The Economic and Social Review, Vol. 25, No. 4, July, 1994, pp. 303-320

Health Insurance Reform in The Netherlands: Assessing The Progressivity Consequences*

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Abstract: This paper examines the effects of the proposed Health Insurance Reform in The Netherlands on the incidence of the burden of health care finance. The focus of attention is on the measurement of the degree of progressivity of health care payments with respect to income. By means of an empirical simulation, we have examined how the regressiveness of the Dutch health care financing system would have been affected if the proposed health insurance reform had already been implemented in 1987. The regressiveness of the simulated distribution under various assumptions is then compared to the actual distribution of health care payments across income deciles in 1987. Since concern about the solidarity between publicly and privately insured in the current system was one of the prime motivations for proposing the reform, information on the likely distributional effects is highly relevant from a policy perspective.

I INTRODUCTION

During the 1980s several industrialised countries considered, proposed or implemented reforms of their health care systems (OECD, 1992). While most of these reforms were motivated by a desire to contain health care costs and improve efficiency, it is clear that many may have significant equity consequences. Indeed, the recognition of equity concerns may sometimes be

*This paper derives from the project "Equity in the Finance and Delivery of Health Care in Europe", which is partially funded by the European Community's Biomed programme (contract BMH1-CT92-608). We are also grateful for financial support to the Dutch Ministry of Health, and to the Dutch Central Bureau of Statistics for providing the data used, to Jan van Emmerik and Edwin Thieman for help with the computations, and to the Editor and two referees for helpful comments on an earlier version of the paper.

one of the driving forces behind such reforms, particularly in countries with a fragmented health care structure (Maynard and Hutton, 1992).

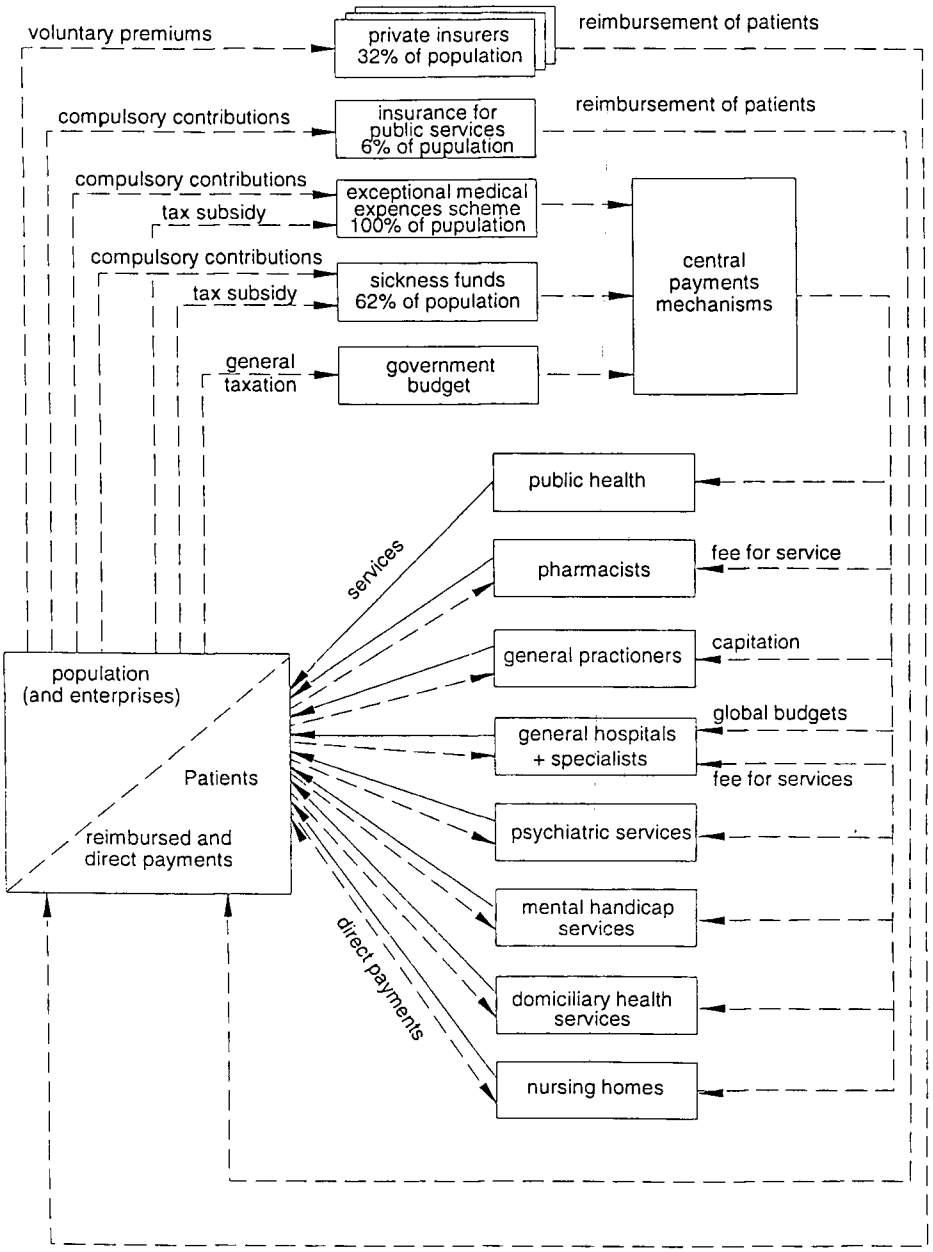
This paper examines the likely equity consequences of the recent Dutch Health Insurance Reform proposal — a reform package which has attracted a good deal of attention both inside and outside The Netherlands (cf. van de Ven, 1990, 1991; OECD, 1992). The reform involves a major change to the Dutch health care financing system, and although the reform may be expected to have consequences for the extent to which health care is *provided* equitably, our concern in this paper is with the implications of the reform for equity in health care *finance*. More specifically, our concern lies with the *progressivity* implications of the reform. Our methods are similar to those employed in a recent cross-country comparative study of health care financing systems (Wagstaff, *et al.*, 1993) and our analysis builds on an earlier attempt to simulate the effects of the Dutch reform package (van Doorslaer, *et al.*, 1991) by incorporating more realistic assumptions about behavioural responses to system changes and using more recent datasets.

