
7 Demographic Challenges in the Welfare State

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This chapter deals with a basic issue of welfare state theory that has been overlooked in recent years, but was quite obvious to the intellectual founders of the welfare state: the relationship between demographic change and the managing of social welfare. Current discussions have concentrated on *internal* causes for a 'crisis of the welfare state'. Demographic change, however, is *external* to the economic as well as to the political system (cf. Alber 1982: 203–7). But given the fact that eligibility to benefits and services is dependent on age, sex, employment and marital status, it is quite obvious that demographic changes in size or composition of the population affect the growth and the distribution of productive as well as of reproductive activities in society.

The following argument is based on the assumption that changes in the age structure of western (and also East European) societies in the next 50 years will act as a decisive factor on growth and change in welfare needs. We shall then try to illuminate the relationship between the population problem and the functioning of the welfare state.

Demographic changes and challenges

The demographic evolution of western societies has followed similar patterns in the last two centuries. Demographers speak of a period of 'demographic transition' in order to characterise these common features. Pre-industrial populations grew slowly as a consequence of high fertility and high mortality. The improvement of living conditions during the industrial revolution first led to a continuous decline in mortality and consequently to a great increase in population growth. After some time the social changes induced by technical and economic progress also influenced fertility rates, which similarly decreased. In recent years, since approximately 1965, a new decline in the birth rate has been observed in nearly all European countries (East and West) as

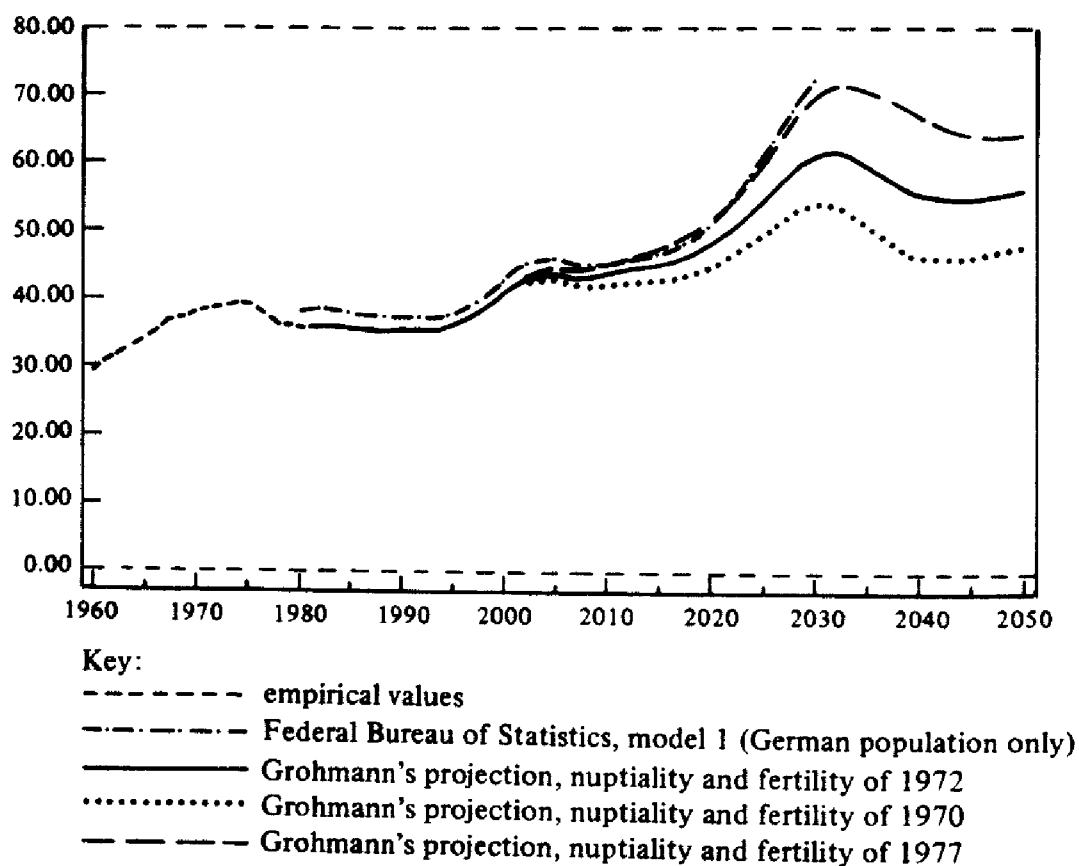
well as in North America. The starting levels and the speed of the decline have shown differences, but the trends are comparable and seem to remain at below population maintenance level.

Let us first look at some of the consequences of these demographic variations for expenditures in two basic welfare state provisions: old age pensions and the health service. The analysis will be given for the West German case which is particularly dramatic. Tendencies in other countries, however, vary only in scope not in direction.

