8
Sweden	72.2	77.2	5.0	14.3	16.9	2.6
USA	67.2	74.9	7.7	13.1	17.1	4.0
1995						
England &						
Wales	74.4	79.6	5.2	14.8	18.4	3.6
France	73.9	81.9	8.0	16.1	20.6	4.5
Japan	76.4	82.8	6.4	16.5	20.9	4.4
Sweden	76.2	81.5	5.3	16.0	19.7	3.7
USA	72.4	79.3	6.9	15.3	19.2	3.8

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Sources: Government Actuary's Department for England and Wales.

Berkeley Mortality Data Base

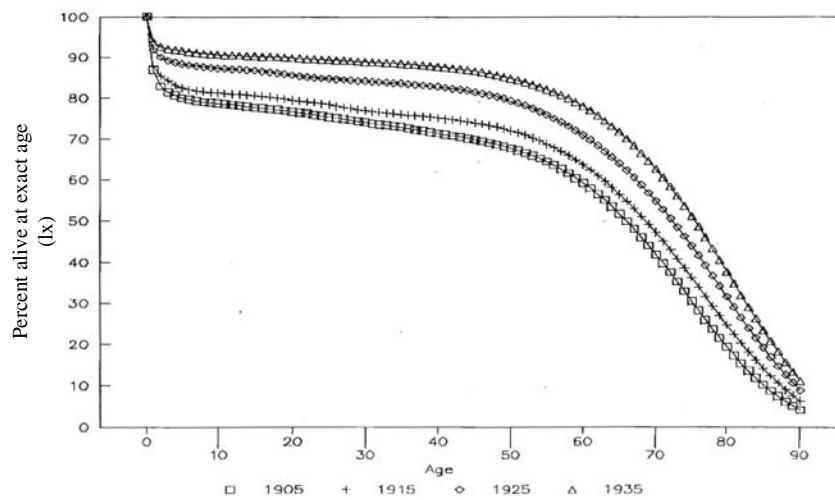
(<http://demog.berkeley.edu/wilmoth/mortality>).

### **Sex differentials in mortality and gender structure of the elderly population**

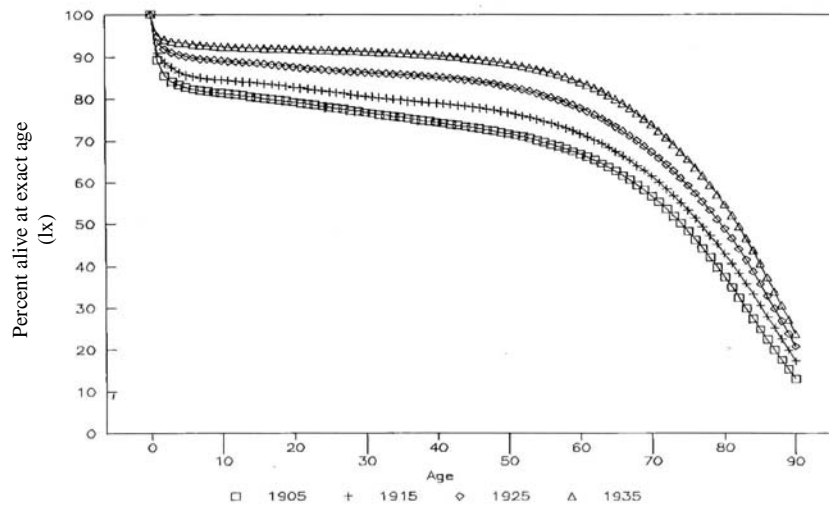
Apart from age variations in the extent of mortality decline experienced during the transition period from relatively high to relatively low rates, a notable feature is the widening of sex differentials in death rates and consequently in life expectancy (Table 13.2), which is a general feature observed in populations experiencing mortality decline (Preston 1976). Waldron (1986; 1993) has reviewed the literature on this subject and pointed to changes in the intra-household allocation of resources.

These include, as causal factors: declines in causes of mortality specifically or primarily affecting women (such as maternal mortality and tuberculosis); gender differences in health related

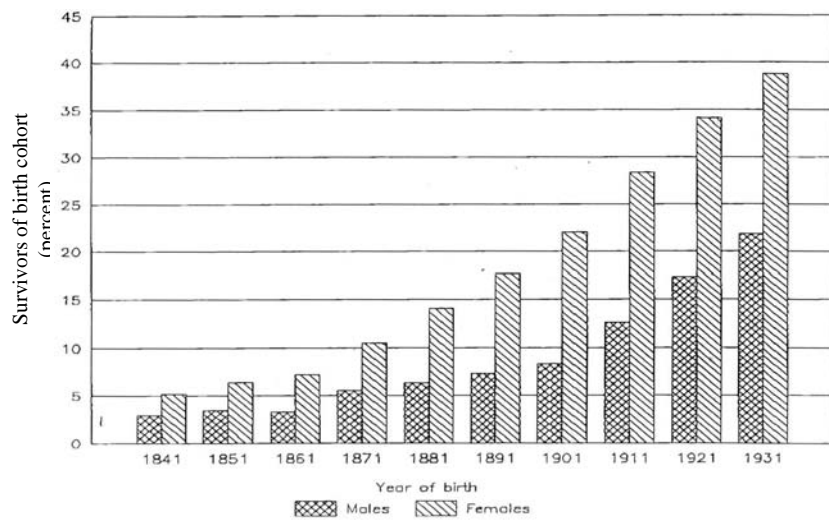
**Figure 13.2 Male survivorship in England and Wales by year of birth, 1905 to 1935**



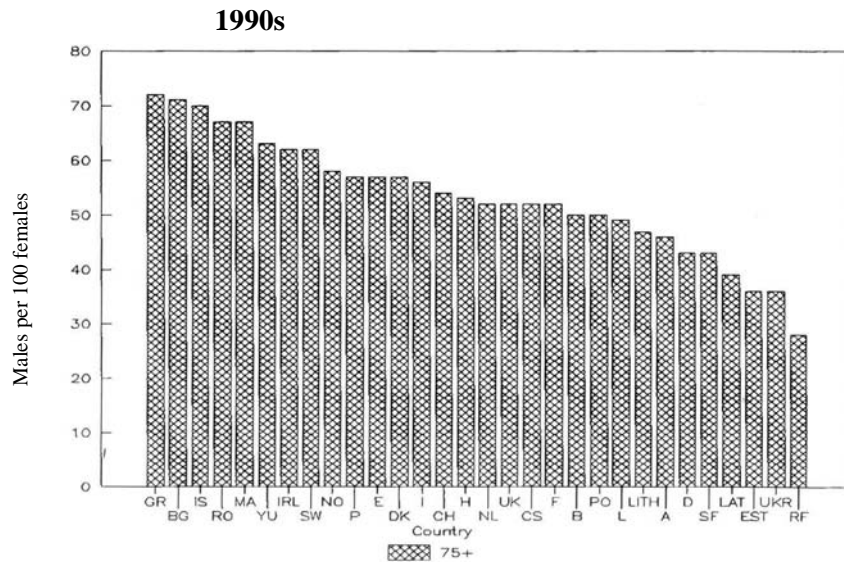
**Figure 13.3 Female survivorship in England and Wales by year of birth, 1905 to 1935**



**Figure 13.4 Survivors at age 85 by year of birth for England and Wales**



**Figure 13.5 The sex ratio (males per hundred females) at ages 75 and over for countries of Europe in the early**



Source: Grundy 1996.

behaviour and in exposure to occupational hazards; and the possibly greater susceptibility of males to stresses associated with socio-economic change. An important result of this sex differential in mortality is the high proportion of widows in elderly populations. But there are signs that the sex differential in mortality in England and Wales and the United States (and a number of other developed countries) is beginning to narrow again (Table 13.2). Changes in the relative propensity of men and women to smoke are undoubtedly an important factor in this (Casselli 1996).

The effects of these gender differences in mortality, and of specific historical events such as war and migration, are that nearly all elderly populations are female dominated. In the United Kingdom in 1996, women constituted 51 percent of the 60-64 year age group but 75 percent of the population aged 85 years and over. However, the predominance of women varies considerably between populations and between time periods. Within Europe, sex ratios (males per 100 females) are lowest in the Russian Federation (where male mortality from alcohol related causes is particularly

high) and Eastern Europe, and highest in Greece (Figure 13.5 illustrates this for the population aged 75 and over). Gender differences in mortality are important because of their effect on marital status, economic security and living arrangements, as well as because of demonstrated relationships in Western populations between marital status and psychological well-being (Waite 1995).

### **Health status**

Ageing brings biological changes which increase the risk of illness, disability and death and all indicators of health status show strong relationships with age. Rates of long-term illness, for example, rise throughout adult life with a steeper increase after the age of 50 or so; measures of more serious disability rise most steeply in advanced old age (Grundy 1992). In the 1993 Health Survey of England (which included only the private household population and so omits some of those in the poorest health) 62 percent of 65-74 year olds and 66 percent of those aged 75 years and over reported a long standing illness or disability. The most frequently reported long-standing illnesses or disabilities among those over 65 were due to musculo-skeletal conditions (prevalence 388 per thousand among women and 264 per thousand among men) and disorders of the heart and circulatory system (262 per thousand among women and 342 per thousand among men).

Of course long-standing illness is not equivalent to disability or frailty; for many who report a musculo-skeletal or heart problem, the effect on ability to undertake normal activities may not be serious. However, the prevalence of disabilities is strongly age related and high among the older old. Results from the 1994 British General Household Survey (Table 13.3) show that a quarter of women aged 85 and over are unable to bathe without help and half are unable to manage one or more specified locomotion activities on their own (viewed more positively, this means that three-quarters

of women over 85 *can* bathe unassisted and half are independent in locomotion). Results from other developed countries are similar (Serow, Sly and Wrigley 1990). These prevalence rates are, moreover, *underestimates* of the true prevalence of disability in these age groups as the surveys from which they are derived excludes the population resident in institutions.

**Table 13.3 Indicators of health problems / disability by age and sex for Great Britain, 1994 (private household population only)**

Indicator		65-69	70-74	75-79	80-84	85 & over	65 & over
Reported limiting long-standing illness	male	39	38	42	50	43	40
	female	35	41	43	46	54	42
Reported inability to manage one or more locomotion activities on their own	male	8	7	9	21	22	10
	female	10	13	19	27	50	19
Reported inability to usually manage bathing/showerin g/ washing all over on their own	male	3	5	6	12	17	6
	female	5	7	9	15	23	10
Health in general in Preceding year "not good"	male	21	20	22	31	17	22
	female	18	24	27	26	30	24

Source: OPCS 1996.

Although prevalence rates of long-term illness and disability are age related, it is important to note that most elderly people enjoy good health; moreover disabilities acquired in later life are not necessarily permanent. Longitudinal studies have shown that some older people who are disabled at one observation point are less disabled, or free of disability, at subsequent follow up (Mendes de Leon et al. 1997). Much can be done, through rehabilitation

programmes, to restore function among elderly people left with some disability after an acute episode (Beck and Stuck 1996). Interventions, such as exercise programmes, have been shown to be highly effective in increasing performance in elderly people, including groups of frail very old people (Skelton et al. 1995).

### **Life table estimates of active / disabled life expectancy**

Mortality rates at older ages have recently fallen quite considerably in a number of countries, as noted earlier. However, it is not universally accepted that the cause and consequence of these declines denotes an improvement in the health status of the older population. On the contrary, some have suggested that such declines may be associated with higher levels of morbidity at the population level, because of interventions allowing longer survival of those with disabilities and long-term illnesses and reductions in the “selective” effect of mortality on population health (Verbrugge 1984).

One consequence of this debate has been increased interest in finding indicators, other than mortality, of population health. A growing number of researchers have used life-table methods to analyse data on mortality and on various estimates of disability to produce estimates of expectation of life divided into “active” or “disability free” years, and years with some form of impairment (Robine et al. 1997). “Health expectancy” is the generic term used to described these and other conceptually similar indicators, such as the World Bank’s estimation of Disability Adjusted Life Years (DALYs) lost. This is a useful summary indicator which may be readily interpreted. Largely under the auspices of the REVES group, great advances have been made in standardising good terminology and methodology. Nevertheless, the estimates of health expectancy which have now been prepared for some 40 countries are not directly comparable because of the substantial differences in the

methods and data used to derive them (Boshuizen and van de Water 1994).

Despite these problems, some general conclusions can be drawn about differentials in health expectancy. In nearly all countries, for example, women have a longer life expectancy than men but also spend proportionately longer in a state of impaired health. For a few countries estimates of health expectancy for different time periods are available, based on input measures which, at least in design, are consistent. Potentially these results may hold the answer to the very important question of whether falls in mortality in older age groups are associated with reductions or increases in the extent of health limitations. Results from Great Britain appear at first sight to suggest an unfavourable trend as far as life expectancy free of long-standing illness is concerned. Between 1976 and 1991 male life expectancy in long-term ill health increased by 1.6 years, while life expectancy free of long-term ill health increased by 1.4 years (Bone et al. 1996). However, these results are based on responses to general questions in the General Household Survey which may well reflect changes in health *expectations* rather than health *expectancy*.