The next two sections briefly outline the current Dutch health care financing system and the proposed reform. Section IV outlines the methodology used to measure the progressivity of health care finance. The next section — Section V — then examines the progressivity of the current Dutch health care financing system. Section VI then simulates the distribution of the health care financing burden under the reform proposal. The final section contains a brief discussion.

II THE CURRENT DUTCH HEALTH CARE FINANCING SYSTEM

Health care in The Netherlands is financed primarily out of social and private insurance — see Figure 1 — and is provided predominantly by private organisations operating in an environment of elaborate government regulation (cf. e.g. OECD, 1992). In 1987 social insurance accounted for 65.7 per cent of health care revenues and private insurance for 20.2 per cent. The remaining 14.1 per cent came from direct payments (7.5 per cent) and taxes (6.6 per cent) (cf. van Doorslaer, *et al.*, 1993).

Social insurance contributions are of two types. The first — the so-called AWBZ (Exceptional Medical Expenses Act) contribution — is a compulsory scheme for "catastrophic" health expenditures and covers the entire population. It pays mainly for long-term care in nursing homes, care received in psychiatric institutions and long spells in general hospitals. AWBZ premiums are payable by employees and the self-employed (pensioners and social security recipients are exempt) and are a fixed proportion of income up to a ceiling. They are paid by the employer in the case of employees.



Source: OECD, 1992.

Figure 1: *Financing Structure of Dutch Health Care, 1987*

The second type of social insurance contribution is paid to sickness funds to cover non-exceptional health care expenses. These contributions are compulsory for those employees with a wage below a certain level and for social security recipients and for the elderly with an income below the same threshold. In the case of employees, the contribution is split equally between the employee and the employer. Civil servants employed by local (provincial and municipal) governments are covered by an employment-specific statutory scheme. This scheme is also compulsory and contributions are also income-related up to a ceiling. It is therefore best viewed as social insurance. In 1987, 68 per cent of the Dutch population paid social insurance contributions for non-exceptional care.

