

The fiscal burden on future generations – an analysis using generational accounting

Like most industrial countries, Germany is facing serious problems associated with demographic change. In view of existing legislation on benefits, the growing percentage of older people in the population as a result of the low birth rate and increasing life expectancy is leading to a sharp rise in expenditure on providing statutory old age pensions and other basic public services, the funding of which is threatening to overtax the paying capacity of those generations still in employment. This unfavourable outlook is receiving considerable attention both in academic and political circles, the thrust of whose deliberations is the search for alternative means of financing provision for the elderly. Generally speaking, however, the long-term repercussions are being examined only for some areas of public finance and do not form part of a comprehensive analysis of the trends in the country's overall public finance. A method known as generational accounting will be presented in the following pages and applied to the particular circumstances obtaining in Germany. It is a method which, despite all the shortcomings it still retains in specific areas, seems capable of including in the general analysis of public sector budgets the long-term aspects more satisfactorily than other methods.

The concept of generational accounting

*How it differs
from traditional
indicators*

The assessment of a country's fiscal policy is usually based on the various analytical forms of its financial balance and – as a supplementary indicator – on the level of public debt. However, neither future burdens on public finance (including the social security funds), which to some extent are caused by the very fiscal and socio-political decisions made, nor long-term effects of intergenerational redistribution can be identified in this way. These burdens can occur even when budgets are in balance because almost no future payment commitments of the state are included in common budgetary concepts. If, for example, an increase in payments from the pay-as-you-go pension insurance system were financed through an increase in contribution rates, the overall public sector deficit would not increase, although this would involve a shift in the burden from present to future generations. Those generations already in retirement would benefit from the increase in payments but would no longer be contributing to their funding. The level of public debt is not entirely satisfactory as an indicator of the actual long-term burdens either, because it covers only explicit securitised debt and not implicit liabilities such as future claims on statutory provision for old age.

*Generational
accounts as
a basis for
generational
accounting*

The generational accounting concept has been developed during the nineties to make up for the shortcomings of traditional fiscal policy analysis.¹ This concept is based on allocating levies to the state, on the one hand, and government payments to the various age groups within the population, on the other.

This breakdown is made using so-called generational accounts, which are calculated separately for men and women who were born in the same year and, initially, for those generations now alive. As long as they are individually attributable, the taxes and contributions paid, on the one hand, and state transfer payments, on the other, are entered in these accounts; the data are shown as present values and include all payments which are expected to be made during the remaining lifetime of the persons concerned. It is assumed here that the levy and payment system obtaining in the base year will also apply in future to all persons living at the end of that year. To this end, the per capita values of the various types of levies and transfers applying to each age group in the base year are extrapolated, as a rule, on the basis of the rate of growth in productivity.

The net fiscal burden on the "account holder" during the latter's remaining life, which – in terms of his/her future gross income (likewise determined on the basis of the growth in productivity) – may be interpreted as a "lifetime tax rate" (which is already net of state transfers), is derived as a balance. It must be noted, however, that only the receipts and expenditure of the state which are attributable to the various age groups are entered in

¹ The following is a selection from the extensive literature already existing on the subject: Auerbach, A.J., J. Gokhale and L.J. Kotlikoff, *Generational Accounts – A Meaningful Alternative to Deficit Accounting*, Cambridge 1991; by the same authors, *Generational Accounting: A Meaningful Way to Evaluate Fiscal Policy*, *Journal of Economic Perspectives*, 8,1, pages 73 to 94, 1994; Boll, S., *Intergenerational redistribution through the public sector – Methodology of generational accounting and its empirical application to Germany*, Discussion paper 6/96, Economic Research Group of the Deutsche Bundesbank, August 1996.

the generational accounts. Whereas the receipts, which for the most part consist of taxes and social insurance levies, can, to a large extent, be attributed to individual groups, a relatively large part of the expenditure (essentially the expenditure of the various levels of government on goods and services) cannot be easily broken down, if at all.² As this expenditure also brings benefits, the net burden recorded represents the position of the "account holder" vis-à-vis the state too unfavourably.

Burdens on present ...

The burden variables shown in the generational accounts may be used for two analytical purposes. They provide an indication of the extent to which the various age groups of present generations are affected by government measures. However, as it is to be assumed that the benefit arising from unattributed government expenditure is not distributed equally among the various age groups, the results obtained here can only be used as a rough guide.