At present almost 1 in 6 persons in the Federal Republic of Germany is 65 years of age or more. In 1961 and 1910 the figures for the same age group were 1 in 9 and 1 in 20, respectively. According to population projections the *ageing* of the population will continue in the future, interrupted only by a slight decrease in the percentage of old people during the 1980s. At the same time fertility has been declining rapidly since 1963/64, going down by half until 1978 (from 87 live born children per 1000 women in the 15–45 age group to 44) and remaining since at a low level, with slight oscillations. Since today's children will be the economically active part of the population of tomorrow, a declining working population will have to support a growing number of old people. In fact, the dependency ratio (i.e. the number of economically inactive persons in relation to the number of economically active persons) is likely to rise considerably in the future. Population projections point out that the old age component of the dependency ratio will rise in the 1990s and peak in the year 2030, only falling off slightly and remaining at a high level thereafter (Figure 7.1).¹ Thus, the process of demographic transition has not led to a harmonious, almost stationary development of the population (Kaufmann 1975: 46). These new developments are caused by changes in fertility rather than mortality since drastic changes in life-expectancy are out of sight for the near future.² The recent decline in fertility appears to be the basis of a new far-reaching 'wave' in the future demographic process.

In the field of social policy the ongoing change in the structure of the population has given rise to lively and sometimes anxious discussions in the mass media and political arenas. Referring to the so-called 'pensioner mountain', some people fear that the social security of future pensioners and the overall welfare of the nation might not be maintained. It has been claimed that the present fertile generation is to blame for increasing its own standard of living at the expense of future generations by not providing enough children.

In which ways do the trends in population development outlined above really constitute a challenge to the welfare state? Mere figures such as dependency ratios, birth rates and proportions of old people in the population do not tell us the *real* burden of dependence society has to face. In order to assess the impact of changes in the population on



Source: Grohmann (1981:54, Fig. 1)

Figure 7.1 *Projected dependency ratio of the elderly (%), 1960–2050*

the institution of social security we have to examine the allocation systems which provide benefits, services and other resources for the elderly.

The bulk of old people receive the major part of their income from the social security system. Their dependency on the welfare state has largely increased in the course of the last 100 years, though private provisions as well as family and local support systems still play an important role. Old age pensions and the health service constitute the two biggest single items in social expenditure, accounting for more than two-thirds of the total.

The German *old age insurance* of today dates back to 1957 and is organised according to the so-called *Umlageverfahren*, that is to say, the insurance contributions paid by the economically active part of the population are immediately transferred to the recipients of old age pensions; and hence no reserve funds or capital assets are established. That is the reason why the pensioner ratio is so crucial to the operation of the system. In a population with a stable age structure the system will function at a constant rate of contributions to be raised, assuming

no government subsidies, with the level of pensions rising in proportion to wage increases. This is known as the *dynamische Rente* (dynamic pension scheme) which has gradually become one of the fundamental principles of the German welfare state. When the dynamic principle was discussed in the mid-1950s, the decline of the pensioner ratio during the period 1965–80 could be foreseen as a consequence of war losses (Schreiber 1955: 18, 19). Compared with the development of the pensioner ratio we now expect for the years 2010–40, the small 'pensioner mountain' of the 1960s and the 1970s is a tiny one. According to Grohmann's population projections (1981: 58), the rate of insurance contributions will have to double from today's 18 per cent to 36 per cent – or at least reach 32 per cent or 28 per cent, depending on the assumptions made about fertility.³ Only a slight decrease in the pensioner ratio will follow. (These projections assume a continuous rise in the pension benefits corresponding to the dynamic principle.)

Ceteris paribus, the drastic rise in expenditures can only be reduced by reducing the nominal growth of pensioners' benefits, or by raising government subsidies and so increasing the tax burden. Both these solutions are likely to give rise to considerable political dissent. Another approach could be to alter the dependency ratio, e.g. by raising the age of retirement or by enlarging the economically active part of the 15–65 age group.⁴ According to Grohmann (1983) a combination of several strategies could reduce the maximum contribution rate to 25 per cent. However, it is doubtful whether the welfare state will be able to manage a quick and flexible adaptation to this demographic challenge. Time is passing and the demographic circumstances favourable to political intervention are limited to the present decade (Grohmann 1981: 70, 71).