Analyses based on the more detailed questions on ability to undertake specific tasks suggest, more positively, a reduction in the prevalence of more severe disability. In 1991, for example, 80 percent of men and 79 percent of women aged 85 and over and living in private households were able to bathe themselves, feed themselves, get in and out of bed and get to the toilet without help from another person. In 1980 the equivalent percentages were only 69 percent and 64 percent (Grundy 1996b). Data from the United States Long-term Care surveys analysed by Manton, Corder and Stallard (1997) also suggest a positive trend. Overall, the evidence currently available seems to suggest increases in life expectancy with mild or moderate health limitations (and in the proportion of life spent in this state) but decreases in the extent and relative



duration of more serious disability (Boshuizen and van de Water 1994; Grundy 1997).

### **Use of health and welfare services**

Given the relationship between age and health status, it is not surprising that use of services is strongly age associated. Use of personal social services is particularly high among very old people aged 85 years and over, whose numbers are currently growing so rapidly. Socio-demographic factors other than age influence patterns of use. Women make greater use of these services than men, partly because more elderly women than men live alone and service use is related to living arrangements. In 1991, for example, in Great Britain 27 percent of those aged 75 and over who lived alone had a local-authority home help, compared with six percent of those living just with a spouse and nine percent of those in other types of household. Changes in living arrangements thus may have major implications for the demand for formally provided social services. Use of long-term care services has also been shown in a number of studies (but not all) to be associated with the availability and characteristics of children (Wolf 1994). Of course supply-side factors will also affect relationships between age and use of services. In the United States, where all older people but only certain groups of the young have access to free medical care, the relationship between age and consultations with doctors is much steeper than in Great Britain where everybody is entitled to free health care (Grundy 1992).

### **Marriage, family and household**

#### **Marital status**

Sex differentials in mortality, and the common pattern of women marrying men older than themselves, are reflected in a preponderance of widows in all of Europe's elderly populations. However, differences between European countries in the extent of widowhood are substantial. In the late 1980s in Switzerland and Malta, 44 percent of elderly women were widows, compared with 60 percent in Bulgaria and Hungary (Grundy 1996a). Widowhood is necessarily preceded by marriage and to some extent differences in the proportions widowed reflect differences in the proportions ever marrying, which are very substantial.

In the late 1980s fewer than two percent of elderly men in Bulgaria had never married, compared with nearly a quarter in Ireland. Imbalances between the number of men and women, the result of war-related mortality or differential emigration, affected some of today's elderly Europeans when they were in the prime marriageable age groups (Coleman and Salt 1992). However, the major reason for the differences between Northern and Western Europe on the one hand and Eastern Europe on the other is the historical difference in marriage patterns.

Until relatively recently, the countries of North and West Europe were characterised by high proportions never marrying and a relatively late age at marriage. In Eastern Europe, by contrast, marriage was earlier and more universal (Hajnal 1965). In a number of Western countries, marriage rates among those born after 1920 (and before 1955) were substantially higher with the result that the proportions of younger elderly people never married has been falling. In England and Wales, for example, the proportion of single (never-married) women in the 65-74 year old age group fell from 14 percent to seven percent between 1971 and 1991 (Grundy 1996b).

The slight narrowing of sex differentials in mortality in some populations has also increased women's chances of staying married for longer. In 1991, in England and Wales, married women

outnumbered widows until the age of 73; in 1971, this was the case only until the age of 71. These changes are important because marital status is strongly associated with living arrangements, including residence in an institution, and use of services (Grundy 1996b). While the proportion never married has fallen, and is projected to fall further, the proportion of divorced elderly people is rapidly increasing. The effect of divorce on support for older people and more generally on intergenerational relationships is likely to become an important issue in a number of countries in the next century (Goldscheider 1994).

### **Childlessness**

As a result of falls in the proportion of single women and historical falls in the prevalence of childless marriage, the proportion of elderly people with no children has fallen in a number of European countries and in the United States. (Prioux 1993). The proportion of women who had no children or only one child for successive birth cohorts in England and Wales is illustrated in Figure 13.6. Among those born in 1902-06, one-third were childless at age 45-49, and 22 percent had had only one child. Among those born in 1940, the equivalent proportions were 10 percent and 14 percent respectively. The current young elderly and their successors thus include higher proportions ever-married and lower proportions childless than their predecessors. Increases in childlessness among the post-Second World War birth cohorts suggest a rather different long term future, however.

### **Family contacts and living arrangements.**

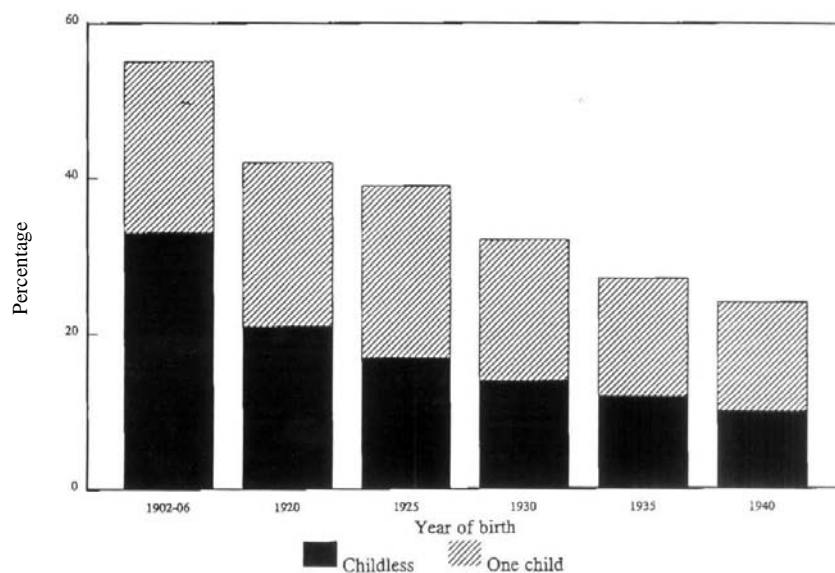
There are marked differences between European countries in the extent of contact between elderly people and their relatives (Table 13.4). In Italy 71 percent of elderly people report daily contact,

compared with only 14 percent in Denmark. Interestingly, there is less variation in the percentage of elderly people who report infrequent or no contact, and the proportions reporting loneliness appear, if anything, to be *inversely* associated with the extent of contact.

This apparently counter-intuitive finding is consistent with the results of other studies of Western populations which have found high rates of loneliness among elderly people living with their relatives and high rates of life satisfaction and self esteem among elderly people with networks of *friends* rather than, or as well as, of relatives. Lee (1985) has suggested that in countries which lay high stress on self reliance and autonomy, reliance on relatives may have negative effects on the psychological well-being of elderly people. Associations between family contact and well-being are likely to be highly culturally specific.

Variations in frequent contact with relatives partly reflect variations in the extent of coresidence with children and other relatives, which are considerable. Far higher proportions of elderly people in Italy and Ireland live with relatives than in Britain or Sweden. Moreover such “cultural” differences appear very persistent. Pampel (1992), in an analysis of changes in living arrangements in Europe, found that the ranking of countries in this regard persisted over time, despite major changes in other parameters of relevance. In the United States and Canada marked differences in living arrangements between groups of different ancestry are apparent, even among those whose families have been resident in America for several generations (Clark and Neidert 1992).

**Figure 13.6 Proportion of women for whom completed family size was one or no children by year of birth for England and Wales**



In many developed countries postwar changes in living arrangements, including those of elderly people, have been substantial (Keilman 1987). Households have become smaller and simpler (in terms of composition) and solitary living far more common. In 1990/91, average household size in the European Community (EC 12) was 2.6 and single person households comprised 26 percent of all households (Commission Européenne 1994).

**Table 13.4 Distribution of men and women aged 65 and over by family/household type (in percent), 1971, 1981 and 1991 for England and Wales**

Sex	Age Group	Year	Solitary	Married couple alone	Family/ household type			
					Married couple plus others	Lone parent	Complex	Non-private household
Men	65-74	1971	11	58	16	2	11	3
		1981	14	61	14	2	8	1
		1991	16	65	11	1	5	1
	75-84	1971	18	47	10	4	15	6

		1981	22	54	7	3	11	4
		1991	24	59	4	2	6	4
	85+	1971	20	24	6	8	27	15
		1981	29	31	5	5	20	11
		1991	32	37	3	3	10	16
Women	65-74	1971	32	36	7	6	16	3
		1981	35	42	7	5	10	1
		1991	34	48	5	5	7	1
	75-84	1971	40	16	3	8	24	8
		1981	50	20	2	6	16	6
		1991	53	24	2	5	9	7
	85+	1971	30	5	1	12	31	22
		1981	42	5	1	8	25	19
		1991	49	6	1	5	13	27

Source: ONS Longitudinal Study data reported in Grundy 1996b.

The living arrangements of men and women aged 65 and over in 1971, 1981 and 1991 in England and Wales are outlined in Table 13.5. Over this period living alone or with a just a spouse became more common while the proportions living in other types of household fell. Most marked has been the decline in the proportions living in “complex” households including friends and relatives other than a spouse or more than one family. In 1971, 27 percent of men and 31 percent of women aged 85 and over lived in this kind of household, by 1991 these proportions had fallen to 10 percent and 13 percent respectively.

**Table 13.5 Level of contact with family and reported loneliness among older persons 60 and over (in percent) for Europe, 1993**

	Daily contact	Contact less than monthly	Often feel lonely
United Kingdom	21.9	18.5	5-9
Denmark	13.8	10.0	5

Ireland	50.1	10.2	10-14
Belgium	35.8	10.4	10-14
France	34.2	12.0	
Germany	46.5	9.4	5-9
Netherlands	19.2	10.0	
Greece	64.8	13.6	20 and over
Italy	70.7	5.0	15-19
Portugal	59.8	13.9	20 and over
Spain	60.7	9.7	10-14
EC 12 <sup>a</sup>	44.4	11.0	13

<sup>a</sup> including Luxembourg

Source: Eurobarometer Survey.

Analyses by number of generations in the households of elderly people similarly show very marked falls in the extent of intergenerational coresidence. In 1971, 38 percent of men and 42 percent of women aged 85 and over lived in households containing two, three or more generations; the equivalent proportions in 1991 were 15 percent and 21 percent. Moreover, whereas in 1971 far more very elderly people lived with relatives than in institutions, by 1991 this situation had reversed. Thus among women aged 85 and over the ratio of those in institutions (largely comprising residential and nursing homes and long-stay hospital beds) to those in complex households increased from 0.71:1.00 in 1971 to 2.00:1.00 in 1991.

A similar increase in the use of institutional long-term care among the very old has been reported in the United States (Crimmins et al. 1997). This suggests some substitution of institutional for family care for frail elderly people, an impression supported by analyses of longitudinal data which show that, in England and Wales, transitions from living independently to living with relatives were less common 1981 to 1991 than in the previous decade (Grundy and Glaser 1997).

### **Family help and the importance of family**

Although intergenerational coresidence has declined in many developed countries, this should not be interpreted as a withdrawal of family support. Families remain prominent supporters of frail elderly people in need of assistance. The usual source of help for elderly people in Britain who needed help with specified tasks is shown in Table 13.6. For those with a spouse, most of this help was provided by the spouse. Relatives were also the most usual source of help for those living alone and help from relatives was more common than help from formal providers. Moreover, relationships with family members are clearly important to elderly people psychologically as well as for practical reasons. In a recent survey of the most important things in life in Britain, relationships with family came second only to health (Bowling 1995).

It is important to note that elderly people in developed countries are often *providers* of help to peers and younger family members. In the United States, for example, the direction of flows of financial and other aid is downward until the late sixties or early seventies (Cox and Rank 1992). Elderly people provide substantial help to younger relatives with chores and activities such as child care and the normative lifetime basis for giving and receiving help is one of reciprocity (Antonucci and Jackson 1989). Coresidence between adult children may often benefit the “child” rather than the parent or be part of a mutually beneficial arrangement (Grundy and Harrop 1992; Kendig 1989; Speare and Avery 1993).

In a number of developed countries, recent increases in signs of family disorganisation, such as divorce and extramarital childbearing, have raised concerns that they may herald a move from family to individual orientations which may not bode well for continued family support for frail elderly people. The growth of individualism has also been advanced as a partial explanation for



very low fertility (Van de Kaa 1987). However, changes in marital stability are not universally associated with low fertility. Fertility rates in Southern Europe and Japan are very low, as are rates of divorce and extramarital childbearing. Moreover, both the extent of intergenerational coresidence and positive attitudes to it remain far higher in Southern than in Northern Europe.

A 1986 international survey conducted by the Japanese Management and Coordination Agency found that 34 percent of older Italians said that living together was the best relationship between younger and older family members compared with four percent in Denmark and 58 percent in Japan (Martin 1989). However, in Japan, as in the West, rates of intergenerational coresidence have fallen markedly in the recent past, even though they remain at a much higher level than in Western and Northern Europe (Ogawa and Retherford 1997). Demographic as well as socio-economic change may put intergenerational coresidence under stress as the duration of such arrangements has been extended by declining mortality.