... and future generations

However, generational accounting is primarily concerned with the fiscal burden on future generations. If the forecasts for the future population trends and their breakdown by age group are extrapolated for the distant future, net burdens (in present value terms) can also be calculated for generations not yet born on the basis of the age-specific levy and transfer pattern of the base year.³

Intertemporal budget constraint

However, these calculations are assumed to be subject to a major constraint: the state can only temporarily incur or reduce its debt to achieve a specific expenditure path in the

course of an infinitely long time horizon but in the end it cannot incur additional debt or create assets. This means that the present value of all future expenditure must be the same as the present value of all future receipts plus net assets in the base year (which naturally may also be negative). The burden on present and on future generations may be compared in the light of this "inter-temporal budget constraint on the state".

This comparison is based on the fact that the sum of the net burdens which are entered in the generational accounts and which, conversely, represent net receipts (gross levies minus transfers) from the point of view of the state must be used along with net state assets to finance expenditure which has not been attributed. If the net taxes paid by present generations and the net state assets are deducted from the total sum of the unattributed expenditure (all discounted to the base year), the portion of state payment commitments which will have to be financed in the future remains as a residual.⁴

Indicators of the extent of future burdens

In practice, the burdens can be compared on the basis of two indicators. It is assumed that this residual represents a burden on the gen-

² Government expenditure which is not attributed includes, for example, expenditure on administration and defence. State investment, by contrast, does not belong to this category. It has been assumed here that the present value of the incoming and outgoing payments associated with investment amount to zero for the state, that is to say, the internal rate of return is the same as the discounting rate from the government's point of view; these payments are therefore completely disregarded.

³ To record the very long-term effects virtually in full a time horizon of 250 years has been chosen here.

⁴ The greater the net taxes paid by the present generations, the lower is the sum of unattributed expenditure which will have to be charged to future generations.

*Comparison
of lifetime tax
rates*

erational accounts of future generations and increases the lifetime tax rate of the account holders accordingly. The difference between the burden on present generations and that on future generations can then be ascertained by relating the lifetime tax rate applying to future generations to the rate applying to present generations.⁵ If this ratio is greater than 1, this indicates a shift of the burden on to future generations.

*Sustainability
gap*

Instead of assuming that it is only those born after the base year that guarantee the observance of the intertemporal budget constraint through an appropriate increase in their net payments to the state, it is also possible to examine the extent of the gap which arises between the present value of state expenditure and the receipts and assets available to meet this expenditure if the conditions of the base year are retained for all future generations, too. In the latter case the intertemporal budget constraint is no longer equalised in accounting terms by changing the net burden on future generations but, instead, by means of a residual which may be defined as a "sustainability gap". This "gap" may be interpreted as the present value of all economy measures to be taken by the state in future or all future increases in receipts which are necessary to enable a shift from the fiscal policy obtaining in the base year to a policy which, on the assumptions made, meets the budget constraint, without further changes being necessary.

Limitations of generational accounting

In view of the broad time horizon and the inadequacy of the data available for processing, highly simplifying assumptions are necessary, including those applying to the behaviour of economic agents. To avoid reaching false conclusions it is vitally important when interpreting empirical results that the basic assumptions and conceptual limitations of generational accounting are observed.

*Highly
simplifying
assumptions
necessary*

It is important to remember above all that generational accounting is not an instrument for forecasting as realistic a picture of long-term fiscal developments as possible. Instead, the aim of the concept is to obtain a yardstick for evaluating the course of current fiscal policy while taking into account the long-term effects of this policy. Except in the case of projecting population trends, only status quo conditions are used with the result that it is possible to obtain some idea of the interplay between the fiscal conditions of the base year and demographic trends. The results therefore provide an indication of the extent to which adjustments have to be made but are unable to specify the types of adjustment necessary or the time at which they should be applied.

*Not a
forecasting
instrument*

One important economic objection to this concept is that overall economic repercussions are ignored. In particular, the need to increase the lifetime tax burden to close the

*Overall
economic
repercussions
not included*

⁵ However, not all present generations are included in the calculation but only the youngest complete generation, that is to say, the generation born in the base year because this is the only generation which represents the total age-specific net burden "on the present".

sustainability gap and the changes in behaviour arising from this have an effect on economic growth. Consequently, there will probably not be steady productivity growth and a constant discounting rate. This could be a starting point for further and more comprehensive model analyses.

*Lifespan
as a planning
horizon*

Intergenerational cost calculations are based on the idea that economic agents have at least some notion of what their income will be during the rest of their life and that they gear their economic behaviour to this remaining income. This therefore rules out not only a mode of behaviour which is more in keeping with the extremely short-term income situation but also a very long-term perspective which includes, by way of legacies, the welfare of future generations. Consideration of inheritance motives, in particular, would greatly affect the way in which burden calculations could be interpreted.