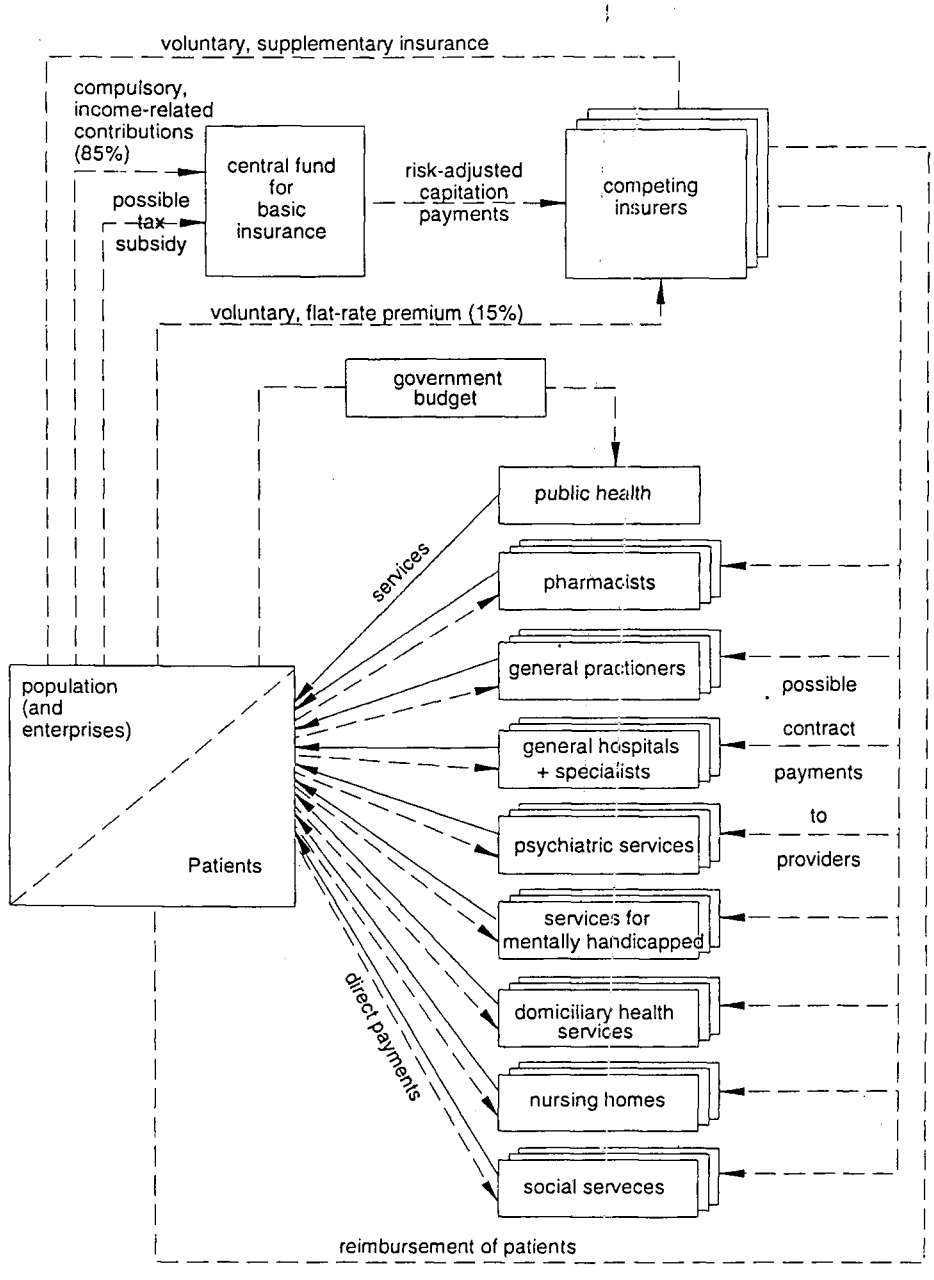
The remaining 32 per cent of the population — the self-employed, employees earning over a certain income limit, and persons aged over 65 and formerly in these categories — have the option of purchasing private insurance for non-exceptional health care risks from one of about 70 proprietary and non-profit insurance companies. Most individuals in these groups do take out such insurance. Premiums are assessed on an individual basis and may vary according to risk (e.g. according to age). The privately-insured often elect not to be covered for certain types of care and take out deductibles in return for a lower premium.

Direct health care payments by households can be supplementary to any of the above categories of insurance but are primarily paid by the privately insured with less than full coverage. The small proportion of revenues raised through general taxation is used *inter alia* to subsidise the social insurance schemes.

III THE PROPOSED DUTCH HEALTH INSURANCE REFORM

In 1986, the Dutch government appointed a committee, chaired by Wisse Dekker, a former industrialist, to advise on a revision of the structure and finance of the health care system. The results of the review were published in 1987. A year later the government published a White Paper (Ministry of Health, Welfare and Culture, 1988) in which it endorsed most of the recommendations of the committee (see e.g. van de Ven, 1990, 1991). The change of government in 1989 resulted in only a slight modification of the reform.