**Table 13.6 Usual source of help for elderly people unable to undertake tasks without help (in percent) in Great Britain, 1994**

	Bathing/ showering	Domestic tasks	Going out
Lives alone:			
Relative	46	59	67
NHS or social services	45	19	6
Lives with spouse:			
Spouse	82	91	87
Other relative	5	15	12
NHS or social services	11	3	1
All elderly:			

Spouse	41	52	39
Other relative	10	13	17
NHS or social services	22	12	3

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Source: OPCS 1996.

In recently industrialised countries the pace of change and resulting divergence between the experiences of the old and young may also result in conflict of values. Analysis of the World Values Survey (Inglehart and Abramson 1993) showed that differences between the values of the old and young were greatest in countries such as South Korea which had experienced recent rapid economic growth.

### **Economic aspects of population ageing**

A further issue of major concern is the economic support of large elderly populations. In developed countries transfer payments and savings provide the major pillars of economic support in old age with very little coming directly from children. In the United States in 1986, for example, only two percent of elderly people reported receiving income from children, compared with 22 percent in Japan (Maeda and Shimuzu 1991). Expenditure on pensions now constitutes a significant proportion of GNP, and of all government expenditure, in most European countries (Table 13.7). Moreover, in many of these countries pension liabilities are huge, higher than total GNP in some cases (World Bank 1994).

Several factors, not all of them demographic, are important in this context. Many countries rely heavily on “pay-as-you-go” pension schemes whereby current workers pay for current pensioners. Such a system is easy to fund if the workforce is growing in relation to the number of pensioners, as has been the case in most countries until recently, but becomes increasingly

difficult to sustain once this relationship changes. However, moves towards funded schemes, while reducing state liabilities, may have other disadvantages. Lifetime low earners and those with intermittent labour market involvement will be disadvantaged if the main planks of pension provision rely on employer contributions or private saving.

The United Kingdom, which has promoted such “second tier” pensions while failing to upgrade the value of universal pensions in line with earnings, has a high rate of pensioner poverty in comparison with many other European countries. Moreover, private and occupational pensions may not be secure, either because of misappropriation or misleading marketing by employers or private pension providers (both recent occurrences in the United Kingdom) or because of falls in returns on investments.

**Table 13.7 Public expenditure on pensions in countries of Europe, mid-1980s to early 1990s**

Country	Public pension spending as percentage of		Standard retirement ages	
	GDP	Government expenditure	males	females
United Kingdom	9.5	24.1	65	60
Denmark	9.9	24.8	67	67
Ireland	6.1	15.7	65	65
Sweden	11.6	28.1	65	65
Belgium	11.0	17.6	60	60
France	11.8	25.8	60	60
Germany	10.8	34.4	65	65
Netherlands	9.8	17.9	65	65
Greece	12.3	30.6	65	60
Italy	14.4	37.0	60	55
Portugal	7.7	18.9	65	62

Spain	7.5	23.2	65	65
Australia	3.9	16.0		
United	6.5	24.5	65	65
Japan	5.0	-	65	58

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Source: World Bank 1994

A further, very substantial, obstacle in the path of moving from a pay-as-you-go to a funded scheme is that one or two generations in the transitional period would be heavily penalised by having to pay both for current pensioners and for their own future pensions. Pensioners in countries undergoing structural change face particular problems, witness extreme falls in the value of pensions in a number of former Eastern bloc countries (Kinsella and Gist 1995).

Older populations are very heterogeneous and increases in the absolute or relative incomes of pensioners may mask quite high rates of pensioner poverty, as in the United States (Holtz-Eakin and Smeeding 1994). In the United Kingdom, as in the United States, pensioner income inequality increased during the 1980s; the richest tenth of pensioners have incomes around five times greater than the poorest tenth (Johnson et al. 1996).

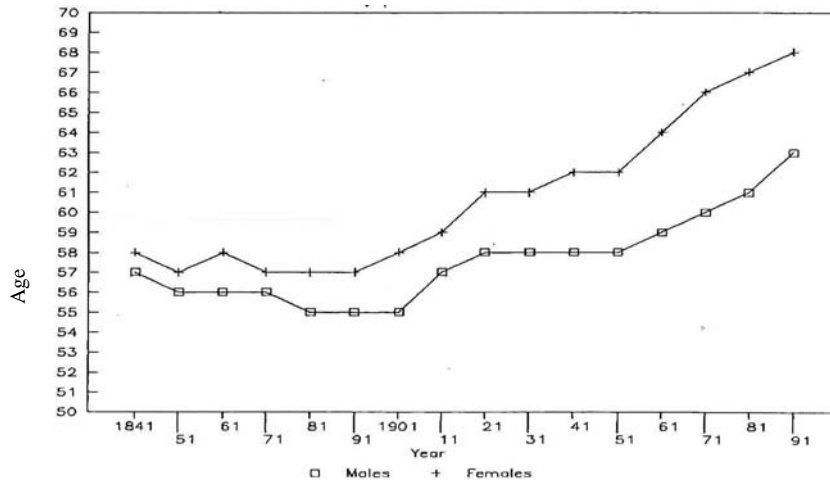
In nearly all OECD countries, increases in pension expenditures have been more affected by changes in beneficiary ratios than by demographic change alone, a consequence of early retirement and other forms of early labour market exit, for example "bridged" through disability payments (Guilmot 1978; Johnson 1994). An important factor has been the trend towards earlier and earlier retirement, only recently showing signs of halting in some countries such as the United States. In Britain, half of all men over 65 were economically active in 1931, compared with only 8 percent in 1991. Moreover, only half of 60-64 year-old men are still at work, even though retirement pension age for men is 65 (Henretta 1994).

Although some governments have recently acted to reverse these trends, in other countries concerns with youth unemployment have dampened the impetus for change. A further problem is that “bridges” to early retirement may often be provided through firm-based schemes, and for firms, early retirement of some workers may have economic benefits, especially if part of the cost is born by the state (Henretta 1994). Older workers may suffer other disadvantages, including lack of access to training and difficulties in securing jobs if unemployed. A European Community survey conducted in 1993 found that nearly 80 percent of the European Community population believed older workers were discriminated against in recruitment and 60 percent thought they were discriminated against in training and promotion (Centre for Policy on Ageing 1993). Reversing both such discrimination and other factors that discourage older workers needs to be a priority.

## **Discussion**

Population ageing is perceived as a problem, but it is the inevitable outcome of goals which have been actively pursued - namely reduced fertility and lower mortality in mid-life and later life. Ageing is associated with biological changes that increase the risk of morbidity, disability and death. However, most old people are not seriously disabled and appropriate medical and social interventions can be very effective in delaying or mitigating disability.

**Figure 13.7 Age at which life expectancy is 15 years by year and sex for England and Wales**



Source: Grundy 1996.

Recent fertility declines have been attributed by some to a “second demographic transition” involving major shifts in values and the growth of individualism. Increases in family “disorganisation” have also been associated with this shift. However, the two do not inevitably go hand in hand. Southern Europe and Japan have very low fertility, but also low rates of divorce and extramarital childbearing and high rates of coresidence between elderly people and their children. The “cultural context” of population ageing is important.

Even in countries such as the United Kingdom where coresidence between elderly people and their children has fallen very extensively, most of the help needed by frail old people is provided by relatives. Older people also *provide* a great deal of support of various kinds to younger relatives and their age peers and, even if not economically active, make important contributions to the well-being of others and society as a whole.

The economic “old age security crisis” is not solely demographically driven. Changes in economic activity rates have in many cases had as great an effect on pensioner/worker ratios. Pay-as-you-go pension systems and universal age-related benefits may be affordable, equitable and easy to administer when labour forces are growing and most old people are poor. They may become unaffordable and inequitable when labour forces are falling relative to the number of pensioners and as the pensioner population becomes more economically heterogeneous.

Social institutions developed to meet the needs of older people need to be flexible. The age at which people have on average fifteen years of life remaining has recently increased quite markedly (Figure 13.7). However, there have been very few initiatives to introduce corresponding changes in age related benefits.

## **Note**

**1** Eastern Europe is considered only in passing as recent upheavals mean that the future course of demographic trends there is particularly uncertain. Velkhoff and Kinsella (1993) have recently published an excellent analysis of ageing trends in Eastern Europe and European-wide differences in population are considered in Grundy (1996a).

## References

- Allen, I. and E. Perkins, eds. 1995. *The Future of Family Care*. London: HMSO.
- Antonucci, T. and J. Jackson. 1989. "Successful ageing and life course reciprocity," in A.M. Warnes, ed., *Human Ageing and Later Life*. London: Edward Arnold. pp. 83-95.
- Bartiaux, F. 1991. "La composition des ménages des personnes âgées en Italie 1981." *European Journal of Population* 7(59-98).
- Beck, J. C. and A. E. Stuck. 1996. "Preventing disability: beyond the black box." *JAMA* 276(1756-7).
- Benjamin, B. 1987. "The demographic outlook," in B. Benjamin, S. Haberman, G. Helowicz, G. Lay, and D. Wilkie., eds., *Pensions: The Problems of Today and Tomorrow*. London: Allen and Unwin.
- Bone, M. R., A. C. Bebbington, C. Jagger, K. Morgan, and G. Nicolaas. 1996. *Health Expectancy and Its Uses*. London: HMSO.
- Boshiuizen, H. C. and H. P. A. Van de Water. 1994. "An international comparison of health expectancies." Leiden: *TNO Health Research*.
- Bowling, A. 1995. "The most important things in life. Comparisons between older and younger population age groups by gender. Results from a national survey of the public's judgements." *International Journal of Health Sciences* 6(169-175).
- Caselli, G. and J. Vallin. 1990. "Mortality and population ageing." *European Journal of Population* 6/1(1-25).
- Caselli, G. 1996. "Future longevity among the elderly," in G. Caselli and A. Lopez, eds., *Health and Mortality Among Elderly Populations*. Oxford: Clarendon Press. pp. 235-265.
- Centre for Policy on Ageing/Family Policy Studies Centre, (CPA/FPSC). 1993. *Older People in the European Community*. London: CPS.
- Clarke, C. J. and L. Neidert. 1992. "Living arrangements of the elderly: an examination of differences according to ancestry and generation." *The Gerontologist* 32(796-804).
- Coleman, D. and J. Salt. 1992. *The British Population Patterns, Trends and Processes*. Oxford: Oxford University Press.



- Commission Européenne. 1994. *Europe Sociale: l'union européenne et la famille*. Luxembourg: Office des publications officielles des Communautés européennes.
- Council of Europe. 1997. *Recent demographic developments in Europe*. Strasbourg: Council of Europe Publishing.
- Cox, D. and M. R. Rank. 1992. "Inter-vivos transfers and inter-generational exchange." *Review of Economics and Statistics* 74(305-314).
- Crimmins, E. M., Y. Saito and S. L. Reynolds. 1997. Further evidence on recent trends in the prevalence and incidence of disability among older Americans from two sources: the LSOA and the NHIS. *Journal of Gerontology B Psychological and Social Science* 52(S59-71).
- European Commission. 1995. *The demographic situation in the European Union*. Luxembourg: Office for Official Publications of the European Communities.
- Goldscheider, F. K. 1994. Divorce and remarriage: effects on the elderly population. *Reviews in Clinical Gerontology* 4(253-259).
- Grundy, E. 1992. "The epidemiology of aging," in J. C. Brocklehurst, R. Tallis, and H. Fillit, eds., *Textbook of Geriatric Medicine and Gerontology*, 4<sup>th</sup> edition. Edinburgh. 1-20.
- \_\_\_\_\_. 1996a. "Population ageing in Europe," in D. Coleman, ed., *Europe's Populations in the 1990s*. Oxford: Clarendon Press. pp. 267-299.
- \_\_\_\_\_. 1996b. "Population Review: the population aged 60 and over." *Population Trends* 84(14-20).
- \_\_\_\_\_. 1997. "The health of older adults 1841-1994," in J. Charlton and M. Murphy, eds., *The Health of Adult Britain 1841-1994, Vol. II*. London: The Stationery Office. pp. 183-204.
- Grundy, E. and K. Glaser. 1997. "Trends in, and transitions to, institutional residence among older people in England and Wales, 1971 to 1991." *Journal of Epidemiology and Community Health*. 51(531-540).
- Grundy, E. and A. Harrop. 1992. "Co-residence between adult children and their elderly parents in England and Wales." *Journal of Social Policy* 21(325-348).