*Simplifying
incidence
assumptions*

It must also be remembered that in most cases very simple incidence assumptions are being made for the various types of taxes and transfers. It is normally assumed that there is no shifting, that is to say, taxes and contributions are actually ascribed to those who pay them and transfers to those who receive them. This overlooks the fact that state intervention is often reflected not only in the figures applying to the economic agents directly affected but also impinges on their environment in a way that is difficult to determine empirically.

Regarding the interpretation of the results, consideration must still be given to the fact

that the fiscal status quo, at least in the basic version of intergenerational cost calculations, is very narrowly defined. If it is assumed that the fiscal policy of the base year is retained, that means that neither automatic changes inherent in the present fiscal system nor changes to the legal basis which have already been approved but which have not yet become effective in the base year are included in the calculations. In the case of Germany, for example, no account is taken either of the fact that under present legislation the contribution rate to the statutory pension insurance scheme is raised if the fluctuation reserve threatens to fall below the required minimum, that is the amount needed to meet a month's expenditure, or that restrictions on early retirement have already been approved.

*Measures
approved but
not yet applied
in the base year
are ignored*

The results of generational accounting are determined not least by the choice of the base year. If special factors play a substantial role here, these are assumed to continue to apply in the future, too, and this may lead to substantial distortions. Thus, the state of public finance in the base year 1996 used here was unfavourable as a result of the burdens which were still extensive following reunification and as a result of the high unemployment rate and poor economic conditions. This can be seen, for example, in the fact that the deficit was relatively high at 3.5 % of GDP.

*Choice of
base year*

Finally, it must also be pointed out that ascribing state transactions to men and women separately and to specific age groups is particularly dependent on an extensive database, which in the case of Germany is largely avail-

*Incomplete
database*

able only on a sample basis and, moreover, must be augmented by a large number of estimates.

In the light of these restrictions the results obtained by means of generational accounting have to be interpreted with care and can only be regarded as a rough indication of the intergenerational redistribution effects of fiscal policy.

Intergenerational redistribution of public finance in Germany

Data used for calculations

Data sources

The main sources of data for the application of generational accounting to public finance in Germany in the base year 1996, presented below, were, in addition to data from the government account within the national accounts and statistics from the social security funds, the results of the income and consumption sample which was taken by the Federal Statistical Office in 1993 and which has recently become available as well as the figures from the latest version of the socio-economic panel produced under the auspices of the German Institute for Economic Research, Berlin.⁶ To extrapolate the age-specific per capita amounts of various tax and transfer types, a productivity growth rate of 2% and a discounting factor of 4% were assumed as macroeconomic parameters in the basic version. These values more or less correspond to the average figures recorded during the past few decades for the growth rate of real per capita income and for the real

long-term interest rate, respectively, in Germany. In addition, calculations based on alternative assumptions were carried out. The demographic trend up to the year 2040 is taken from the eighth coordinated population forecast calculated by the Federal Statistical Office (medium variant). The further trend was modelled in such a way that the population in Germany will stabilise at approximately 57 million after 2100. To determine the level of government assets in the base year, financial assets and tangible fixed assets (at replacement values) were offset against debts.

Age-dependent burden profiles

As far as the burden on the various age groups in the base year is concerned, the balance between the average payments of levies and transfers shows a pronounced age-dependent pattern (see chart on page 23). The financial state of the public sector budgets is therefore considerably influenced by the growing proportion of elderly persons in the population. Children and young people receive a not inconsiderable amount of net payments from the state, with child benefits playing a particularly significant role. When they start working, the absolute payment profiles become positive, that is to say, the state becomes a net recipient. In mid-life, tax

*Pronounced
age-dependent
pattern of
absolute
payment
profiles*

⁶ In principle, the calculation of the results is based on the study by Boll, S., loc. cit., which took 1994 as its base year and which appeared in the series of discussion papers published by the Economic Research Group of the Deutsche Bundesbank. However, extensive methodological changes were necessary. In particular, western German and eastern German data are no longer treated separately with the result that a direct comparison of the figures is not possible.

and contribution payments as well as net payments are largely in line with changes in income, the net annual burden on men being significantly greater than that on women. Transfer payments during this period remain more or less constant. Around the age of 60 and the approach of retirement net payments on the part of the state return. Although men receive larger net transfers than women, the difference between the sexes is not as pronounced as it is during the mid-life period because a large proportion of transfers is also being used for redistribution purposes and does not follow a pure form of the principle of equivalence.