Survey data reveal the bad state of health of the aged. The incidence of illness increases with increasing age, for example, the incidence of cancer increases 61-fold from the 30 and under age group to the 65–70 age group, and 125-fold to the 80 and over age group.⁵ An analysis of the health service budget demonstrates that expenditure rises roughly with advancing age, the expenditure for a person of 75 years or more being 5 times as high as for a child aged between 5 and 15 years. For this reason, the ageing of the population will, all other things being equal, lead to an increase in the health budget by 7–8 per cent from 1980 to 2020 (Bericht über die Bevölkerungsentwicklung in der Bundesrepublik Deutschland 1984: 90, 98). This seems to be fairly minimal, but one has to bear in mind that at the same time the proportion of the economically active part of the population as well as the total population will decline drastically.

Eighty-eight per cent of old people's illnesses are chronic, and thereby constitute a potential extra demand for health services. As costs have been climbing rapidly (due to excessive price increases in social welfare services and housing) more and more people have not been able

to afford private old-age or nursing homes. Therefore, public expenditure for persons in need of general care (*Hilfe zur Pflege*) increased by 317 per cent from 1970 to 1979, thus becoming the biggest single item in the German social assistance budget (*Sozialhilfe*) which is financed directly by the government (Presse- und Informationsamt 1982: 301). Apart from spending on the disabled, this represents the highest growth rate of any one item in this budget. The problem of public expenditure for general care is one of the major issues in present social policy. Even the question of a new kind of social insurance is now being raised.

A closer look at the *structure of demographic change* reveals that the aged claim an even bigger proportion of social expenditure than is suggested by their rising proportion in the population:

- The proportion of the *very old* is projected to increase more rapidly than the proportion of the old in general (until 1990). The needs of very old people for health services and care are the highest in the population.
- The proportion of *women* among the aged is higher than in the total population. During the last three decades the female/male ratio in the 65 and over age group has risen to 64:36 (1980), but will gradually diminish in the future. This is mainly due to war losses and to the higher rate of female life expectancy. Since German old age insurance is based on the idea that the relative level of benefits corresponds to previously paid contributions and thereby to previous earnings, women's old age pensions tend to be very low, if they get any at all. In these cases supplementary benefits within the general pension scheme or social assistance may be granted, or the women may receive a survivor's pension. Thus, the high proportion of elderly women is likely to raise government expenditure further in the income maintenance system. As to the demand for health services, there is no clear trend. Although the incidence of some illnesses in elderly women is higher, others, such as cancer, are much lower than for elderly men. Altogether, health expenditure tends to be somewhat lower for elderly women (Bericht über die Bevölkerungsentwicklung in der Bundesrepublik Deutschland 1983: 90).
- The ageing process also applies to the 45–65 age group, i.e. the proportion of 'old' people among the economically active persons in society is growing too. The demands for health services among this age group are higher than among the rest of the economically active. Moreover, the growing proportion of disability pensions within the general pension scheme for workers (*Arbeiterrentenversicherung*) is mainly due to this group. In addition, disability means a loss of social insurance contributions.

Thus, the growing proportion of old people leads to increasing demands on social expenditure, while at the same time the proportion of young people is declining. There is a shift from the child component to the old age component of the dependency ratio, i.e. the economically inactive part of society that has to be supported by the active part will increasingly consist of old people. One might suggest that a low child ratio could compensate for a growing pensioner ratio. But the overall dependency ratio will still be increasing by 20 per cent from 1980 to 2030 according to Grohmann's population projection⁶ and there is no straightforward way of transferring societal resources from children to the elderly. Children's needs differ from old people's, children are involved in different social security systems, and they get more of their needs from the family (cf. Leisering 1984).

This ongoing change in the structure of the population constitutes a challenge to society and to the welfare state. Whatever the reaction or non-reaction of the political system may be, society seems bound to undergo major changes in the 'production of welfare'. Demographic change may not create new social problems, but it widens the numbers relying on the welfare state for income maintenance and social services. Furthermore, the decline of the economically active part of the population makes it even more difficult to provide the fiscal resources necessary to meet the rising demands.

These problems of today's and tomorrow's welfare policies indicate a more general issue. In any period of the welfare state and for any welfare programme, demographic change is relevant to social expenditure, although it may not be openly recognised as such. The problem for sociological analysis, therefore, is how to appreciate the influence of demographic change, how to determine its *relative causal weight* as compared with other determinants and how to detect the variation of causal weight over time.

A study of income maintenance programmes published by the OECD in 1976 has tried to attack this problem. The study considers three factors that determine the expenditure for a single programme: the level of benefits, the number of beneficiaries, and the number of potential beneficiaries. Thus, the expenditure as a percentage share in gross domestic product (GDP) is decomposed into three components: (1) the so-called '*transfer ratio*', being the average payment per beneficiary as a ratio to per capita GDP; (2) the '*eligibility ratio*', being the number of beneficiaries as a ratio to the size of the 'target group' of the programme (e.g. the number of pensioners as a percentage of the total number of old people); and (3) the '*demographic ratio*', being the size of the target group as a ratio to the total population. Roughly speaking, the transfer ratio and the eligibility ratio correspond to changes in social expenditure due to legal or institutional amendments, whereas the demographic ratio corresponds to changes due to external

influences that occur without political intervention. A causal interpretation in a strict sense, however, cannot be derived since the decomposition into the three components does not provide a clearcut distinction between institutional and external change. For example, a variation in the transfer and the eligibility ratios may be due to demographic change as well.