- Guilmot, P. 1978. "The demographic background," in Council of Europe, *Population Decline in Europe. Implications of a Declining or Stationary Population*. London: Edward Arnold. pp. 3-49.
- Hajnal, J. 1965. "European marriage patterns in perspective," in D. V. Glass and D. E. Eversley, eds., *Population in History*. London: Edward Arnold.
- Henretta, J. C. 1994. "Recent trends in retirement." *Reviews in Clinical Gerontology* 4(71-81).
- Holtz-Eakin, D. and T. M. Smeeding. 1994. "Income, wealth and intergenerational economic relations of the aged," in L. G. Martin and S. H. Preston, eds., *Demography of Aging*. Washington DC: National Academy Press. pp. 102-145.
- Inglehart, R. and P. R. Abramson. 1993. "Affluence and intergenerational change: period effects and birth cohort effects," in H. A. Becker and P. L. J. Hermkens, *Solidarity of Generations. Demographic, Economic and Social Change, and its Consequences*. Amsterdam: Thesis Publishers I(71-113).
- Johnson, P. 1994. "Retirement: evolution and macro-economic implications." *Reviews in Clinical Gerontology* 4(161-167).
- Johnson, P., R. Disney and G. Stears. 1996. *Pensions: 2000 and Beyond*, Volume 2. London: The Retirement Income Inquiry.
- Keilman, N. 1987. "Recent trends in family and household composition in Europe," *European Journal of Population* 3(297-325).
- Kendig, H. 1989. *Social Change and Family Dependency in Old Age: Perceptions of Japanese women in middle age*. Tokyo: NUPRI Research Paper no. 54.
- Kinsella, K. and Y. J. Gist. 1995. *Older Workers, Retirement and Pensions: A Comparative International Chartbook*. Washington DC: United States Bureau of the Census, IPC/95-2.
- Kono, S. 1994. "Demography and population ageing in Japan," in *Ageing in Japan*. Tokyo: JARC.
- Laslett, P. 1984. "The significance of the past in the study of ageing." *Ageing and Society* 4(379-89).
- Lee, G. R. 1985. "Kinship and social support: the case of the United States." *Ageing and Society* 5(19-38).

- Maeda, D. and Y. Shimuzu. 1991. "Family support for elderly people in Japan," in H. Kendig, A. Hashimoto and L. C. Coppard, eds., *Family Support for the Elderly*. Oxford: Oxford Medical Publications. pp. 235-249.
- Manton, K. G., L. Corder and E. Stallard. 1997. "Chronic disability trends in elderly United States populations: 1982-1994." *Proceedings of the National Academy of Sciences USA* 94(25):93-8).
- Martin, L. G. and K. Kinsella. 1994. "Research on the demography of aging in developing countries," in L. G. Martin and S. H. Preston, eds., *Demography of Aging*. Washington DC: National Academy Press. pp. 356-397.
- Martin, L. G. 1989. "The graying of Japan." Washington DC: Population Reference Bureau. *Population Bulletin* 44(2).
- Mendes, de Leon C. F., L. A. Beckett, G. G. Fillenbaum, D. B. Brock, L. G. Branch, D. A. Evans and L. F. Berkman. 1997. "Black-white differences in risk of becoming disabled and recovering from disability in old age: a longitudinal analysis of two EPESE populations." *American Journal of Epidemiology* 145(4):88-97).
- Myers, G. 1996. "Comparative study of mortality trends among older persons in developed countries," in G. Casselli and A. Lopez, eds., *Health and Mortality Among Elderly Populations*. Clarendon: Oxford Press. pp 87-111.
- Office of Population Censuses and Surveys (OPCS). 1996. *Living in Britain: Results from the 1994 General Household Survey*. London: HMSO.
- Pampel, F. C. 1992. "Trends in living alone among the elderly in Europe," in A. Rogers, ed., *Elderly Migration and Population Redistribution*. London: Belhaven Press 97-117.
- Preston, S. H. 1976. *Mortality Patterns in National Populations*. New York: Academic Press.
- Preston, S. H., C. Himes and M. Eggers. 1989. "Demographic conditions responsible for population aging." *Demography* 26(6):91-704).
- Prioux, F. 1993. "L'infécondité en Europe," in A. Blum and J. L. Rallu, eds., *European Population II*. Paris: Demographic Dynamics.
- Robine, J. M., I. Romieu and E. Cambois. 1997. "Health expectancies in current research." *Reviews in Clinical Gerontology* 7(73-82).

- Robins, A. and R. Wittenberg. 1992. "The health of elderly people: economic aspects," in Central Health Monitoring Unit, *The Health of Elderly People, an Epidemiological Overview*. Volume II, Companion Papers. London: HMSO pp. 10-19.
- Royal Commission on Population. 1949. *Report*. London: HMSO, cmd 7695 p. 121.
- Serow, W. J., D. F. Sly and J. M. Wrigley. 1990 *Population aging in the United States*. New York: Greenwood Press.
- Skelton, D. A., A. Young, C. A. Greig and K. E. Malbut. 1995. "Effects of resistance training on strength, power, and selected functional abilities of women aged 75 and over." *Journal of the American Geriatrics Society* 43(1-7).
- Speare, A. and R. Avery. 1993. "Who helps whom in older parent-child families?" *Journal of Gerontology, Social Sciences* 48(S64-S73).
- United Nations Economic Commission for Europe (UN ECE)/United Nations Fund for Population Activities (UNFPA). 1992. *Changing Age Structures: Demographic and Economic Consequences and Implications*. Geneva: United Nations.
- United States Bureau of Census. 1996. *Global Aging into the Twenty-First Century*. Washington DC: US Bureau of the Census.
- van de Kaa, D. J. 1989. *Europe's Second Demographic Transition*. Washington DC: PRB. Population Reference Bureau Population Bulletin 42(1).
- Velkoff, V. and K. Kinsella. 1993. *Aging in Eastern Europe and the Former Soviet Union*. Washington DC: US Bureau of the Census.
- Verbrugge, L. 1984. "Longer life but worsening health? Trends in health and mortality in middle-aged and older persons." *Millbank Memorial Fund Quarterly* 62(475-519).
- Waite, L. J. 1995. "Does marriage matter?" *Demography* 32(483-507).
- Waldron, I. 1986. "What do we know about sex differences in mortality?" *Population Bulletin* no 18. New York: United Nations.
- \_\_\_\_\_. 1993. "Recent trends in sex mortality ratios for adults in developed countries." *Social Science and Medicine* 36(451-62).
- Wolf, D. A. 1994. "The elderly and their kin: patterns of availability and access," in L. G. Martin and S. H. Preston, eds., *Demography of Aging*. Washington DC: National Academy Press. pp. 146-194.

- World Bank (International Bank for Reconstruction and Development).  
1994. *Averting the Old Age Crisis: Policies to Protect the Old and  
Promote Growth*. New York: Oxford University Press.
- Wrigley, E. A. and R. S. Schofield. 1989. *The Population History of  
England*. (2nd Edition). Cambridge: Cambridge University Press.

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### 13. Policy Issues of Population Ageing A United Kingdom Perspective

*Emily Grundy*

#### **Introduction**

The ageing of an increasing number of the world's national populations is an outcome of demographic changes that many policy makers have striven hard to set in motion. However, responses to population ageing have often been far from positive. The Royal Commission on Population set up in 1944 in the United Kingdom in response to the plummeting birth rates of the 1930s, warned that a society with a falling proportion of young people might become "dangerously unprogressive, falling behind other communities not only in technical efficiency and economic welfare but in artistic and intellectual achievement as well" (Royal Commission 1947: 21). Few contemporary commentators would so readily attribute particular behavioural characteristics to the population as a whole.

Nevertheless, ambivalence about older, and ageing populations, remains. The increase in the relative size of the elderly, and more particularly the very old, population is perceived as a major challenge on a number of counts. In 1997, the United Kingdom government established a new Royal Commission, not on population but on long-term care for elderly people, and a separate special enquiry into the financing of pensions; together, these concerns are indicators of the importance of policy issues raised by age structure changes. In a number of Western countries, fears about escalating health care and pension costs have been exacerbated by concerns that recent changes in family patterns, such as increased divorce and lone parenthood, will erode the

capacity of younger generations to support the old (Allen and Perkins 1995). Population ageing is also rising high on the agendas of many newly industrialised or still developing countries (Martin and Kinsella 1994; World Bank 1994).

There are some well-founded reasons for these concerns. In the United Kingdom, public expenditure on health and welfare services for those aged 85 and over, now the fastest growing age group of the population, is 15 times as great as expenditure on 15-64 year olds (Robins and Wittenberg 1992). In the European Union 45 percent of social protection benefits are devoted to old age with a further 35 percent accounted for by health and disability related expenditure (European Commission 1994). Moreover, there is still uncertainty about what proportion of the “extra time” added to later life through recent reductions in mortality rates at older ages, is spent in good health. However, there are other less valid reasons for society’s ambivalence, namely ageist assumptions that old people are invariably a burden and ageing a negative experience, even though there is ample evidence to show that older people make major contributions to the care and support of their peers and younger generations, and evidence also that the vast majority of older people, including very old people, report high levels of satisfaction with their lives (Bowling 1995).

This chapter first considers demographic aspects of population ageing before proceeding to examine in more detail information on the health status of the older population; family, household and intergenerational relationships; and finally, some of the economic aspects of population ageing. Data are drawn from the developed world, particularly Europe<sup>1</sup> as it is here that population ageing is the most advanced. There is no biological reason for choosing one particular age over another as the demarcation between elderly and other adults, but the conventional practice has been followed here in using either 60 or 65 (depending on data availability) as marking the threshold of later life.

### **Population ageing and demographic characteristics of the older population**

The demographic determinants of a population's size and age structure are fertility, mortality and migration. It has long been recognised that fertility is potentially the most important of these parameters in all but the highest of high mortality populations. Historically, and apparently paradoxically, improvements in mortality in the now developed world served to partially offset the trend towards population ageing, as they chiefly benefitted the young - and led to increases in the proportion surviving to have children themselves. *Primary* population ageing - a once and for all shift to an older age structure - is a consequence of long-term downward trends in fertility.

In much of the now developed Western World this shift, termed the demographic transition, occurred in the late nineteenth or early twentieth century, with the consequence that the relative size of the older population grew markedly in the first half of the twentieth century. Moreover, even prior to the demographic transition, some North West European pre-industrial populations had relatively "low pressure" demographic regimes, with levels of fertility held in check by late marriage and high rates of celibacy, and so a sizeable representation of older adults. The estimated proportion of the population aged 60 and over in seventeenth century England, for example, was eight to nine percent - much the same as the equivalent proportion in contemporary South Korea and Thailand (Wrigley and Schofield 1989; United States Bureau of the Census 1996).

**Table 13.1 Demographic indicators for selected countries of Europe, 1996**



	TFR (per woman)	Life expectancy at Birth(years)		65 and over (percent)	65 and over/ 15-64 (percent)
		Male	Female		
<i>Northern Europe</i>					
United Kingdom	1.7	74	79	15.7	24.2
Denmark	1.8	73	78	15.0	22.4
Ireland	1.9	72	78	11.5	17.8
Sweden	1.6	77	82	17.4	27.4
<i>Western Europe</i>					
Belgium	1.6	74	81	16.3	24.7
France	1.7	73	82	15.4	23.6
Germany	1.3	73	80	15.6	22.8
Netherlands	1.5	75	80	13.4	19.6
<i>Southern Europe</i>					
Greece	1.3	75	80	16.0	23.6
Italy	1.3	74	81	17.1	25.1
Portugal	1.4	71	79	14.9	21.9
Spain	1.2	73	81	15.8	23.1
<i>Central and Eastern Europe</i>					
Hungary	1.5	66	75	14.3	21.0
Poland	1.6	68	77	11.5	17.2
Czech Republic	1.2	70	77	13.5	19.6
Russian Federation	1.3	58	71	12.1	18.1

Source: Council of Europe 1997.

Today, as shown in Table 13.1, in virtually all of Europe, as well as in other developed countries, the proportion of the population aged 65 or over exceeds ten percent and in parts of Europe is greater than 15 percent. All the European countries shown in Table 13.1 have rates of fertility below the long-term replacement level. Fertility in Southern Europe and in much of Eastern Europe, is particularly low. In 1997, in terms of the share of the population

aged 60 and over, Italy was the world's oldest country. All these populations also have either very low, or (in Eastern Europe) moderately low mortality rates which in much of the developed world (except Eastern Europe) have recently fallen further. In the rest of the world, the proportion of elderly people is smaller.