The proposed reform would do away with the distinction between exceptional and non-exceptional health care expenses and with the two tier structure for insurance cover for non-exceptional expenses. Instead *all* Dutch citizens would be required to purchase a single insurance policy covering about 95 per cent of expenses covered by the current public insurance package (van de Ven, 1991). Citizens could, if they wished, complement this



Source: Adaptation of Hurst, 1990.

Figure 2: *Post-reform Financing Structure of Dutch Health Care*

basic policy to obtain cover for items of expenditure excluded from the basic policy. The proposed scheme is illustrated in Figure 2.

A key feature of the reform is that rather than financing the purchase of health insurance themselves directly, citizens will in effect be issued with a voucher by the state, which might cover as much as 86 per cent of the cost of a typical policy. The remaining 14 per cent is paid directly by the individual concerned as a flat-rate premium to the insurer of his or her choice. A reduction of this flat-rate premium may be obtained in return for taking out a deducible amount (e.g. a 300 Dfl premium reduction in return for a Dfl 500 deductible). The value of the voucher will vary according to the risk status of the person concerned, with the elderly, for example, receiving more than the young. The voucher scheme will be financed by income-related premiums (a fixed percentage of income up to a ceiling with exemptions for certain categories), which will be collected by the tax authorities and then paid to a central health care financing fund. Insurance policies will be issued by sickness funds and private insurers (the distinction will become less clear, though sickness funds are likely to maintain their non-profit status) on a competitive basis. Insurers will receive payments from the central fund for each insured person (the amount varying, as indicated above, according to the insured person's risk status) and from the insured person directly. This flat-rate payment will vary with the number of insured persons in a family and with the presence of a deductible. Competition will be on price (i.e. on the flat-rate payment) and all insurers will be required to offer the basic insurance package and accept any applicant.

The consequences of the proposed reform for the overall degree of progressivity of health care financing are uncertain. On the one hand, the extension of the compulsory basic insurance with income-related payments may increase the relative contribution of the higher income groups. But on the other hand, there is concern about the effect of the flat-rate premiums for the lower income groups' relative contribution. If higher income groups also enjoy better health, they may be expected to be more likely to take out deductibles and/or to have lower out-of-pocket expenditures. We will examine the overall impact on progressivity of the implementation of the reform proposal under various assumptions about the demand for deductibles.

IV MEASUREMENT OF HEALTH CARE FINANCING PROGRESSIVITY

A number of indices are available for measuring progressivity (cf. e.g. Lambert, 1993). Here we employ the index proposed by Kakwani (1977). Very similar results are obtained throughout if Suits' (1977) index is used instead.

Kakwani's index -- applied to health care finance rather than taxation —

is illustrated in Figure 3. The curves labelled $g_{inc}(p)$ and $g_{pay}(p)$ are respectively the Lorenz curve for income prior to health care payments (i.e. pre-payment income) and the concentration curve for health care payments. The latter plots the cumulative proportions of the population (ranked according to pre-payment income as with $g_{inc}(p)$) against the cumulative proportion of health care payments. If payments are levied strictly in proportion to income, $g_{inc}(p)$ and $g_{pay}(p)$ the payment concentration curve and the Lorenz curve for pre-payment income coincide. If health care payments as a proportion of income rise with income (so that the financing system is progressive, $g_{pay}(p)$ lies outside $g_{inc}(p)$. The opposite is true if the financing system is regressive. The degree of progressivity can therefore be assessed by looking at the size of the area between $g_{inc}(p)$ and $g_{pay}(p)$. If G_{inc} is the Gini coefficient for pre-payment income, and C_{pay} is the concentration index for health care payments, Kakwani's index of progressivity, π_k, is defined as

$$\pi_k = C_{pay} - G_{inc}$$

which is twice the area between $g_{pay}(p)$ and $g_{inc}(p)$. If the financing system is progressive, as in Figure 3, π_k is positive. If, by contrast, the financing system is regressive, so that $g_{pay}(p)$ lies *above* $g_{inc}(p)$, π_k is negative. The value of π_k ranged from –2.0 (when all pre-payment income is concentrated in the hands of the richest person and the entire financing burden falls on someone else) to 1.0 (when pre-payment income is distributed equally and the entire financing burden falls on one person).

A useful property of Kakwani's index — like that of Suits (*op. cit.*) is that the overall index for a tax system consisting of two or more taxes is a weighted average of the indices for the individual taxes, where the weights are the proportions of each tax in total tax revenue (Suits, 1977). The same principle applies to health care finance, so that the degree of progressivity of a health care financing system depends on the proportion of total revenues raised from each source and on the degree of progressivity of each of these sources. Likewise, the progressivity implications of a health care financing reform such as that proposed in The Netherlands will depend on the extent of the implied changes in the financing mix and/or the progressivity of the various sources.