Bearing these restrictions in mind we can briefly summarise the findings of the OECD study. *During the period 1962–72 somewhat over a third of the increase in social expenditure as a share in GDP was due to demographic factors* and nearly two-thirds were due to changes in the coverage of programmes (eligibility ratio); the influence of increases in the level of benefits was negligible. This applies to the major income-maintenance programmes in the OECD countries. Projections for the period 1972–85 show a changing picture: the influence of demographic factors almost vanishes, while the coverage factor could continue to have a considerable impact. (An up-dated computation for the overall 1960–80 period assigns some 30.5 per cent of the increase in expenditure for old age pensions to demographic reasons. (OECD 1983: 14.)) Today, the situation has changed again. As pointed out above, the demographic factor will regain a considerable importance after 1990. At the same time, coverage of major income-maintenance programmes is high, and may reach a ceiling. Moreover, real increases in benefits could be lost due to fiscal constraints. Thus, we may conclude that the next decades of the welfare state will see demographic change and other external forces such as above-average price increases in social services and housing as the main determinants of rises in social expenditure (cf. also Wilensky 1975: 47). Using a complex method of social budget projection, Linder (1982: 320) has shown that only for demographic reasons, all other things being equal and prices held constant, the 'social expenditure ratio', i.e. total social expenditure as a ratio to the number of people in work, would have to double from 1970 to 2030.

Understanding the importance of demographic trends for the welfare state

There is only a rather weak consensus about the meaning of the welfare state (cf. Kaufmann 1985). Much writing about social welfare tends to neglect the fact that welfare institutions do not form a separate political system (such as a 'welfare state' – *Sozialstaat*) but are aspects of the activities of the same state or government that struggles for stability and security, for economic growth, against pollution or for the integration of ethnic minorities. Welfare is only one of several political concerns and the so-called welfare policies may also be related to considerations of public order and political integration, as we already know from Bismarck's motives for promoting social insurance. Moreover,

political concern for welfare is not restricted to social services or social insurance but may also operate in other political domains, like workers' protection, consumers' protection or urban planning. Furthermore, welfare institutions are not necessarily a part of public administration. The production of public welfare is operated typically through a mix of public and private organisations. Social policy eventually leads to a blurring of the distinction between state and society (cf. Kaufmann *et al.* 1985: chs 6–9).

Here we have to focus on the relationship of population trends and issues of the welfare state. In this context we shall discuss the following three arguments:

- (1) By the emergence of the welfare state the hitherto mere statistical categories of age groups have also become societal relationships.
- (2) The redistribution among generations is a basic issue of the welfare state.
- (3) Why are demographic issues seldom acknowledged in discussions about the welfare state?

Population problems as a consequence of the welfare state

The term population is linked normally to the inhabitants of a certain territory. It became prominent only after the constitution of authority over a delimited and coherent territory (*Landberrschaft*), a stage of political development reached in Europe in the sixteenth and seventeenth centuries. The 'political arithmetic' was at that time the first attempt at political science, and we can see a keen interest in problems of welfare as well as of population growth in the absolutist European states of the seventeenth and eighteenth centuries. It was only in the light of the predicaments depicted by Malthus that population growth began to be seen as a threat to the promotion of welfare. And the question of whether and under what conditions an increase or decrease of population may contribute to a growth of welfare is still open.⁷

However, our concern here is not with the correlation of demographic and economic growth, but rather with the distribution of goods among the population. Until about 1800 most people lived in agricultural communities, were incorporated in productive households and were largely self-supporting. Under those conditions there existed no structural differentiation of producer and consumer roles, and everybody – including old people and children – took part in production as well as in consumption according to their capacities and needs. With industrialisation and the pervasive penetration of market relationships into everyday life, a mobilisation of the labour force took place and led to the well-known structural differentiation of production (in factories and offices) and consumption (in families and other households). This

created interrelationships between geographically distant people and a kind of anonymous dependency on the forces of the market that accounted for the emergence of the new class structures of capitalist society. These market relationships, however, were not linked essentially to the political unit which defines a population. Market forces accounted for migrations, but the consequential demographic changes had a quasi-natural character, and were not perceived. It was only in so far as a political unit like the nation state of the nineteenth century unified the inhabitants of a territory and created citizenship as a boundary-maintaining concept, that demographic change could become an issue.