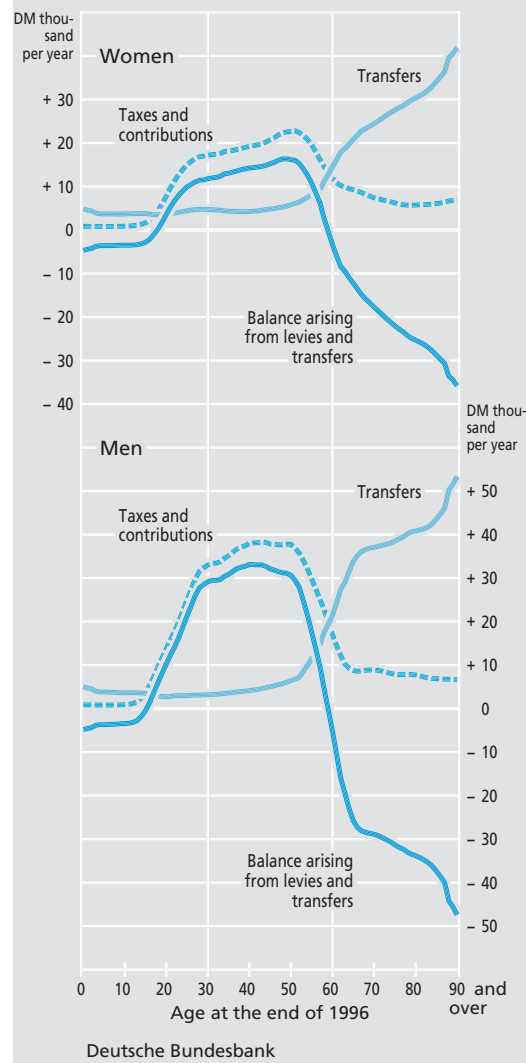
*Calculating
generational
accounts*

The generational accounts of the living are calculated on the basis of this age-dependent distribution of state levy and transfer payments by discounting to the base year – as mentioned above – the payments to be expected from the various age groups during their remaining lifetime (see the table on page 24 for details). The accounts of those born in the base year are particularly informative here because these alone reflect the full extent of state levies and payments over the entire lifespan.

*Total
payments ...*

Men born in the base year have to pay state levies amounting to DM 908,000 (discounted) while they receive DM 491,000 in transfers; a net burden of DM 417,000 remains to finance the unattributed expenditure. In terms of the lifetime income that can be expected this amounts to a lifetime tax rate of 28%. Women pay levies amounting to just over one-half of the payments made by men but receive transfers amounting to

Distribution of levies and transfers among the various age groups



80% of those received by men. The net burden they have to carry is therefore significantly less than that borne by men; their lifetime tax rate is 16%.

The composition of "debit and credit balances" on the generational accounts of those born in 1996 also differs significantly. In the case of men, for example, social insurance contributions constitute by far the greatest

*... and their
composition*

Composition of generational accounts

Age at the end of 1996 ¹	DM thousand			Lifetime tax rate ² in %
	Levies	Transfers	Net burden	
Men				
0	908	491	417	28.2
5	948	488	460	.
10	996	490	506	.
15	1,062	498	564	.
20	1,096	507	590	.
25	1,026	487	540	.
30	916	477	439	.
35	811	482	330	.
40	682	487	195	.
45	546	504	42	.
50	404	535	- 131	.
55	258	555	- 297	.
60	158	558	- 401	.
65	116	511	- 395	.
70	91	427	- 336	.
75	66	338	- 272	.
80	50	294	- 244	.
85	33	221	- 188	.
90 and over	8	65	- 58	.
Future generations	.	.	988	66.8
Women				
0	482	393	89	16.2
5	511	397	114	.
10	544	403	141	.
15	587	412	175	.
20	612	422	190	.
25	595	418	176	.
30	560	412	148	.
35	509	400	109	.
40	457	415	43	.
45	396	425	- 29	.
50	314	460	- 146	.
55	223	469	- 246	.
60	158	471	- 313	.
65	121	440	- 318	.
70	91	391	- 300	.
75	65	313	- 248	.
80	55	294	- 239	.
85	37	207	- 170	.
90 and over	8	51	- 44	.
Future generations	.	.	211	38.3

¹ Only the net burden of those born in 1996 can be compared with that of future generations. — ² If the lifetime tax rate of future generations is divided by the rate applying to those born in 1996, a burden ratio of 2.37 is obtained.