Another feature of Kakwani's index is worth mentioning. It is perfectly possible for a source of finance (or a tax) to be progressive (or regressive) at low income levels but regressive (or progressive) at high income levels. Suppose, for example, that pensioners are exempt from social insurance contributions and tend to be located in the lower income groups. Suppose too that contributions are proportional (assume for simplicity to income) but only

up to a ceiling. The exemption of pensioners makes the system progressive at low income levels (the bottom income groups will tend to pay a relatively small fraction of their income towards health care) but regressive at high income levels (as a person's income rises above the ceiling, the proportion of their income they pay towards health will fall). The result is that the payment concentration curve will cross from below the Lorenz curve for pre-payment income. Calculating Kakwani's index as the difference between C_{pay} and G_{inc} in such a case implies that the regressiveness at high incomes is allowed to offset — at least partially — the progressivity at low incomes. The result could, of course, be a zero value for the progressivity index.

V PROGRESSIVITY OF THE CURRENT HEALTH CARE FINANCING SYSTEM

Our empirical analysis is based on data taken from the 1987 *Household Expenditure Survey* conducted by the Dutch Central Bureau of Statistics (CBS). The progressivity of health care financing could be assessed on either an individual basis or a household basis. Here we focus on the latter. The sample size used includes 2,750 households.

We measure a household's command over resources — and hence "ability to pay" — by its pre-tax equivalent income.[1] The equivalence scale used was that developed by the Central Bureau of Statistics (CBS) and depends on the number of adults and children in the household and on the age of the eldest child (Schiepers, 1988). Income was calculated gross of employer contributions in order to facilitate comparisons with the post-reform financing system. One consequence of the proposed reform is that the employee becomes liable for *all* insurance contributions. To compensate, however, the employer will be required to increase the employee's take-home pay by whatever he was contributing on the worker's behalf to the two old social insurance schemes.

Health care payments were calculated on a household basis but were not equivalised. Direct payments and insurance premiums (to both sickness funds and private insurers) under the present system were recorded in the survey, but sickness fund premiums had to be adjusted (i.e. doubled) to take into account the employer contribution. AWBZ contributions for the self-employed were recorded in the survey, but contributions had to be estimated for employees, since these are paid by the employer and are therefore not included in the survey. Personal income taxes were included in the survey.

1. In retrospect it would probably have been better to have multiplied equivalent income by the number of persons in the household, though we are not alone in measuring a household's ability to pay by its equivalent income (cf. e.g. Aronson, Johnson and Lambert, 1994).

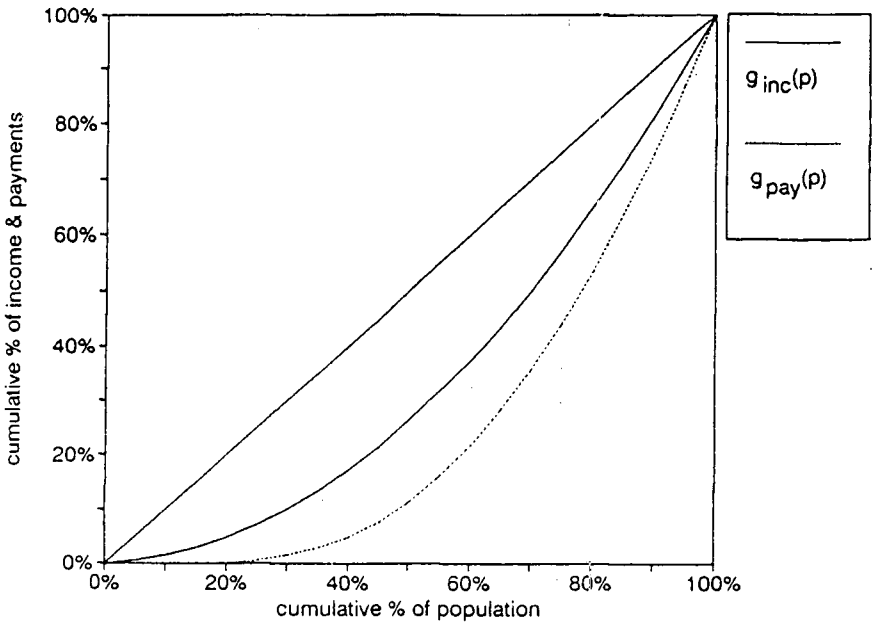


Figure 3: *Kakwani Index of Progressivity*

We have not attempted to allocate the indirect taxes and corporate income tax ourselves. Instead we have assumed that their distributions across gross income are similar to the distributions across net income reported by the Dutch Social and Cultural Planning Bureau (Sociaal en Cultureel Planbureau, 1981).[2]