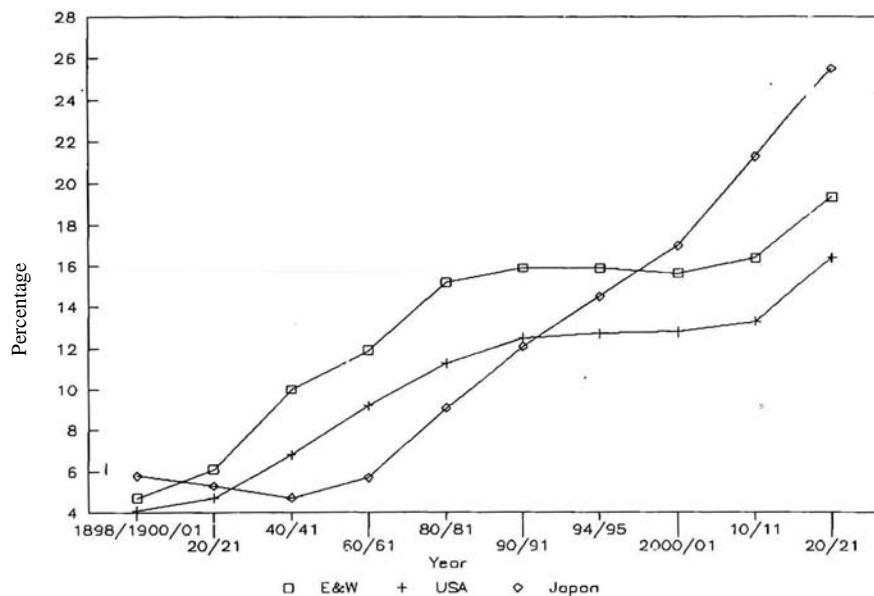
A transition to lower, deliberately controlled fertility - the precursor of population ageing - is now close to being a global phenomenon. In 1990, only 17 percent of the world's population lived in countries where no appreciable downturn in fertility was then evident (UNECE 1992), although in many there are now signs that this is occurring. Sixty percent of the world's population lived in countries such as South Korea, where there had been significant and sustained downturns in fertility since 1950. In most of these populations the proportion aged 65 and over is currently below ten percent (or even slightly below five percent in countries such as Turkey and India where the transition is relatively recent). However, population ageing in these countries is now proceeding apace.

The speed of this transformation, coupled with the rapid pace of other socio-economic changes and the often poorly developed infrastructure of support services for older people, means that the policy challenges faced by newer members of the world's "low-fertility club" may be greater than those previously faced by Scandinavian and other Northern European countries which experienced much earlier what Laslett describes as the "secular shift" to an older society (Laslett 1984).

Japan, with over 14 percent of its population aged 65 or older in 1995, was the first country outside the West to experience the demographic transition and the speed of its decline in fertility was unprecedented. During the period 1947 to 1957 the total fertility rate (TFR) fell by more than half from 4.5 to 2.0 children per woman. Largely as a consequence of this, the pace of population ageing in Japan has also been very fast, as illustrated in Figure 13.1, which compares the proportion aged 65 and over in England and

Wales, the United States and Japan over the course of the twentieth century, together with projections for the early decades of the twenty-first century. Recent trends in mortality have amplified this trend, as considered below.

**Figure 13.1 Population aged 65 and over (in percent) for England and Wales, the United States and Japan, 1900 to 2020**



### Trends in mortality

Trends in life expectancy at birth and at age 65 for England and Wales, France, Japan, Sweden, and the United States over the past century are illustrated in Table 13.2. Gains in life expectancy at birth have been more marked than gains in expectation of life at age 65. However, Table 13.2 also reveals remarkable recent improvements in later life mortality. Male life expectancy at age 65 in England and Wales and the United States increased more between 1970 and 1995, and in France by the same amount, than in the whole period from 1900 to 1970. Moreover, those generations

which benefitted from falling mortality at younger ages earlier in the century have now reached old age and improvements in survival to and beyond the age of 60, as well as variations in initial cohort size, have had a major impact on the size of the elderly population. Actual and projected survivorship curves for males and females born in 1905, 1915, 1925 and 1935 in England and Wales are shown in Figures 13.2 and 13.3. While 59 percent of the men born in 1905 survived to their sixtieth birthday, 71 percent of those born twenty years later did so.

Increases in the proportions of successive cohorts surviving to late old age are shown in Figure 13.4 and are even more remarkable. Only five percent of girls born in 1841 survived to age 85 (i.e., in 1926). Among girls born fifty years later this proportion was over three times higher, and higher still among those now reaching 85. Such changes have profound implications at the individual and family level, as well as for society as a whole. In a growing number of populations individuals can now expect, with a high degree of confidence, that their children will survive to adulthood and that they themselves will survive to witness this, and to participate in the lives of grandchildren, or even great grandchildren. Indeed in many Western populations the role of parent of an adult child (or adult child of a surviving parent) is now likely to extend longer in time than the role of parent raising minor children (or of being a minor child).

### **Mortality change at older ages and further population ageing**

These more recent improvements in mortality have been greatest in absolute terms in adult, including elderly adult, age groups where the scope for further improvement was greatest. As a result, changes in death rates at older ages have come to play an increasingly important role in overall mortality change. Myers

(1996) in a detailed examination of changes in six developed countries, found that in five of them the proportion of overall life expectancy increase in the 1980s due to gains among those aged 65 or more, was over 40 percent for males and nearly 60 percent for females. In Japan 48 percent of the female gain and 31 percent of the male gain in life expectancy at birth 1985-90 was due to falls in mortality among those aged 75 or over (Kono 1994).

Not only have changes in late life mortality come to play a much more dominant role in determining *overall* level and change in mortality, but in low fertility, low mortality populations with already relatively high proportions of elderly people, mortality changes are now the major determinant of *further* population ageing. Benjamin (1987) estimated that 38 percent of the increase in the proportion of elderly people in the United Kingdom between 1951 and 1981 was due to mortality change compared with 21 percent during the period 1911 to 1915. In developed countries with low vital rates, falls in mortality at older ages are now a major determinant of continued population ageing (Preston et al. 1989; Casselli and Vallin 1990).

**Table 13.2 Trends in life expectancy (in years) at birth and at age 65 by sex for selected developed countries**

Year and Country	Life expectancy					
	Male	At birth female	difference	male	At age 65 female	difference
1900/01						
England & Wales	44.8	48.7	3.9	10.1	11.1	1.1
France	43.2	46.9	3.8	10.0	10.9	0.9
Japan	42.8	44.3	1.5	n.a.	n.a.	n.a.
Sweden	50.8	53.6	2.9	12.1	13.0	0.9
USA	46.4	49.0	2.6	11.4	12.0	0.7
1950/51						
England & Wales	5.3	70.3	5.0	10.8	13.4	2.6

Wales						
France	63.4	69.2	5.8	12.2	14.6	2.4
Japan	57.6	60.9	3.3	10.9	13.0	2.1
Sweden	69.8	72.4	2.6	13.5	14.3	0.8
USA	65.6	71.1	5.5	12.8	15.1	2.3
1970/71						
England &						
Wales	68.8	75.0	6.2	11.9	15.8	3.9
France	68.4	75.8	7.4	13.0	16.8	3.7
Japan	69.3	74.7	5.4	12.5	15.4	2.8
Sweden	72.2	77.2	5.0	14.3	16.9	2.6
USA	67.2	74.9	7.7	13.1	17.1	4.0
1995						
England &						
Wales	74.4	79.6	5.2	14.8	18.4	3.6
France	73.9	81.9	8.0	16.1	20.6	4.5
Japan	76.4	82.8	6.4	16.5	20.9	4.4
Sweden	76.2	81.5	5.3	16.0	19.7	3.7
USA	72.4	79.3	6.9	15.3	19.2	3.8

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Sources: Government Actuary's Department for England and Wales.

Berkeley Mortality Data Base

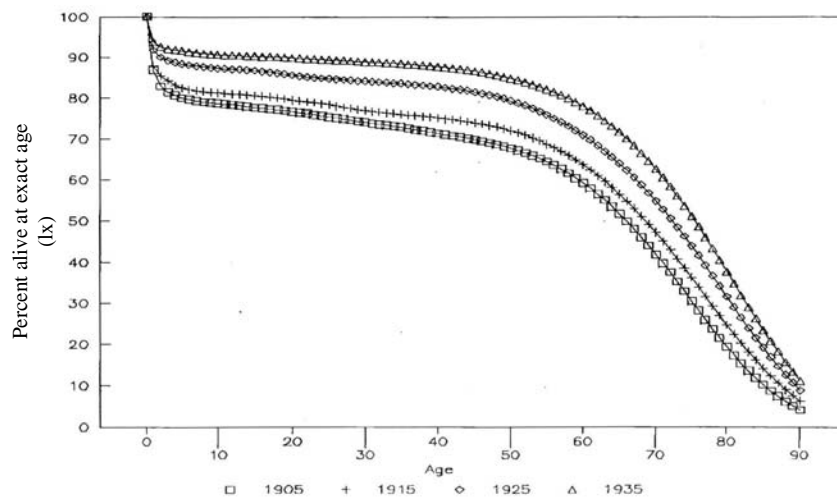
(<http://demog.berkeley.edu/wilmoth/mortality>).

### **Sex differentials in mortality and gender structure of the elderly population**

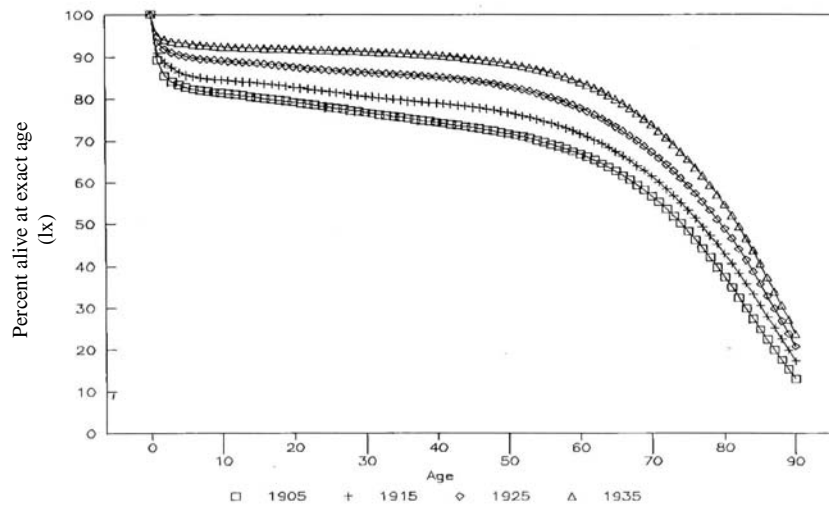
Apart from age variations in the extent of mortality decline experienced during the transition period from relatively high to relatively low rates, a notable feature is the widening of sex differentials in death rates and consequently in life expectancy (Table 13.2), which is a general feature observed in populations experiencing mortality decline (Preston 1976). Waldron (1986; 1993) has reviewed the literature on this subject and pointed to changes in the intra-household allocation of resources.

These include, as causal factors: declines in causes of mortality specifically or primarily affecting women (such as maternal mortality and tuberculosis); gender differences in health related

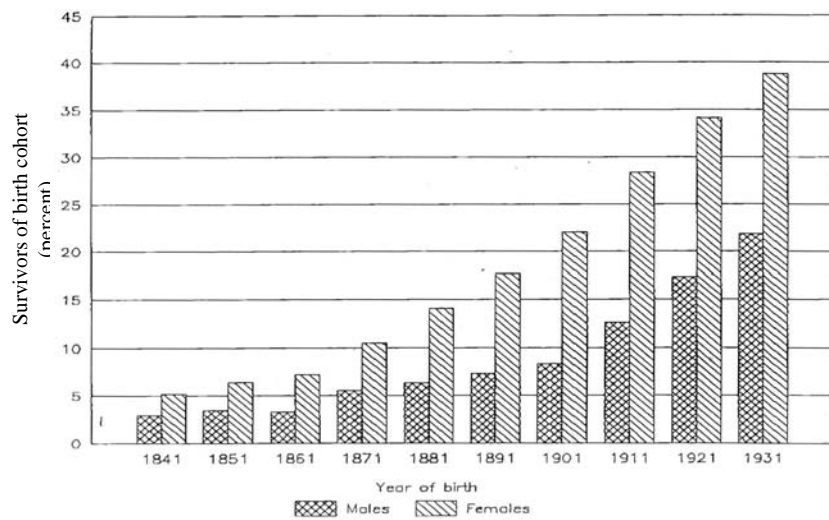
**Figure 13.2 Male survivorship in England and Wales by year of birth, 1905 to 1935**



**Figure 13.3 Female survivorship in England and Wales by year of birth, 1905 to 1935**

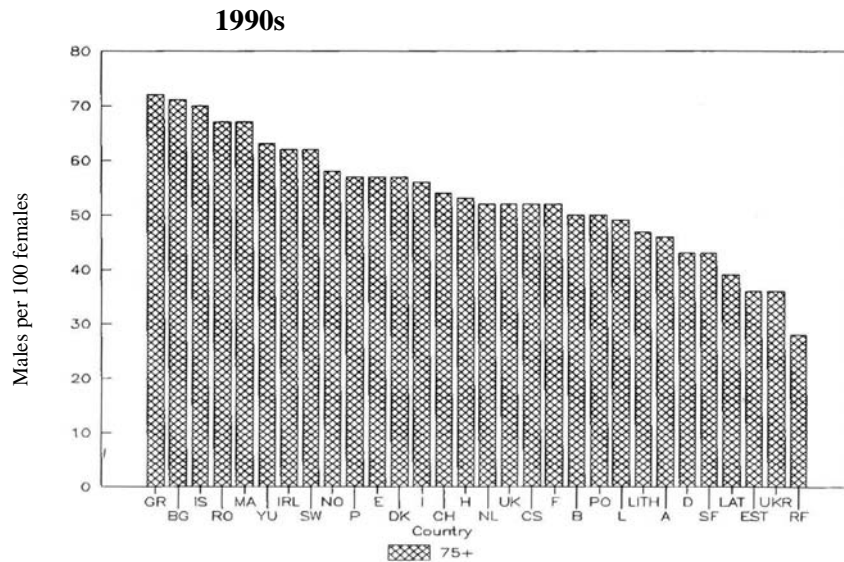


**Figure 13.4 Survivors at age 85 by year of birth for England and Wales**



**Figure 13.5 The sex ratio (males per hundred females) at ages 75 and over for countries of Europe in the early**





Source: Grundy 1996.

behaviour and in exposure to occupational hazards; and the possibly greater susceptibility of males to stresses associated with socio-economic change. An important result of this sex differential in mortality is the high proportion of widows in elderly populations. But there are signs that the sex differential in mortality in England and Wales and the United States (and a number of other developed countries) is beginning to narrow again (Table 13.2). Changes in the relative propensity of men and women to smoke are undoubtedly an important factor in this (Casselli 1996).