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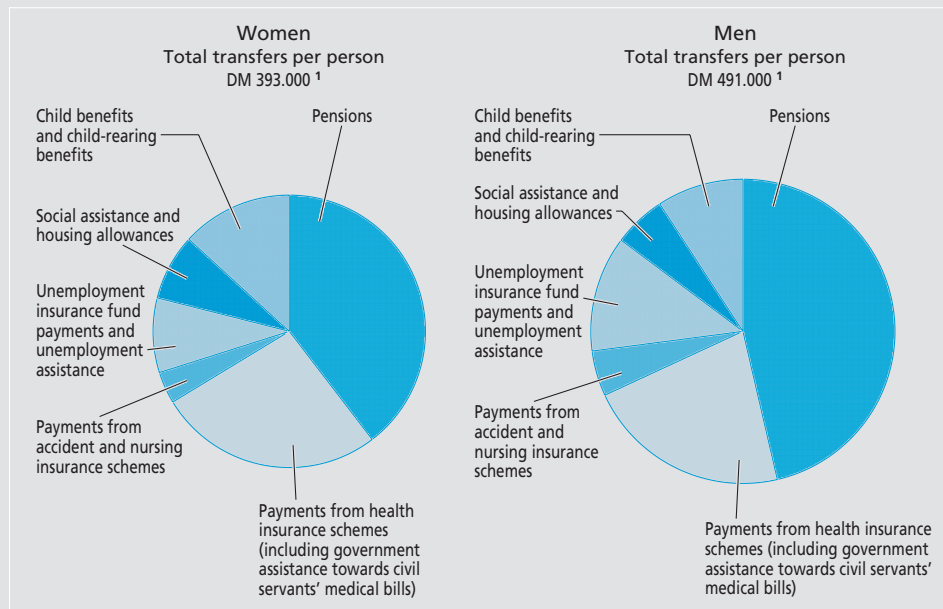
outlays on the expenditure side; in the case of women indirect taxes also constitute a relatively large portion of the overall burden. Although on the transfer side the payments by the statutory old-age pension scheme are the most significant source of income and those of the health insurance schemes the second most significant for both men and women, the importance of both types of payment varies fairly considerably. Again, in the case of men payments in the event of unemployment are more important than they are for women; by contrast, social assistance and housing allowances are relatively more important in the case of women (see the chart on page 25). It is particularly the generally less favourable financial position of women that is reflected in the considerable sex-specific differences. This less favourable financial position is also due to the fact that women are engaged in paid employment to a lesser extent than men, which results in women receiving more state transfer payments and paying less in levies.

Shifts in burdens between present and future generations

As far as the intergenerational distribution as the primary analytical objective of generational accounting is concerned, the calculations confirm the assumption resulting from many independent analyses that it is particularly the demographic changes with respect to the age structure as well as the unfavourable state of public sector budgets in the base year that are creating a much greater additional burden for future generations. While – as mentioned above – a burden ratio of 1 would mean that the present fiscal policy

Dramatic redistribution to the disadvantage of future generations

Transfers to those born in 1996 during their entire life



¹ Present value of the transfer payments extrapolated on the basis of the growth rate of productivity.

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can be retained without shifting burdens on to future generations, the actual value for the base year 1996 is 2.4, which means that, on the assumptions made, future generations will have to pay 140 % more to the state in higher net taxes than those born in 1996.⁷ The lifetime tax rate will rise to 67 % for men and to 38 % for women.

Any increase in the burden on future generations due to higher net incomes ...

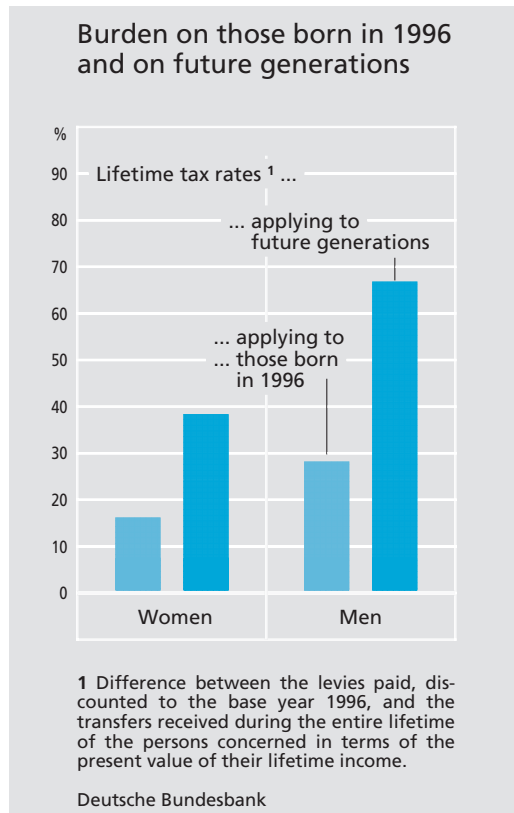
A moderate increase in the burden on future generations could be justified from the point of view of fair redistribution on the grounds that they will have larger incomes over their life as a whole. Consequently, large net tax payments by future generations would be the result of an intertemporal progressive tax system, which takes account of the ability-to-pay principle. To that extent the financial bur-