We have assumed that all health insurance premiums and contributions are borne by the individual concerned. Thus we have assumed that AWBZ payments and sickness fund contributions made by employers on behalf of employees are borne by the employees in the form of lower wages, rather than by shareholders in the form of lower dividends or by consumers in the form of higher prices. We have also assumed that the AWBZ contributions and private insurance premiums paid by the self-employed are borne by them in the form of a lower income rather than by consumers. The distributions of indirect and corporate income tax we have used are derived on the assumption of full forward shifting. Although these assumptions are somewhat arbitrary, they are consistent with those made in much of the empirical literature on the progressivity of taxes and social insurance. Moreover, since it is *changes* to the financing system in which we are interested, the rightness

2. These distributions derive, in fact, from a different survey and a different year (1977). They are therefore only illustrative.

or wrongness of these assumptions is arguably less important than it would be if it were the progressivity of the system itself which was our main concern.

Table 1 and Figure 4 indicate the distributions of each source of finance across deciles of equivalent pre-tax income in 1987. As is evident from Figure 4, the concentration curve for insurance premiums (i.e. sickness fund and private insurance premiums combined) lies everywhere above the Lorenz curve for pre-tax income. This financing source is therefore unambiguously regressive. Indeed, as is clear from Table 1, with the exception of the two bottom deciles, the distribution of insurance premiums is fairly even across income deciles. The evenness at the top of the distribution stems from the fact that the relevant premiums are private insurance premiums, which are unrelated to income. The pattern elsewhere is presumably due to the fact that although sickness fund premiums are proportional to earnings up to the threshold level, what is being assessed here is the relationship between premiums and equivalent pre-tax income.

The concentration curve for AWBZ contributions crosses the Lorenz curve from below. This implies that AWBZ contributions are progressive at low income levels but regressive at high income levels. It is striking that the three deciles whose share of AWBZ contributions is less than their share of

Table 1: *Distribution of Current Dutch Health Care Financing Burden — 1987*

Income Decile	*Pre-tax Income* %	*Insur. Prems* %	*AWBZ Premiums* %	*Personal Income Tax* %	*Indirect Taxes* %	*Direct Payments* %	*Total Payments* %
Bottom	3.7	5.3	1.6	1.0	1.9	5.4	4.1
2nd	5.5	8.0	4.0	2.4	6.2	4.4	6.5
3rd	6.7	9.8	7.1	4.2	7.4	7.6	8.7
4th	7.7	9.8	8.3	5.7	8.4	9.0	9.2
5th	8.6	11.1	9.7	7.2	9.3	11.3	10.6
6th	9.6	10.7	10.8	8.5	10.2	10.9	10.7
7th	10.9	10.1	11.6	10.5	11.2	11.4	10.7
8th	12.4	11.3	13.2	12.3	12.4	11.5	11.9
9th	14.4	12.6	16.1	15.8	14.2	12.1	13.6
Top	20.4	11.3	17.6	32.4	18.8	16.4	14.1
Revenue share (%)		59.7	26.2	2.1	4.5	7.5	100.0
Gini/Conc. index	0.2531	0.0943	0.2695	0.4326	0.2424	0.1791	0.1602
Kakwani index		–0.1588	0.0164	0.1795	–0.0107	–0.0740	–0.0928

Note: Indices calculated by linear approximation.