The effects of these gender differences in mortality, and of specific historical events such as war and migration, are that nearly all elderly populations are female dominated. In the United Kingdom in 1996, women constituted 51 percent of the 60-64 year age group but 75 percent of the population aged 85 years and over. However, the predominance of women varies considerably between populations and between time periods. Within Europe, sex ratios (males per 100 females) are lowest in the Russian Federation (where male mortality from alcohol related causes is particularly

high) and Eastern Europe, and highest in Greece (Figure 13.5 illustrates this for the population aged 75 and over). Gender differences in mortality are important because of their effect on marital status, economic security and living arrangements, as well as because of demonstrated relationships in Western populations between marital status and psychological well-being (Waite 1995).

### **Health status**

Ageing brings biological changes which increase the risk of illness, disability and death and all indicators of health status show strong relationships with age. Rates of long-term illness, for example, rise throughout adult life with a steeper increase after the age of 50 or so; measures of more serious disability rise most steeply in advanced old age (Grundy 1992). In the 1993 Health Survey of England (which included only the private household population and so omits some of those in the poorest health) 62 percent of 65-74 year olds and 66 percent of those aged 75 years and over reported a long standing illness or disability. The most frequently reported long-standing illnesses or disabilities among those over 65 were due to musculo-skeletal conditions (prevalence 388 per thousand among women and 264 per thousand among men) and disorders of the heart and circulatory system (262 per thousand among women and 342 per thousand among men).

Of course long-standing illness is not equivalent to disability or frailty; for many who report a musculo-skeletal or heart problem, the effect on ability to undertake normal activities may not be serious. However, the prevalence of disabilities is strongly age related and high among the older old. Results from the 1994 British General Household Survey (Table 13.3) show that a quarter of women aged 85 and over are unable to bathe without help and half are unable to manage one or more specified locomotion activities on their own (viewed more positively, this means that three-quarters

of women over 85 *can* bathe unassisted and half are independent in locomotion). Results from other developed countries are similar (Serow, Sly and Wrigley 1990). These prevalence rates are, moreover, *underestimates* of the true prevalence of disability in these age groups as the surveys from which they are derived excludes the population resident in institutions.

**Table 13.3 Indicators of health problems / disability by age and sex for Great Britain, 1994 (private household population only)**

Indicator		65-69	70-74	75-79	80-84	85 & over	65 & over
Reported limiting long-standing illness	male	39	38	42	50	43	40
	female	35	41	43	46	54	42
Reported inability to manage one or more locomotion activities on their own	male	8	7	9	21	22	10
	female	10	13	19	27	50	19
Reported inability to usually manage bathing/showerin g/ washing all over on their own	male	3	5	6	12	17	6
	female	5	7	9	15	23	10
Health in general in Preceding year "not good"	male	21	20	22	31	17	22
	female	18	24	27	26	30	24

Source: OPCS 1996.

Although prevalence rates of long-term illness and disability are age related, it is important to note that most elderly people enjoy good health; moreover disabilities acquired in later life are not necessarily permanent. Longitudinal studies have shown that some older people who are disabled at one observation point are less disabled, or free of disability, at subsequent follow up (Mendes de Leon et al. 1997). Much can be done, through rehabilitation

programmes, to restore function among elderly people left with some disability after an acute episode (Beck and Stuck 1996). Interventions, such as exercise programmes, have been shown to be highly effective in increasing performance in elderly people, including groups of frail very old people (Skelton et al. 1995).

### **Life table estimates of active / disabled life expectancy**

Mortality rates at older ages have recently fallen quite considerably in a number of countries, as noted earlier. However, it is not universally accepted that the cause and consequence of these declines denotes an improvement in the health status of the older population. On the contrary, some have suggested that such declines may be associated with higher levels of morbidity at the population level, because of interventions allowing longer survival of those with disabilities and long-term illnesses and reductions in the “selective” effect of mortality on population health (Verbrugge 1984).

One consequence of this debate has been increased interest in finding indicators, other than mortality, of population health. A growing number of researchers have used life-table methods to analyse data on mortality and on various estimates of disability to produce estimates of expectation of life divided into “active” or “disability free” years, and years with some form of impairment (Robine et al. 1997). “Health expectancy” is the generic term used to described these and other conceptually similar indicators, such as the World Bank’s estimation of Disability Adjusted Life Years (DALYs) lost. This is a useful summary indicator which may be readily interpreted. Largely under the auspices of the REVES group, great advances have been made in standardising good terminology and methodology. Nevertheless, the estimates of health expectancy which have now been prepared for some 40 countries are not directly comparable because of the substantial differences in the

methods and data used to derive them (Boshuizen and van de Water 1994).

Despite these problems, some general conclusions can be drawn about differentials in health expectancy. In nearly all countries, for example, women have a longer life expectancy than men but also spend proportionately longer in a state of impaired health. For a few countries estimates of health expectancy for different time periods are available, based on input measures which, at least in design, are consistent. Potentially these results may hold the answer to the very important question of whether falls in mortality in older age groups are associated with reductions or increases in the extent of health limitations. Results from Great Britain appear at first sight to suggest an unfavourable trend as far as life expectancy free of long-standing illness is concerned. Between 1976 and 1991 male life expectancy in long-term ill health increased by 1.6 years, while life expectancy free of long-term ill health increased by 1.4 years (Bone et al. 1996). However, these results are based on responses to general questions in the General Household Survey which may well reflect changes in health *expectations* rather than health *expectancy*.

Analyses based on the more detailed questions on ability to undertake specific tasks suggest, more positively, a reduction in the prevalence of more severe disability. In 1991, for example, 80 percent of men and 79 percent of women aged 85 and over and living in private households were able to bathe themselves, feed themselves, get in and out of bed and get to the toilet without help from another person. In 1980 the equivalent percentages were only 69 percent and 64 percent (Grundy 1996b). Data from the United States Long-term Care surveys analysed by Manton, Corder and Stallard (1997) also suggest a positive trend. Overall, the evidence currently available seems to suggest increases in life expectancy with mild or moderate health limitations (and in the proportion of life spent in this state) but decreases in the extent and relative

duration of more serious disability (Boshuizen and van de Water 1994; Grundy 1997).

### **Use of health and welfare services**

Given the relationship between age and health status, it is not surprising that use of services is strongly age associated. Use of personal social services is particularly high among very old people aged 85 years and over, whose numbers are currently growing so rapidly. Socio-demographic factors other than age influence patterns of use. Women make greater use of these services than men, partly because more elderly women than men live alone and service use is related to living arrangements. In 1991, for example, in Great Britain 27 percent of those aged 75 and over who lived alone had a local-authority home help, compared with six percent of those living just with a spouse and nine percent of those in other types of household. Changes in living arrangements thus may have major implications for the demand for formally provided social services. Use of long-term care services has also been shown in a number of studies (but not all) to be associated with the availability and characteristics of children (Wolf 1994). Of course supply-side factors will also affect relationships between age and use of services. In the United States, where all older people but only certain groups of the young have access to free medical care, the relationship between age and consultations with doctors is much steeper than in Great Britain where everybody is entitled to free health care (Grundy 1992).

### **Marriage, family and household**

#### **Marital status**

Sex differentials in mortality, and the common pattern of women marrying men older than themselves, are reflected in a preponderance of widows in all of Europe's elderly populations. However, differences between European countries in the extent of widowhood are substantial. In the late 1980s in Switzerland and Malta, 44 percent of elderly women were widows, compared with 60 percent in Bulgaria and Hungary (Grundy 1996a). Widowhood is necessarily preceded by marriage and to some extent differences in the proportions widowed reflect differences in the proportions ever marrying, which are very substantial.

In the late 1980s fewer than two percent of elderly men in Bulgaria had never married, compared with nearly a quarter in Ireland. Imbalances between the number of men and women, the result of war-related mortality or differential emigration, affected some of today's elderly Europeans when they were in the prime marriageable age groups (Coleman and Salt 1992). However, the major reason for the differences between Northern and Western Europe on the one hand and Eastern Europe on the other is the historical difference in marriage patterns.

Until relatively recently, the countries of North and West Europe were characterised by high proportions never marrying and a relatively late age at marriage. In Eastern Europe, by contrast, marriage was earlier and more universal (Hajnal 1965). In a number of Western countries, marriage rates among those born after 1920 (and before 1955) were substantially higher with the result that the proportions of younger elderly people never married has been falling. In England and Wales, for example, the proportion of single (never-married) women in the 65-74 year old age group fell from 14 percent to seven percent between 1971 and 1991 (Grundy 1996b).

The slight narrowing of sex differentials in mortality in some populations has also increased women's chances of staying married for longer. In 1991, in England and Wales, married women

outnumbered widows until the age of 73; in 1971, this was the case only until the age of 71. These changes are important because marital status is strongly associated with living arrangements, including residence in an institution, and use of services (Grundy 1996b). While the proportion never married has fallen, and is projected to fall further, the proportion of divorced elderly people is rapidly increasing. The effect of divorce on support for older people and more generally on intergenerational relationships is likely to become an important issue in a number of countries in the next century (Goldscheider 1994).

### **Childlessness**

As a result of falls in the proportion of single women and historical falls in the prevalence of childless marriage, the proportion of elderly people with no children has fallen in a number of European countries and in the United States. (Prioux 1993). The proportion of women who had no children or only one child for successive birth cohorts in England and Wales is illustrated in Figure 13.6. Among those born in 1902-06, one-third were childless at age 45-49, and 22 percent had had only one child. Among those born in 1940, the equivalent proportions were 10 percent and 14 percent respectively. The current young elderly and their successors thus include higher proportions ever-married and lower proportions childless than their predecessors. Increases in childlessness among the post-Second World War birth cohorts suggest a rather different long term future, however.

### **Family contacts and living arrangements.**

There are marked differences between European countries in the extent of contact between elderly people and their relatives (Table 13.4). In Italy 71 percent of elderly people report daily contact,

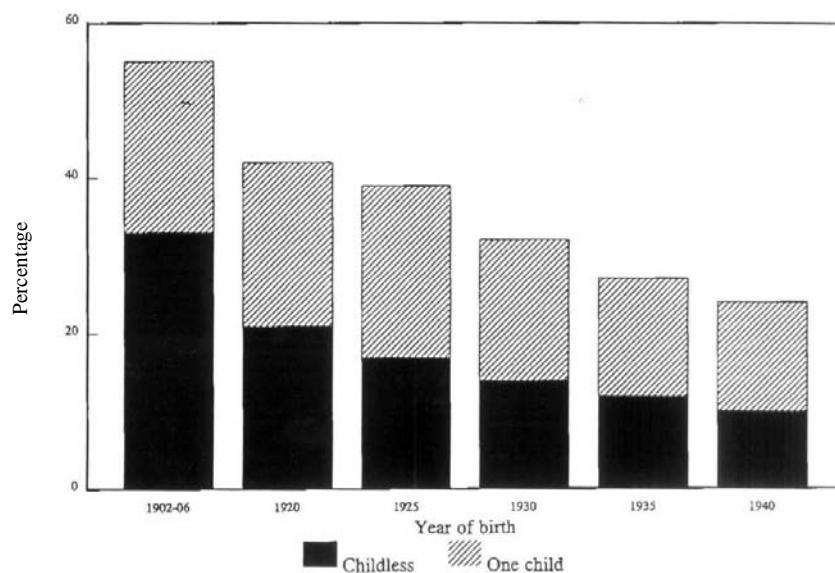


compared with only 14 percent in Denmark. Interestingly, there is less variation in the percentage of elderly people who report infrequent or no contact, and the proportions reporting loneliness appear, if anything, to be *inversely* associated with the extent of contact.