The structural differentiation of production and consumption was a necessary, but not a sufficient condition for the differentiation of productive and non-productive members of society. Under the typical conditions of early capitalism everybody was forced to sell his or her labour in order to survive. *It is only by state intervention that a non-productive class to be provided for has been created.* This began with the prohibition of child labour in factories and compulsory education. It continued with the regulation of normal or even compulsory retirement. Social policy here had the impact of protecting those sectors of the population that were threatened by unwholesome and exploitative working conditions. The intervention contributed both to regulating or even excluding the work of persons with limited working capacities, and to providing measures of income-maintenance or social services for those who were not able to earn their living in the labour market.

It has been emphasised recently by social historians and sociologists that childhood as well as old age have emerged only in modern times as socially relevant and differentiated stages of life (cf. Lüscher 1975; Imhof 1981). But it is seldom acknowledged that this development has been an effect of the political regulation of work and the corresponding growth of welfare services to provide a decent way of life for those outside the workforce. This is one of the major 'successes' of the welfare state. By regulating working opportunities, the welfare state has attained both a higher conformity to the existing working conditions for those defined as able to work, and has excluded from the labour market those who are defined as undesirable in the workforce. As the establishment of this boundary brings advantages to both the collectivity of employers (externalising costs for sub-marginal workers) and workers (keeping the labour force scarce), it is not surprising that it has become an unquestioned basic social structure in almost all modernised societies.

State regulation of non-productivity seems to link up with calendar age. Children were forbidden to work before the age of 10 in Prussia (1839); men were assumed to be invalided at 70 in the first social welfare laws of Bismarck (1889). This age limit was subsequently

extended from industry to nearly all domains of economic life. Since the age limits on the workforce are linked to services, as for example education, and to income maintenance, early retirement and an extension of compulsory education bring about extensions of these formal age limits.

The clustering of the not yet and the no longer productive population in certain age groups makes their provision dependent on demographic variations. At the same time the statistical categories of age groups become indicators of social classes of productive and non-productive parts of the population. The different schemes of social security have created a new kind of interrelatedness among people that is mediated less by markets than by the welfare state.

Redistribution among generations as a basic issue of the welfare state

In its beginnings modern social policy was not concerned with the population at large but with the lower social classes — groups like the poor or workers acknowledged to be in need. Hence relief or social insurance were not considered a means of an overall redistribution. In the liberal tradition, social policy was considered as piecemeal engineering. Only later, with the advent of the idea of the welfare state, did the emphasis change and a more comprehensive view of redistribution develop.

The welfare state is not only a set of welfare institutions, but also an idea. The notion of public responsibility for the welfare of *all* citizens emerged only in the 1930s and 1940s. It developed in a special intellectual climate that may be characterised as denial of liberal politics under the shadow of the Great Depression. Instead of liberal ideas about freedom, there arose a quest for planned freedom and large-scale social planning under democratic control. Social science, Keynesianism, opinion polls and social engineering contributed to expectations of rational reform through societal planning (cf. for example, Mannheim 1940; Myrdal 1958). Under the pressures of warfare the hopes for a better future were reflected in government action such as the Atlantic Charter of Churchill and Roosevelt in 1941. The idea of social security became the panacea for the illnesses of the time and found its programmatic institutional layout in the Beveridge Report to the British parliament of 1942 (cf. Kaufmann 1973: 108ff.).

This combination of Keynesianism and the idea of social security and social planning shaped the basic concept of the welfare state. Thus public provision had not only to prevent forms of extreme want and destitution, but also *to develop the human capacities of the whole population by providing educational and health services, to grant full employment in order to ensure maximum economic growth, and to redistribute the economic output from the producers to the non-*

producers.⁸ It is in this perspective that the holistic terms of economy, population and society gained political attention in the Anglo-Saxon world, as for example the drastic decline in the birth rate which shocked the European countries before the second world war provoked an evident concern about family and population questions.⁹ However, the issue soon withered away in the English discussion, and the Report of the Royal Commission on Population (1949) did not have any substantial effect: pension problems were discussed mainly as a matter of financial issues (cf. Eversley 1982).