dens on public sector budgets could be more heavily "bequeathed" to future generations.

However, this argument is only valid if it is certain that the intertemporally greater burden will make it possible in future to enjoy a net increase – albeit a slower one – in lifetime income. If it is assumed that the greater burdens necessary to maintain the intertemporal budget constraint are evenly distributed over all future generations from the start, this condition could not be maintained in the event of the lifetime tax rate for future generations being raised – as mentioned above – to 67 % for men and 38 % for women. The net life-

... must not result in their being overtaxed

⁷ This value applies equally to men and women because it has been assumed in calculating the net burden on future generations that there will be no changes as far as the intergenerational redistribution between the sexes is concerned.



time income of the next few generations would actually decline considerably at first, and it would not be until very much later generations that the level enjoyed by those born in 1996 would be regained (see the chart on the situation for men on page 27).

Instead of having a uniform lifetime tax rate for all future generations, it might therefore be possible to assume a gradual increase in burdens as an alternative which would ensure a constant increase in net lifetime income from one age group to another. Even on this assumption, however, the greater burden on future generations is not tenable either, because in this case the annual increase in net lifetime incomes would be more or less zero. The increase in gross lifetime incomes resulting from the 2 % improvement in productivity

Gradual increase in burdens as a solution?

would be virtually eroded by growing intervention by the state, which to a large extent would still be attributable to the financing of payments to present generations. This still does not take into account the fact that the likely changes in behaviour associated with the greater burden would have lasting negative repercussions for economic development.

Calculating the sustainability gap – the second indicator mentioned at the beginning of this article – also shows that the fiscal conditions obtaining in 1996 imply a considerable increase in burdens in the future in view of demographic trends. According to this calculation, there was a gap of DM 10,300 billion, which was 2.9 times the value of gross domestic product, between the present values of state receipts and state expenditure in 1996.

Large sustainability gap requires ...

If this sum is converted into annual rates, servicing this economic debt requires an annual and permanent cut in expenditure or an increase in receipts amounting to 6.3 % of gross domestic product (that would have been approximately DM 225 billion in 1996).⁸ It must be remembered, however, that this value is also dependent on the selected discounting rate and on the assumed productivity growth even if the differences arising from these factors are not very great. If, for example, the latter amounts to only 1.5 % instead of 2.0 %, the annual consolidation

... expenditure cuts or increased receipts amounting to almost 6 1/2 % of GDP

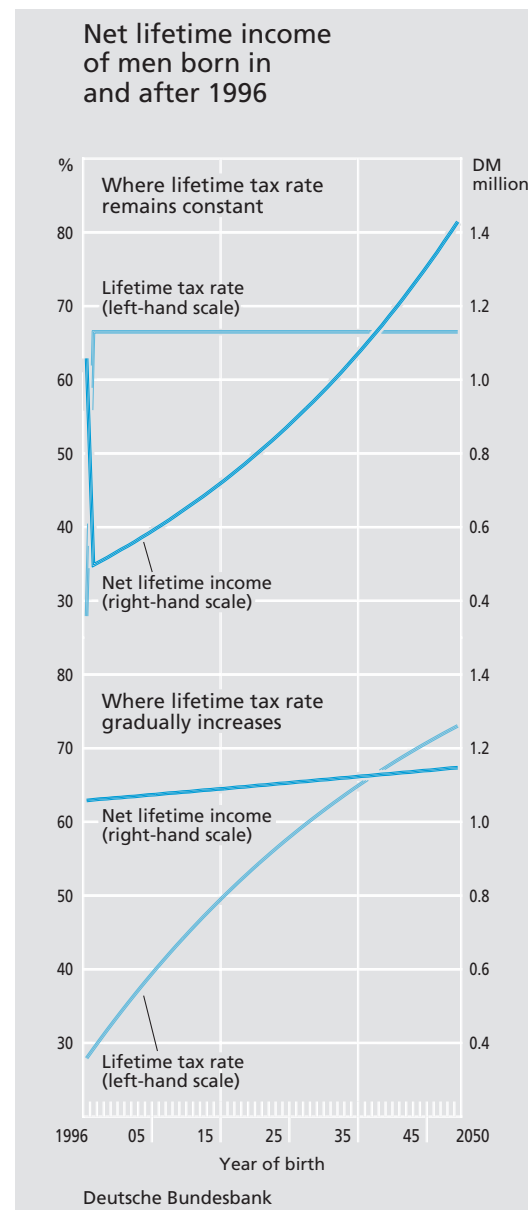
⁸ Given the conditions obtaining in 1996, the expenditure ratio of just over 50 %, for example, would have to be reduced to 44 %. In 1989, that is to say, prior to reunification, it had amounted to just under 46 % after a lengthy period of consolidation; the ratio exceeded 44 % for the first time in 1974.