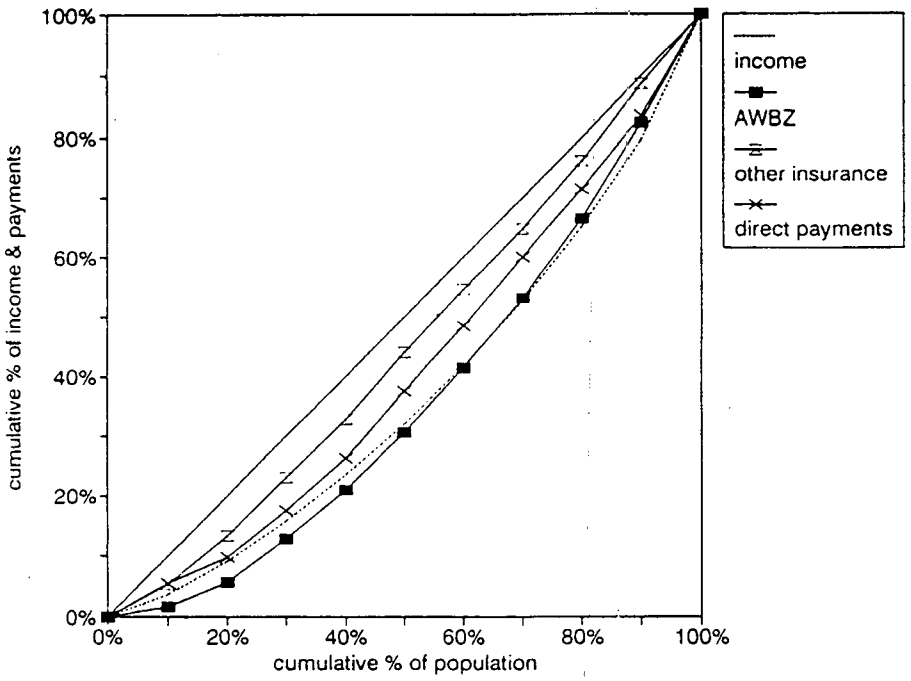


Figure 4: *Distribution of Health Care Financing Burden — The Netherlands, 1987*

pre-tax income are the two bottom deciles and the top decile. This is explained by two characteristics of the AWBZ contribution schedule: (i) the fact that pensioners and certain types of social security recipients are exempt from AWBZ contributions and that these groups tend to be concentrated in the bottom deciles, and (ii) the fact that there is a maximum AWBZ premium per wage earner. Overall, according to the Kakwani index, the AWBZ system is mildly progressive, reflecting the fact that the area to the left of the crossover point in Figure 4 is larger than the area to the right of the crossover point.

As is clear from Table 1, personal income tax is a progressive means of raising health care finance (the concentration curve lies everywhere below the Lorenz curve), but this accounts for a very small percentage of total revenues. Indirect taxes, by contrast, which here include corporate income tax, are regressive, given our incidence assumptions.

The final source of health care finance — direct payments — is unambiguously regressive, though less so than insurance premiums. Because of the lower degree of full insurance cover, the (mainly privately insured) top income deciles actually pay a larger share of out-of-pocket payments but the distribution is still regressive.

The final column of Table 1 shows the distribution of total health care payments — obtained as a weighted average of the preceding five columns using the revenue shares as weights. As is clear from Figure 6, the total payment concentration curve lies everywhere above the Lorenz curve for pre-tax income, indicating that overall the Dutch pre-reform health care financing system is regressive.

VI PROGRESSIVITY OF THE PROPOSED DUTCH HEALTH CARE FINANCING SYSTEM

The progressivity of the proposed Dutch HCFS for basic insurance cover will depend on the distribution across income groups of the following three sources of payment: (i) income-related premiums, (ii) flat-rate premiums and (iii) out-of-pocket payments.[3] We assume that total health care spending remains the same at Dfl 43.6 bn[4] and that 86 per cent of the total expenditures are financed from income-related contributions. The remaining 14 per cent are to be financed out of a mix of flat-rate premiums (per adult equivalent) and out-of-pocket expenses.

It can be verified that in order to raise the same revenue as at present, the average income-related premium would need to be about 12 per cent of income (see Janssen, *et al.*, 1990 for details). Calculating the distribution of these premiums across deciles of equivalent income is straightforward. The distribution of the other 14 per cent of payments is much more difficult to estimate, because it depends on the behaviour of households (a reduction in the flat-rate premium can be bought by accepting a deductible) and on the likely behaviour of health insurers (competition on the flat-rate premium will determine the size of this premium and the size of any deductibles). Van Puijenbroek, *et al.* (1992) have attempted to predict the distributions across income groups of flat-rate premiums, premium reductions, deductibles and direct payments under various assumptions. Our simulations concerning the progressivity consequences of the proposed reform package are based on their results.

With regard to flat-rate premiums, premium reductions and deductibles, we have focused the two extreme scenarios analysed by these authors — a so-called risk-neutral scenario with a minimum compulsory deductible and a so-called risk-averse scenario with the option of a deductible. In the first it is assumed that each household is required to take a minimum deductible but has the option of taking a higher deductible if they wish. Households are

3. We assume that tax subsidies under the new system are zero and we do not look at the distribution of supplementary insurance premiums for care not included in the basic cover.