The most thorough analysis of the questions involved has been given by Mackenroth (1952), who combines in a unique way the German and Anglo-Saxon lines of thought. He starts with the basic Keynesian assumption that all provision for life must be drawn from the production of the current period. From a macroeconomic point of view, social savings for old age by a whole generation is not feasible. The principle of capital security for future payments that social insurance originally had borrowed from private insurance constitutes no security at all, because a substantial liquidation of capital assets and funds would kindle inflation and thus lead to their depreciation. From this follows — whatever the modes of financing the economic provisions for the non-productive part of the population may be — that there is a direct relationship between the size of the dependent population and the level of provision to be furnished by the economically active population. There exists a *necessary* redistribution from the producers to the non-producers with respect to *all* produced consumer goods and services. As we have seen, the existence of an essentially 'non-productive' part of the population emerged as a consequence of welfare state activities. Consequently, we may formulate a basic law of the economy of a welfare state. *All other things being equal, the average welfare as measured in terms of market income and welfare benefits is a function of the relationship of the productive to the non-productive part of the population.* The larger the non-productive part of the population, the more redistribution is needed.¹⁰ As needs and benefits, however, are not given, one has to decide on the satisfaction of needs either by institutional arrangements or by repeated political decision-making.

As a consequence of these considerations the British and (to some extent) the Scandinavian countries institutionalised economic security for dependants as a part of the overall public budget. The redistribution of income was taken over by the state as one of several public tasks and it is now competing every year with other political issues. This development follows the idea of collective solidarity and transforms the macroeconomic idea of redistribution into the microeconomic device of a unified tax deduction on the part of the producers. Mackenroth did not go so far as to abandon the idea of a separate body for income re-

distribution, but proposed the organisation of social security along the lines of age groups i.e. by a *Jugendamt* (youth administration), an *Arbeitsamt* (labour administration) and a *Rentenamt* (pension administration) (1957: 70, 71). These agencies would operate in the realm of a common social budget and under the same legislation ensuring equal benefits for everybody with comparable needs. Mackenroth's main concern was to integrate *all* benefits for the dependent part of the population in *one* common frame of reference: *the social budget*. It would allow the satisfaction of different claims to become visible and accessible to an open political decision. This, he hoped, would help clarify basic ethical questions and restore the trust in the equity of social policy which had been corrupted by a jungle of deceit and the plurality of institutions operating under separate rules. To keep the social budget separate from the general budget and to finance it by contributions rather than by general taxes not only reflects the German tradition of social insurance, but also serves to obscure the whole redistributive process.

In 1955 these basic ideas had been worked out in a concrete proposal of reform of the social insurance programme for the aged and in a new compensatory programme for children (cf. Schreiber 1955). Schreiber started with the assertion that in industrial society individual lifetime earnings need to be distributed throughout the three stages of youth, adulthood and old age. As this cannot be achieved by individual savings, there must be a collective redistributive process from adulthood to youth and to old age. Therefore, he proposed two separate bodies of redistribution: one for the aged and one for children. Both should be financed by contributions from the economically active population, and the benefits should equal the contributions of the same period. By this simple institutional arrangement two problems of feedback would be solved:

- First, the problem of *inflation* and of *participation in economic growth*. In so far as benefits are directly dependent on the amount of contributions, they will increase in proportion to wages, the relation of the number of contributors to the number of beneficiaries being equal. If wages were rising due to inflation or gains in productivity there would be a parallel growth of benefits. This idea became quite influential in the reform of old age insurance in 1957 and has since been called the *dynamische Rente*.
- Second, the problem of a *changing dependency ratio*. In its pure form an increase in the number of children or old people in relation to the adult population would lead to a lowering of the benefits for the dependent group, contributions being equal. As changes in these ratios are rather slow and a rise in real wages is expected, this would not normally lead to a real loss of income but only to a lowered

increase of benefits compared with net wages. This system then makes manifest the interrelatedness of economic and demographic trends which is hidden in other systems.

One may of course question the equity of the assumption that the risk of being in a very large or in a very small age cohort should be borne exclusively by those belonging to that cohort. But the principle could also be mitigated, e.g. by a modification of the contribution rate or of the age of retirement. What really matters is the idea of a general 'contract between generations' that establishes (1) the level of pension benefits relative to previous earnings, and (2) how modifications of the dependency ratio can be borne by the active and inactive parts of the population. In fact, only the first rule has been made explicit, whereas the second problem has been omitted from German legislation on pensions until today.

One may speculate whether the extreme decline in the birth rate in Germany has partially been induced by poor public support for children. A much larger share of the provision for old age as opposed to that for children is financed by public transfers. An estimate of the overall costs of bringing up children in Germany (1974) showed that about 47 per cent of all costs are paid out of individual family incomes. Cash transfers to families (e.g. family or housing allowances) and health services account for a further 23 per cent; the balance being made up of various welfare benefits in kind, mainly education. If in addition the non-paid time of the parents caring for children is taken into account (as estimated by a very modest hypothetical salary), the proportion borne by the individual family increases to 74 per cent (Wissenschaftlicher Beirat für Familienfragen 1979: 102). The system of old age insurance does not take into consideration whether people raise children or not. Mothers who give up their jobs to bring up their children cannot accumulate contribution for their old age pensions. From the perspective of individual economic rationality raising children is a loss. At the same time it is quite evident that today's children are the producers of tomorrow. Although a purely economic interpretation of the birth rate decline is certainly superficial, one should not underestimate these facts, because they may be perceived also as a public disinterest in the family, and hence as a diminution of the status of parents in our society.