requirement declines from 6.3 % to 6.1 % of gross domestic product because the growth rate of per capita payments is assumed to be correspondingly lower (see the table on page 28 for the effects of various assumption combinations).

In contrast to the previous indicators of intergenerational redistribution, it is assumed here that there will be immediate consolidation which will entail for present generations, too, a fall in net lifetime income. The sustainability gap converted into regular annual payments will rise further for every year in which the calculated contribution to consolidation is not achieved. This makes it clear that any postponement of consolidation efforts leads inevitably to even greater efforts in later years.⁹

Quantitative effects of selected measures on intergenerational distribution

What effects policy changes already approved but not yet applied in 1996 have on intergenerational distribution or what specific measures would be necessary to prevent an additional burden on future generations are illustrated by the following examples. It must be emphasised yet again that intergenerational burden calculations cannot provide information either on the extent or the form of a desirable change in intergenerational redistribution. This would require not only a standard for the intended redistribution among the various generations; the macroeconomic repercussions of the various measures chosen would also have to be taken into account. While it is assumed in intergenerational burden calculations that there is no difference between reductions in expenditure and increases in receipts owing to the use of net payments, the actual effects probably differ



considerably. For example, it may be assumed in the event of a cut in transfers which affects the elderly and which has been announced well in advance that younger members of the population will increase their efforts to save. By contrast, higher taxes could be associated

⁹ If, for example, the expenditure ratio were reduced gradually by 1 percentage point annually starting from 1997, a permanent cut of just under 7 percentage points would ultimately be required.

Effects of alternative assumptions about economic trends on the distribution of burdens among different generations

Increase in productivity in %	Discounting factor in %		
	3	4	5
Intergenerational burden ratio 1			
1.5	2.4	2.3	2.3
2.0	2.5	2.4	2.3
2.5	2.8	2.4	2.3
Annual consolidation requirement as a percentage of GDP			
1.5	6.6	6.1	5.7
2.0	6.9	6.3	5.9
2.5	7.4	6.6	6.1

1 Lifetime tax rate applying to future generations in relation to that applying to those born in 1996.

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not only with a reduction in savings and in investment but could also lead to evasive action (such as resorting to a greater degree to the shadow economy).

Account must first be taken of the fact that the contribution rate to the statutory old-age pension scheme will not remain firmly fixed at the 1996 level but will be adjusted under existing legislation to allow for the expected sharp rise in expenditure resulting mainly from demographic trends. It is assumed here that the contribution rate will be raised to 28.5 % in 2030 in accordance with the lower variant of the forecast by Prognos (made on the basis of the legislation valid in 1992).¹⁰ Compared with the basic version, this variant results in a significant reduction in the intergenerational imbalance to a burden ratio

of 1.7; the additional burden on future generations is thereby reduced by 50 %. The relief that will be enjoyed by future generations is accompanied by greater net levies to be paid by present generations, with the additional financial burden being all the greater, the younger a person is. The lifetime tax rate for men (women) born in 1996 rises accordingly from approximately 28 % (16 %) to 34 ½ % (22 ½ %).

If the aim is to bring about an even distribution of the burdens between those born in the base year and future generations through tax increases, the tax burden existing in 1996 would have to be increased by 30 %, that is to say, the tax ratio would have to rise from just over 23 % of GDP to 30 % of GDP. If consolidation were to be achieved by specific forms of expenditure, by contrast, a reduction of approximately 40 % in spending on old age pensions (including civil servants' pensions) – to take only one example – would be necessary (see the table on page 29 for details). These examples already show that consolidation to that extent could not be restricted to single measures but would have to be broadly based.