This apparently counter-intuitive finding is consistent with the results of other studies of Western populations which have found high rates of loneliness among elderly people living with their relatives and high rates of life satisfaction and self esteem among elderly people with networks of *friends* rather than, or as well as, of relatives. Lee (1985) has suggested that in countries which lay high stress on self reliance and autonomy, reliance on relatives may have negative effects on the psychological well-being of elderly people. Associations between family contact and well-being are likely to be highly culturally specific.

Variations in frequent contact with relatives partly reflect variations in the extent of coresidence with children and other relatives, which are considerable. Far higher proportions of elderly people in Italy and Ireland live with relatives than in Britain or Sweden. Moreover such “cultural” differences appear very persistent. Pampel (1992), in an analysis of changes in living arrangements in Europe, found that the ranking of countries in this regard persisted over time, despite major changes in other parameters of relevance. In the United States and Canada marked differences in living arrangements between groups of different ancestry are apparent, even among those whose families have been resident in America for several generations (Clark and Neidert 1992).

**Figure 13.6 Proportion of women for whom completed family size was one or no children by year of birth for England and Wales**



In many developed countries postwar changes in living arrangements, including those of elderly people, have been substantial (Keilman 1987). Households have become smaller and simpler (in terms of composition) and solitary living far more common. In 1990/91, average household size in the European Community (EC 12) was 2.6 and single person households comprised 26 percent of all households (Commission Européenne 1994).

**Table 13.4 Distribution of men and women aged 65 and over by family/household type (in percent), 1971, 1981 and 1991 for England and Wales**

Sex	Age Group	Year	Solitary	Married couple alone	Family/ household type			
					Married couple plus others	Lone parent	Complex	Non-private household
Men	65-74	1971	11	58	16	2	11	3
		1981	14	61	14	2	8	1
		1991	16	65	11	1	5	1
	75-84	1971	18	47	10	4	15	6

		1981	22	54	7	3	11	4
		1991	24	59	4	2	6	4
	85+	1971	20	24	6	8	27	15
		1981	29	31	5	5	20	11
		1991	32	37	3	3	10	16
Women	65-74	1971	32	36	7	6	16	3
		1981	35	42	7	5	10	1
		1991	34	48	5	5	7	1
	75-84	1971	40	16	3	8	24	8
		1981	50	20	2	6	16	6
		1991	53	24	2	5	9	7
	85+	1971	30	5	1	12	31	22
		1981	42	5	1	8	25	19
		1991	49	6	1	5	13	27

Source: ONS Longitudinal Study data reported in Grundy 1996b.

The living arrangements of men and women aged 65 and over in 1971, 1981 and 1991 in England and Wales are outlined in Table 13.5. Over this period living alone or with a just a spouse became more common while the proportions living in other types of household fell. Most marked has been the decline in the proportions living in “complex” households including friends and relatives other than a spouse or more than one family. In 1971, 27 percent of men and 31 percent of women aged 85 and over lived in this kind of household, by 1991 these proportions had fallen to 10 percent and 13 percent respectively.

**Table 13.5 Level of contact with family and reported loneliness among older persons 60 and over (in percent) for Europe, 1993**

	Daily contact	Contact less than monthly	Often feel lonely
United Kingdom	21.9	18.5	5-9
Denmark	13.8	10.0	5

Ireland	50.1	10.2	10-14
Belgium	35.8	10.4	10-14
France	34.2	12.0	
Germany	46.5	9.4	5-9
Netherlands	19.2	10.0	
Greece	64.8	13.6	20 and over
Italy	70.7	5.0	15-19
Portugal	59.8	13.9	20 and over
Spain	60.7	9.7	10-14
EC 12 <sup>a</sup>	44.4	11.0	13

<sup>a</sup> including Luxembourg

Source: Eurobarometer Survey.

Analyses by number of generations in the households of elderly people similarly show very marked falls in the extent of intergenerational coresidence. In 1971, 38 percent of men and 42 percent of women aged 85 and over lived in households containing two, three or more generations; the equivalent proportions in 1991 were 15 percent and 21 percent. Moreover, whereas in 1971 far more very elderly people lived with relatives than in institutions, by 1991 this situation had reversed. Thus among women aged 85 and over the ratio of those in institutions (largely comprising residential and nursing homes and long-stay hospital beds) to those in complex households increased from 0.71:1.00 in 1971 to 2.00:1.00 in 1991.

A similar increase in the use of institutional long-term care among the very old has been reported in the United States (Crimmins et al. 1997). This suggests some substitution of institutional for family care for frail elderly people, an impression supported by analyses of longitudinal data which show that, in England and Wales, transitions from living independently to living with relatives were less common 1981 to 1991 than in the previous decade (Grundy and Glaser 1997).

### **Family help and the importance of family**

Although intergenerational coresidence has declined in many developed countries, this should not be interpreted as a withdrawal of family support. Families remain prominent supporters of frail elderly people in need of assistance. The usual source of help for elderly people in Britain who needed help with specified tasks is shown in Table 13.6. For those with a spouse, most of this help was provided by the spouse. Relatives were also the most usual source of help for those living alone and help from relatives was more common than help from formal providers. Moreover, relationships with family members are clearly important to elderly people psychologically as well as for practical reasons. In a recent survey of the most important things in life in Britain, relationships with family came second only to health (Bowling 1995).

It is important to note that elderly people in developed countries are often *providers* of help to peers and younger family members. In the United States, for example, the direction of flows of financial and other aid is downward until the late sixties or early seventies (Cox and Rank 1992). Elderly people provide substantial help to younger relatives with chores and activities such as child care and the normative lifetime basis for giving and receiving help is one of reciprocity (Antonucci and Jackson 1989). Coresidence between adult children may often benefit the “child” rather than the parent or be part of a mutually beneficial arrangement (Grundy and Harrop 1992; Kendig 1989; Speare and Avery 1993).

In a number of developed countries, recent increases in signs of family disorganisation, such as divorce and extramarital childbearing, have raised concerns that they may herald a move from family to individual orientations which may not bode well for continued family support for frail elderly people. The growth of individualism has also been advanced as a partial explanation for

very low fertility (Van de Kaa 1987). However, changes in marital stability are not universally associated with low fertility. Fertility rates in Southern Europe and Japan are very low, as are rates of divorce and extramarital childbearing. Moreover, both the extent of intergenerational coresidence and positive attitudes to it remain far higher in Southern than in Northern Europe.

A 1986 international survey conducted by the Japanese Management and Coordination Agency found that 34 percent of older Italians said that living together was the best relationship between younger and older family members compared with four percent in Denmark and 58 percent in Japan (Martin 1989). However, in Japan, as in the West, rates of intergenerational coresidence have fallen markedly in the recent past, even though they remain at a much higher level than in Western and Northern Europe (Ogawa and Retherford 1997). Demographic as well as socio-economic change may put intergenerational coresidence under stress as the duration of such arrangements has been extended by declining mortality.

**Table 13.6 Usual source of help for elderly people unable to undertake tasks without help (in percent) in Great Britain, 1994**

	Bathing/ showering	Domestic tasks	Going out
Lives alone:			
Relative	46	59	67
NHS or social services	45	19	6
Lives with spouse:			
Spouse	82	91	87
Other relative	5	15	12
NHS or social services	11	3	1
All elderly:			

Spouse	41	52	39
Other relative	10	13	17
NHS or social services	22	12	3

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Source: OPCS 1996.

In recently industrialised countries the pace of change and resulting divergence between the experiences of the old and young may also result in conflict of values. Analysis of the World Values Survey (Inglehart and Abramson 1993) showed that differences between the values of the old and young were greatest in countries such as South Korea which had experienced recent rapid economic growth.

### **Economic aspects of population ageing**

A further issue of major concern is the economic support of large elderly populations. In developed countries transfer payments and savings provide the major pillars of economic support in old age with very little coming directly from children. In the United States in 1986, for example, only two percent of elderly people reported receiving income from children, compared with 22 percent in Japan (Maeda and Shimuzu 1991). Expenditure on pensions now constitutes a significant proportion of GNP, and of all government expenditure, in most European countries (Table 13.7). Moreover, in many of these countries pension liabilities are huge, higher than total GNP in some cases (World Bank 1994).

Several factors, not all of them demographic, are important in this context. Many countries rely heavily on “pay-as-you-go” pension schemes whereby current workers pay for current pensioners. Such a system is easy to fund if the workforce is growing in relation to the number of pensioners, as has been the case in most countries until recently, but becomes increasingly

difficult to sustain once this relationship changes. However, moves towards funded schemes, while reducing state liabilities, may have other disadvantages. Lifetime low earners and those with intermittent labour market involvement will be disadvantaged if the main planks of pension provision rely on employer contributions or private saving.

The United Kingdom, which has promoted such “second tier” pensions while failing to upgrade the value of universal pensions in line with earnings, has a high rate of pensioner poverty in comparison with many other European countries. Moreover, private and occupational pensions may not be secure, either because of misappropriation or misleading marketing by employers or private pension providers (both recent occurrences in the United Kingdom) or because of falls in returns on investments.

**Table 13.7 Public expenditure on pensions in countries of Europe, mid-1980s to early 1990s**

Country	Public pension spending as percentage of		Standard retirement ages	
	GDP	Government expenditure	males	females
United Kingdom	9.5	24.1	65	60
Denmark	9.9	24.8	67	67
Ireland	6.1	15.7	65	65
Sweden	11.6	28.1	65	65
Belgium	11.0	17.6	60	60
France	11.8	25.8	60	60
Germany	10.8	34.4	65	65
Netherlands	9.8	17.9	65	65
Greece	12.3	30.6	65	60
Italy	14.4	37.0	60	55
Portugal	7.7	18.9	65	62



Spain	7.5	23.2	65	65
Australia	3.9	16.0		
United	6.5	24.5	65	65
Japan	5.0	-	65	58

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Source: World Bank 1994

A further, very substantial, obstacle in the path of moving from a pay-as-you-go to a funded scheme is that one or two generations in the transitional period would be heavily penalised by having to pay both for current pensioners and for their own future pensions. Pensioners in countries undergoing structural change face particular problems, witness extreme falls in the value of pensions in a number of former Eastern bloc countries (Kinsella and Gist 1995).

Older populations are very heterogeneous and increases in the absolute or relative incomes of pensioners may mask quite high rates of pensioner poverty, as in the United States (Holtz-Eakin and Smeeding 1994). In the United Kingdom, as in the United States, pensioner income inequality increased during the 1980s; the richest tenth of pensioners have incomes around five times greater than the poorest tenth (Johnson et al. 1996).

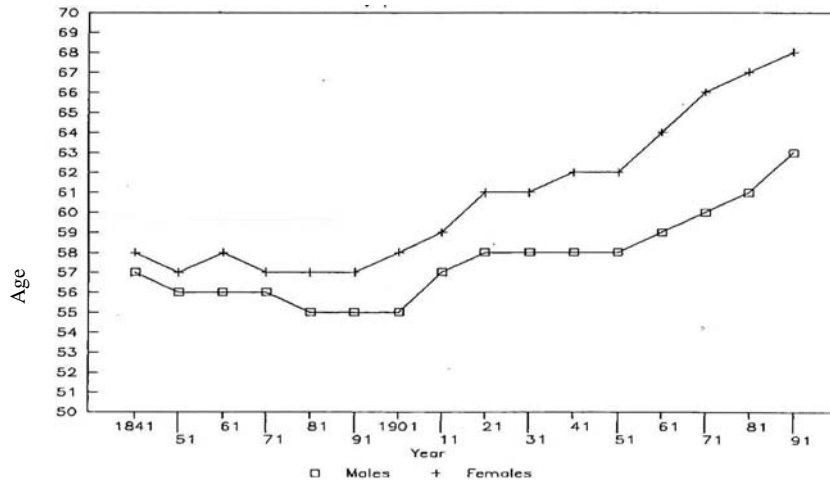
In nearly all OECD countries, increases in pension expenditures have been more affected by changes in beneficiary ratios than by demographic change alone, a consequence of early retirement and other forms of early labour market exit, for example "bridged" through disability payments (Guilmot 1978; Johnson 1994). An important factor has been the trend towards earlier and earlier retirement, only recently showing signs of halting in some countries such as the United States. In Britain, half of all men over 65 were economically active in 1931, compared with only 8 percent in 1991. Moreover, only half of 60-64 year-old men are still at work, even though retirement pension age for men is 65 (Henretta 1994).

Although some governments have recently acted to reverse these trends, in other countries concerns with youth unemployment have dampened the impetus for change. A further problem is that “bridges” to early retirement may often be provided through firm-based schemes, and for firms, early retirement of some workers may have economic benefits, especially if part of the cost is born by the state (Henretta 1994). Older workers may suffer other disadvantages, including lack of access to training and difficulties in securing jobs if unemployed. A European Community survey conducted in 1993 found that nearly 80 percent of the European Community population believed older workers were discriminated against in recruitment and 60 percent thought they were discriminated against in training and promotion (Centre for Policy on Ageing 1993). Reversing both such discrimination and other factors that discourage older workers needs to be a priority.