In exploring the interrelationship between demographic evolution and the welfare state we have to answer a final question of a purely demographic nature. Setting apart the modes of financing, a decreasing burden of the young obviously could compensate for an increasing burden of the elderly. What significance does a decline in the proportion of the young have for a rise in the proportion of the aged population? The answer to this question demands sophisticated cal-

culations, which we have to simplify here. One must distinguish between the time of transition and later, the stabilised age structure with a persistent low fertility rate. In the transition period there is first a decrease of the child component of the burden of dependence, with the increase of the old age component coming some 40 years later when the most populous age cohorts leave the economically active population. Although Germany is currently experiencing a period of relief from the overall burden of dependence, there is no related profit due to unemployment. (The expected growth after the year 2010 has already been presented in Figure 7.1.)

In so far as the long-term evolution of the burden of dependence (*after* the 'great wave') is concerned, one can demonstrate by comparing population models with constant rates of fertility and mortality that there is an optimum point, i.e. a net reproduction rate leading to a minimal overall dependency ratio in that type of model (cf. Kaufmann 1984). The optimum point, however, varies according to three parameters: the average age of entrance to and departure from the workforce; the income relationships of the average young, adult and aged person; and the life-expectancy of the population. If one varies these parameters within reasonable limits and takes into account recent estimations of these, the optimum point does not deviate much from the stationary population model, i.e. a net reproduction rate of 1.0. The curve of the dependency ratio dependent on the net reproduction rate has the form of a hyperbola. As it is rather flat around the optimum point, one may argue for practical purposes that with a net reproduction rate between 0.8 and 1.3 there are no important long-term differences in the *overall* dependency ratio. A further decline of fertility below 0.8 would lead to a progressive increase in the overall dependency ratio. This is the actual case in Germany where the net reproduction rate has remained below 0.7 in the last 10 years.

*Hindrances to accounting for demographic variation
in social policy*

As we have seen in the English and German cases, social policy does not take into account demographic variations in a systematic way. These variations are considered as external influences to be dealt with when they occur (cf. Eversley and Köllmann 1982). The situation is much the same in most other industrialised countries. Social policies vary in the provision of resources for the elderly and the young and the *public* burden of dependence is of course a product of legal regulations. From the point of view of rational social planning one should start with the economic needs of the young, the adult and the elderly. But that is not the way politics deals with the issue. In fact, redistribution is carried out by a multiplicity of mostly uncoordinated institutional arrangements where nobody knows who gets what and who foots the bill.

Despite the existing links between the generations in terms of provision of resources, institutional arrangements seldom account for these relationships. Apparently the provision for the elderly is taken for granted as an issue of public policy, whereas the fact that children constitute the next generation of producers and therefore have to be incorporated into all calculations, is not publicly acknowledged. This leads to an arbitrariness in family policies.

This disregard for basic demographic issues is related to political forces. Children have no vote and it is difficult to mobilise parents as a pressure group. And parents of two or more children (who are essential for the demographic balance) constitute a minority.

But the reluctance to acknowledge demographic trends as a political issue seems to have deeper roots than the analysis of mere political power shows. The reluctance is rooted in general convictions and political orientations. In the case of Great Britain, Eversley (1982) notes the persistence of Malthusianism; while in West Germany it is the memory of Nazi population policies and a highly privatised conception of the family. For liberals and conservatives alike the state should not interfere with the decisions of prospective parents as to the number of children they have. The very unpolitical character of demographic trends and their 'natural' influence seem to make them uninteresting for socialists as well.

There is yet another type of ideological impediment to accounting for the role of demographic factors that leads right back to our starting point, namely, the question of how to conceptualise the current challenges of the welfare state. Both left-wing and right-wing fundamentalist points of view tend to focus on internal problems of the welfare state, assuming external problems to be of minor importance. As we have pointed out, external problems – such as demographic change, and changes in the costs of social services – exert not only a powerful and growing influence on social spending, they also touch upon fundamental normative and institutional issues of the welfare state such as the 'contract between generations'. As has been demonstrated earlier, the demographic factor explains a major part of the growth of public welfare expenditure in the present and in the coming decades. Fundamentalist critics of the welfare state, however, are more interested in arguments for cutback management or for endemic crisis, than in arguments that explain the growth tendency of social expenditure in terms of non-ideological causes. There is in fact very little evidence that the growth of public expenditure is due to a never-ending tendency of the welfare state to compensate minor disadvantages in all areas of human life.