Tax increases and expenditure cuts

Effects of increasing contribution rates to the statutory old-age pension scheme

¹⁰ See Prognos AG: Prognos-Gutachten 1995, Frankfurt/Main 1995 (Ed.: Verband Deutscher Rentenversicherungsträger). The report is based on the pension legislation of 1992 and therefore does not take into account the changes in payments approved in the current year. To simplify matters it has been assumed in our calculations that the contribution rate will rise lineally from the present level in 1997 to 28.5 % in the year 2030 and will then remain constant.

Conclusion

*Useful addition
to customary
fiscal policy
indicators*

Generally speaking, intergenerational burden calculations provide additional information to traditional fiscal policy indicators because they project fiscal conditions into the future. It is also possible to establish how the intergenerational distribution of burdens can be influenced by various fiscal policy measures. These calculations are therefore useful as an extension of the normal set of analytical instruments even if the results have to be interpreted with care owing to conceptual shortcomings and considerable recording and estimating problems. Above all, they must not be misinterpreted as an attempt to forecast. Despite all the reservations which may be cited on specific points, the intergenerational burden calculations presented here provide a quantitative insight into the extent of the problem in Germany.

*Increasing
informative
value through
regular use*

The informative value of generational accounting will increase considerably in future because comparable results over several years will become available as a result of regular use and therefore it will be possible to assess whether or not the fiscal policy pursued is suitable for reducing future burdens. Provided the special circumstances of the base year in question are taken into account, these statements on trends are more important for analysing fiscal policy than calculations on the absolute extent of redistribution or on the sustainability gap.

*Considerable
burden
on future
generations ...*

Given the reservations mentioned, the analyses undertaken here show that retaining the fiscal and socio-political conditions obtaining

Effects of possible consolidation measures on the net burden

DM thousand

Age at the end of 1996	Net burden in the base case	Adjustment of contributions to the pension insurance scheme	Reduction of old age pension payments by 38 % ¹	Increase of 30 % in taxes ¹
Men				
		Difference from the base		
0	417	94	86	138
10	506	88	94	148
20	590	74	104	161
30	439	44	103	134
40	195	22	113	104
50	-131	7	137	69
60	-401	0	166	34
70	-336	0	126	21
80	-244	0	80	11
90 and over	-58	0	16	1
Future generations	988	-130	-485	-433
Lifetime tax rate (%): Those born in 1996	28.2	34.5	34.0	37.5
Future generations	66.8	58.0	34.0	37.5
Burden ratio ²	2.4	1.7	1.0	1.0
Women				
		Difference from the base		
0	89	35	59	93
10	141	34	67	103
20	190	29	77	114
30	148	19	85	106
40	43	10	94	90
50	-146	3	116	68
60	-313	0	134	38
70	-300	0	107	22
80	-239	0	73	13
90 and over	-44	0	12	2
Future generations	211	-2	-64	-29
Lifetime tax rate (%): Those born in 1996	16.2	22.6	26.8	33.0
Future generations	38.4	38.0	26.8	33.0
Burden ratio ²	2.4	1.7	1.0	1.0

¹ Extent of the payment changes necessary to equalise the burden between present and future generations. —
² Lifetime tax rate applying to future generations in relation to that applying to those born in 1996.

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in 1996 would place oppressive burdens on future generations. It is true that some measures have already been taken to reduce this intergenerational redistribution. For example, payment cuts in old age pensions have been agreed which will have a large impact in the long term. The Federal Government is also at pains to restore the government spending ratio to the level prior to reunification by the year 2000.

*... emphasises
the urgent
need for
reforms
in fiscal
policy*

Nevertheless, the results obtained make it clear that further consolidation efforts are urgently necessary not only in the short and medium term but also – and more importantly – in view of long-term considerations. Another point that makes the solution more difficult is that there should be no increases in levies because, in view of their already exces-

sive level and their adverse effects on growth, they would increase the macroeconomic problems and therefore also fiscal policy problems even further. A “refinancing” of certain payments, which may be justified if certain areas of public finance are examined in isolation, evidently cannot provide relief for public finance when considered as a whole. Consequently, it is a permanent reduction in the government spending ratio that is required; in this context, it must be remembered that every delay in doing so can only increase the necessary changes in future even more. In view of the large burdens that are already in store for future generations, present consolidation measures must not be associated with the shift of financial problems on to the future.