## **Discussion**

Population ageing is perceived as a problem, but it is the inevitable outcome of goals which have been actively pursued - namely reduced fertility and lower mortality in mid-life and later life. Ageing is associated with biological changes that increase the risk of morbidity, disability and death. However, most old people are not seriously disabled and appropriate medical and social interventions can be very effective in delaying or mitigating disability.

**Figure 13.7 Age at which life expectancy is 15 years by year and sex for England and Wales**



Source: Grundy 1996.

Recent fertility declines have been attributed by some to a “second demographic transition” involving major shifts in values and the growth of individualism. Increases in family “disorganisation” have also been associated with this shift. However, the two do not inevitably go hand in hand. Southern Europe and Japan have very low fertility, but also low rates of divorce and extramarital childbearing and high rates of coresidence between elderly people and their children. The “cultural context” of population ageing is important.

Even in countries such as the United Kingdom where coresidence between elderly people and their children has fallen very extensively, most of the help needed by frail old people is provided by relatives. Older people also *provide* a great deal of support of various kinds to younger relatives and their age peers and, even if not economically active, make important contributions to the well-being of others and society as a whole.

The economic “old age security crisis” is not solely demographically driven. Changes in economic activity rates have in many cases had as great an effect on pensioner/worker ratios. Pay-as-you-go pension systems and universal age-related benefits may be affordable, equitable and easy to administer when labour forces are growing and most old people are poor. They may become unaffordable and inequitable when labour forces are falling relative to the number of pensioners and as the pensioner population becomes more economically heterogeneous.

Social institutions developed to meet the needs of older people need to be flexible. The age at which people have on average fifteen years of life remaining has recently increased quite markedly (Figure 13.7). However, there have been very few initiatives to introduce corresponding changes in age related benefits.

## **Note**

**1** Eastern Europe is considered only in passing as recent upheavals mean that the future course of demographic trends there is particularly uncertain. Velkhoff and Kinsella (1993) have recently published an excellent analysis of ageing trends in Eastern Europe and European-wide differences in population are considered in Grundy (1996a).

## References

- Allen, I. and E. Perkins, eds. 1995. *The Future of Family Care*. London: HMSO.
- Antonucci, T. and J. Jackson. 1989. "Successful ageing and life course reciprocity," in A.M. Warnes, ed., *Human Ageing and Later Life*. London: Edward Arnold. pp. 83-95.
- Bartiaux, F. 1991. "La composition des ménages des personnes âgées en Italie 1981." *European Journal of Population* 7(59-98).
- Beck, J. C. and A. E. Stuck. 1996. "Preventing disability: beyond the black box." *JAMA* 276(1756-7).
- Benjamin, B. 1987. "The demographic outlook," in B. Benjamin, S. Haberman, G. Helowicz, G. Lay, and D. Wilkie., eds., *Pensions: The Problems of Today and Tomorrow*. London: Allen and Unwin.
- Bone, M. R., A. C. Bebbington, C. Jagger, K. Morgan, and G. Nicolaas. 1996. *Health Expectancy and Its Uses*. London: HMSO.
- Boshiuizen, H. C. and H. P. A. Van de Water. 1994. "An international comparison of health expectancies." Leiden: *TNO Health Research*.
- Bowling, A. 1995. "The most important things in life. Comparisons between older and younger population age groups by gender. Results from a national survey of the public's judgements." *International Journal of Health Sciences* 6(169-175).
- Caselli, G. and J. Vallin. 1990. "Mortality and population ageing." *European Journal of Population* 6/1(1-25).
- Caselli, G. 1996. "Future longevity among the elderly," in G. Caselli and A. Lopez, eds., *Health and Mortality Among Elderly Populations*. Oxford: Clarendon Press. pp. 235-265.
- Centre for Policy on Ageing/Family Policy Studies Centre, (CPA/FPSC). 1993. *Older People in the European Community*. London: CPS.
- Clarke, C. J. and L. Neidert. 1992. "Living arrangements of the elderly: an examination of differences according to ancestry and generation." *The Gerontologist* 32(796-804).
- Coleman, D. and J. Salt. 1992. *The British Population Patterns, Trends and Processes*. Oxford: Oxford University Press.

- Commission Européenne. 1994. *Europe Sociale: l'union européenne et la famille*. Luxembourg: Office des publications officielles des Communautés européennes.
- Council of Europe. 1997. *Recent demographic developments in Europe*. Strasbourg: Council of Europe Publishing.
- Cox, D. and M. R. Rank. 1992. "Inter-vivos transfers and inter-generational exchange." *Review of Economics and Statistics* 74(305-314).
- Crimmins, E. M., Y. Saito and S. L. Reynolds. 1997. Further evidence on recent trends in the prevalence and incidence of disability among older Americans from two sources: the LSOA and the NHIS. *Journal of Gerontology B Psychological and Social Science* 52(S59-71).
- European Commission. 1995. *The demographic situation in the European Union*. Luxembourg: Office for Official Publications of the European Communities.
- Goldscheider, F. K. 1994. Divorce and remarriage: effects on the elderly population. *Reviews in Clinical Gerontology* 4(253-259).
- Grundy, E. 1992. "The epidemiology of aging," in J. C. Brocklehurst, R. Tallis, and H. Fillit, eds., *Textbook of Geriatric Medicine and Gerontology*, 4<sup>th</sup> edition. Edinburgh. 1-20.
- \_\_\_\_\_. 1996a. "Population ageing in Europe," in D. Coleman, ed., *Europe's Populations in the 1990s*. Oxford: Clarendon Press. pp. 267-299.
- \_\_\_\_\_. 1996b. "Population Review: the population aged 60 and over." *Population Trends* 84(14-20).
- \_\_\_\_\_. 1997. "The health of older adults 1841-1994," in J. Charlton and M. Murphy, eds., *The Health of Adult Britain 1841-1994, Vol. II*. London: The Stationery Office. pp. 183-204.
- Grundy, E. and K. Glaser. 1997. "Trends in, and transitions to, institutional residence among older people in England and Wales, 1971 to 1991." *Journal of Epidemiology and Community Health*. 51(531-540).
- Grundy, E. and A. Harrop. 1992. "Co-residence between adult children and their elderly parents in England and Wales." *Journal of Social Policy* 21(325-348).

- Guilmot, P. 1978. "The demographic background," in Council of Europe, *Population Decline in Europe. Implications of a Declining or Stationary Population*. London: Edward Arnold. pp. 3-49.
- Hajnal, J. 1965. "European marriage patterns in perspective," in D. V. Glass and D. E. Eversley, eds., *Population in History*. London: Edward Arnold.
- Henretta, J. C. 1994. "Recent trends in retirement." *Reviews in Clinical Gerontology* 4(71-81).
- Holtz-Eakin, D. and T. M. Smeeding. 1994. "Income, wealth and intergenerational economic relations of the aged," in L. G. Martin and S. H. Preston, eds., *Demography of Aging*. Washington DC: National Academy Press. pp. 102-145.
- Inglehart, R. and P. R. Abramson. 1993. "Affluence and intergenerational change: period effects and birth cohort effects," in H. A. Becker and P. L. J. Hermkens, *Solidarity of Generations. Demographic, Economic and Social Change, and its Consequences*. Amsterdam: Thesis Publishers I(71-113).
- Johnson, P. 1994. "Retirement: evolution and macro-economic implications." *Reviews in Clinical Gerontology* 4(161-167).
- Johnson, P., R. Disney and G. Stears. 1996. *Pensions: 2000 and Beyond*, Volume 2. London: The Retirement Income Inquiry.
- Keilman, N. 1987. "Recent trends in family and household composition in Europe," *European Journal of Population* 3(297-325).
- Kendig, H. 1989. *Social Change and Family Dependency in Old Age: Perceptions of Japanese women in middle age*. Tokyo: NUPRI Research Paper no. 54.
- Kinsella, K. and Y. J. Gist. 1995. *Older Workers, Retirement and Pensions: A Comparative International Chartbook*. Washington DC: United States Bureau of the Census, IPC/95-2.
- Kono, S. 1994. "Demography and population ageing in Japan," in *Ageing in Japan*. Tokyo: JARC.
- Laslett, P. 1984. "The significance of the past in the study of ageing." *Ageing and Society* 4(379-89).
- Lee, G. R. 1985. "Kinship and social support: the case of the United States." *Ageing and Society* 5(19-38).

- Maeda, D. and Y. Shimuzu. 1991. "Family support for elderly people in Japan," in H. Kendig, A. Hashimoto and L. C. Coppard, eds., *Family Support for the Elderly*. Oxford: Oxford Medical Publications. pp. 235-249.
- Manton, K. G., L. Corder and E. Stallard. 1997. "Chronic disability trends in elderly United States populations: 1982-1994." *Proceedings of the National Academy of Sciences USA* 94(25):93-8).
- Martin, L. G. and K. Kinsella. 1994. "Research on the demography of aging in developing countries," in L. G. Martin and S. H. Preston, eds., *Demography of Aging*. Washington DC: National Academy Press. pp. 356-397.
- Martin, L. G. 1989. "The graying of Japan." Washington DC: Population Reference Bureau. *Population Bulletin* 44(2).
- Mendes, de Leon C. F., L. A. Beckett, G. G. Fillenbaum, D. B. Brock, L. G. Branch, D. A. Evans and L. F. Berkman. 1997. "Black-white differences in risk of becoming disabled and recovering from disability in old age: a longitudinal analysis of two EPESE populations." *American Journal of Epidemiology* 145(4):88-97).
- Myers, G. 1996. "Comparative study of mortality trends among older persons in developed countries," in G. Casselli and A. Lopez, eds., *Health and Mortality Among Elderly Populations*. Clarendon: Oxford Press. pp 87-111.
- Office of Population Censuses and Surveys (OPCS). 1996. *Living in Britain: Results from the 1994 General Household Survey*. London: HMSO.
- Pampel, F. C. 1992. "Trends in living alone among the elderly in Europe," in A. Rogers, ed., *Elderly Migration and Population Redistribution*. London: Belhaven Press 97-117.
- Preston, S. H. 1976. *Mortality Patterns in National Populations*. New York: Academic Press.
- Preston, S. H., C. Himes and M. Eggers. 1989. "Demographic conditions responsible for population aging." *Demography* 26(6):91-704).
- Prioux, F. 1993. "L'infécondité en Europe," in A. Blum and J. L. Rallu, eds., *European Population II*. Paris: Demographic Dynamics.
- Robine, J. M., I. Romieu and E. Cambois. 1997. "Health expectancies in current research." *Reviews in Clinical Gerontology* 7(73-82).



- Robins, A. and R. Wittenberg. 1992. "The health of elderly people: economic aspects," in Central Health Monitoring Unit, *The Health of Elderly People, an Epidemiological Overview*. Volume II, Companion Papers. London: HMSO pp. 10-19.
- Royal Commission on Population. 1949. *Report*. London: HMSO, cmd 7695 p. 121.
- Serow, W. J., D. F. Sly and J. M. Wrigley. 1990 *Population aging in the United States*. New York: Greenwood Press.
- Skelton, D. A., A. Young, C. A. Greig and K. E. Malbut. 1995. "Effects of resistance training on strength, power, and selected functional abilities of women aged 75 and over." *Journal of the American Geriatrics Society* 43(1-7).
- Speare, A. and R. Avery. 1993. "Who helps whom in older parent-child families?" *Journal of Gerontology, Social Sciences* 48(S64-S73).
- United Nations Economic Commission for Europe (UN ECE)/United Nations Fund for Population Activities (UNFPA). 1992. *Changing Age Structures: Demographic and Economic Consequences and Implications*. Geneva: United Nations.
- United States Bureau of Census. 1996. *Global Aging into the Twenty-First Century*. Washington DC: US Bureau of the Census.
- van de Kaa, D. J. 1989. *Europe's Second Demographic Transition*. Washington DC: PRB. Population Reference Bureau Population Bulletin 42(1).
- Velkoff, V. and K. Kinsella. 1993. *Aging in Eastern Europe and the Former Soviet Union*. Washington DC: US Bureau of the Census.
- Verbrugge, L. 1984. "Longer life but worsening health? Trends in health and mortality in middle-aged and older persons." *Millbank Memorial Fund Quarterly* 62(475-519).
- Waite, L. J. 1995. "Does marriage matter?" *Demography* 32(483-507).
- Waldron, I. 1986. "What do we know about sex differences in mortality?" *Population Bulletin* no 18. New York: United Nations.
- \_\_\_\_\_. 1993. "Recent trends in sex mortality ratios for adults in developed countries." *Social Science and Medicine* 36(451-62).
- Wolf, D. A. 1994. "The elderly and their kin: patterns of availability and access," in L. G. Martin and S. H. Preston, eds., *Demography of Aging*. Washington DC: National Academy Press. pp. 146-194.

- World Bank (International Bank for Reconstruction and Development).  
1994. *Averting the Old Age Crisis: Policies to Protect the Old and  
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- Wrigley, E. A. and R. S. Schofield. 1989. *The Population History of  
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