This lack of political appeal, however, does not prevent the demographic trends from being influential. *Most of the institutional provisions of the welfare state are based on the assumption of demo-*

graphic equilibrium, i.e. they implicitly assume few or no demographic variations. Consequently, demographic variations must become a political issue. But demographic trends operate on a long-term basis whereas politics tends to deal with short-term variations. Thus politics is likely to react too late and too erratically. The only rational way of dealing with this issue is to make the welfare system itself responsive to demographic variations in order to establish a feedback among demographic trends, economic growth and individual behaviour.¹¹

Notes

1. The projections refer to the ratio of the 60+ age group to the 20–60 age group and are based on the assumption that nuptiality and fertility will stay at the 1970, 1972 or 1977 level. Each assumption leads to a different growth rate of the dependency ratio (the 2030 peak being 1.7-fold of today's level in the 1972 fertility case) but the shape of the curve remains the same.
The population trends in other industrial societies are very similar. All countries in the European Community with the exception of Ireland are experiencing a continuous rise in the proportion of old people, delayed by a stagnation or a slight decrease around the 1970s and the 1980s (United Kingdom in the 1990s) (for data and projections for the period 1960–2000 see Eurostat 1981: 22–3; cf. Eurostat 1980: 34 for the 40–65 age group; for United Kingdom see also Office of Population Censuses and Surveys 1980: 27). Among these countries, Germany and UK have the highest proportion of old people, 15.3 and 15.1 per cent respectively in 1981 (65+ age group). In all EC countries (always with the exception of Ireland) declining birth rates have sharply decreased the net reproduction rate from > 1 in 1960 to < 1 in 1981, and even < 0.8 in Germany, the Netherlands, Luxembourg and Denmark. Germany ranks lowest with 0.68 (1980; Eurostat 1983: 76–7, 88). The overall dependency ratio rises high around the 1960s and the 1970s (except in France and the Netherlands), declining strongly in the 1970s and the 1980s and beginning to rise after 1990 (except Denmark; projections for Italy not given) (Eurostat 1981: 22–3). For the Austrian case see Busch *et al.* (Chapter 12, this volume).
2. In this chapter we do not consider the influence of immigration.
3. In the 1957 reform it was assumed that a contribution rate for old age insurance of 14 per cent would be enough given a long-term demographic equilibrium and a government subsidy amounting to about one-third of total expenditures (cf. Berthold and Roppel 1983: 299).
4. Another strategy could be to reopen the labour market to younger immigrants in order to compensate for the fall in the birth rate. All these strategies presuppose an economic growth in terms of the labour force and not only of GNP. The social problems of immigration and the likelihood of long-term labour-intensive economic growth have, however, to be kept outside of the present discussion. For a discussion of the various strategies to cope with demographic challenges to old age insurance, see Lampert (1980: 19–35) and Grohmann (1981: 59–68).
5. Male population of Hamburg, 1977 (Bundesminister für Jugend, Familie und Gesundheit 1980: 125).
6. 1981:66, under the assumption of nuptiality and fertility as of 1972.
7. From the point of view of pure economics a decrease of population should (*ceteris paribus!*) increase the per capita income and hence individual welfare. cf. Reddaway (1939) and Wander (1971). The empirical evidence available shows, however, a correlation between socioeconomic and demographic decline that may be due to losses of adaptive capacities in declining (and ageing) populations. cf. Kaufmann (1975).
8. Thus, the welfare state combines elements of vertical redistribution (among producers) and horizontal redistribution (from producers to non-producers).

Health services and taxation belong to the first category, whereas cash benefits mainly fall into the second. For example in the German case, 150 out of 186,000 million DM of cash benefits were transferred to households of non-producers (1978; Transfer-Enquete-Kommission 1981: 121-3). Public education and child allowances involve both vertical (referring to households) and horizontal (referring to individuals) redistribution. To a certain extent, vertical redistribution represents the egalitarian element of the welfare state.

9. The most important document for the link of welfare and population policy is Myrdal (1945), completed by 1940. Though only secondarily, the Beveridge Report was also concerned with family and population (cf. Beveridge 1942: 154ff.).
10. This 'law' of course not only applies to the problem of resource allocation to young and old persons, but also to the unemployed who are forced into the non-productive category. As these and other categories like housewives or drop-outs are not linked to demographic developments, we shall not deal with the related issues in the present context.
11. See for example, the proposal of a *bevölkerungsdynamische Rentenformel* by Berthold and Roppel (1983), an old age pension scheme with a built-in mechanism for adaptation to demographic change. Cf. also various propositions in Birg (1983).

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