4. This figure includes expenditures for social care and applies to 1987.

assumed to choose the higher deductible policy if their expected additional out-of-pocket payments are less than the premium reduction offered with the higher deductible policy. The premium reductions are assumed to be the same for everyone and are calculated on community rating principles. Obviously this procedure can only be viewed as a starting point, since the assumption of risk-neutrality — even with community rating — is untenable if people have the option of self-insuring. In the second scenario, van Puijenbroek, *et al.*, predict whether or not households opt for a deductible and the size of the deductible (if there is one) on the basis of regression equations estimated using persons who are currently privately insured. These individuals, whose high earnings disqualify them for sickness fund cover, currently have the opportunity to obtain a premium reduction by opting for a deductible. The actual choice made by such individuals in the 1989 *Health Interview Survey* has been used to obtain a demand function for deductibles for those who are currently privately insured. From this an income elasticity of demand for deductibles has been calculated. This was then used to predict what the likely demand for deductibles by those currently insured with the sickness funds would be if they were given the option (which they do not currently have) of choosing a deductible in exchange for a lower premium. There is no selection bias in the estimation of the regression equation (the choice to insure privately is not voluntary) but it *is* the case that observations are censored, since the equation could not be estimated for those currently insured with the sickness funds.

With regard to direct payments, Puijenbroek, *et al.*, used regression equations on the currently privately insured to estimate the effects of income and insurance cover on medical care utilisation. These equations were then used to obtain predicted values of utilisation and direct payments for *all* households, with the predicted insurance cover being used in the case of those currently insured with sickness funds.

Table 2 and Figure 5 represent the estimated distributions of the health care financing burden for the second of the two scenarios discussed above. The distributions are presented in quintiles rather than deciles, because van Puijenbroek, *et al.*, report quintile distributions only.[5] The concentration curve for income-related premiums cuts the Lorenz curve from below, indicating that these premiums are progressive at low incomes (due in part to some groups being exempt and in part to allowances) but regressive at higher income levels (due to the ceiling on contributions). According to Kakwani's index, income-related premiums are, on balance, regressive. The estimated

5. The Gini coefficient for pre-tax income and the concentration index for income-related premiums in Tables 2 and 3 have, however, been computed from the decile distributions rather than the quintile distributions.

distributions for flat-rate premiums (after allowing for any premium reduction due to the insured person accepting deductibles) and direct payments have been taken from van Puijenbroek, *et al.* (1993). They found the demand for deductibles to be income-elastic amongst the currently (higher income) privately-insured and extrapolated this income effect to the currently (lower income) sickness fund-insured in order to obtain a distribution of deductibles across the entire income distribution. Because higher income groups are expected to demand higher deductibles, they also receive larger premium reductions. This increases the regressivity of these payments. However, it can be seen that the mean (reduced) flat-rate premiums still rise with income. This is mainly a consequence of the fact that the higher income households tend to contain more people. The net result is that flat-rate premiums rise with income but less than proportionately — the relevant concentration curve lies everywhere above the Lorenz curve, so that flat-rate premiums are unambiguously regressive. Direct payments also rise with income, but not quite proportionately. This is a result of the income-elastic demand for deductibles, causing the higher income groups to take higher deductibles and therefore to pay more out-of-pocket when consuming health care. The distributions of total health care payments — shown in the final column of Table 2 and in Figure 6 — indicate that the post-reform financing system is still, on balance, regressive. However, as is apparent from Figure 6, the total payment concentration curve is moved everywhere downwards by the reform, implying that the reform unambiguously reduces the overall regressiveness of the system. Indeed, Figure 6 makes it clear that whilst the current system is unambiguously regressive, the concentration curve for the new system actually cuts the Lorenz curve from below, implying that the new system is progressive at low income levels.

Table 2: *Risk-averse Scenario with Voluntary Deductible*

Income Quintile	*Pre-tax Income* %	*Inc. Rel. Premium* %	*Flat Rate Premium* %	*Direct Payments* %	*Total Payments* %
Bottom	9.2	7.9	12.8	8.9	8.4
2nd	14.4	17.4	18.0	14.3	17.3
3rd	18.3	21.3	21.9	19.1	21.3
4th	23.3	23.9	24.9	25.5	24.1
5th	34.8	29.6	22.4	32.2	29.0
Revenue Share (%)		86.0	10.0	4.0	100.0
Gini/Conc. index	0.2531	0.2060	0.1043	0.2313	0.1915
Kakwani		–0.0471	–0.1488	–0.0218	–0.0616

Note: Indices calculated by linear approximation. Quintile ordinates used except for pre-tax income and income-related premiums, where decile ordinates were used.

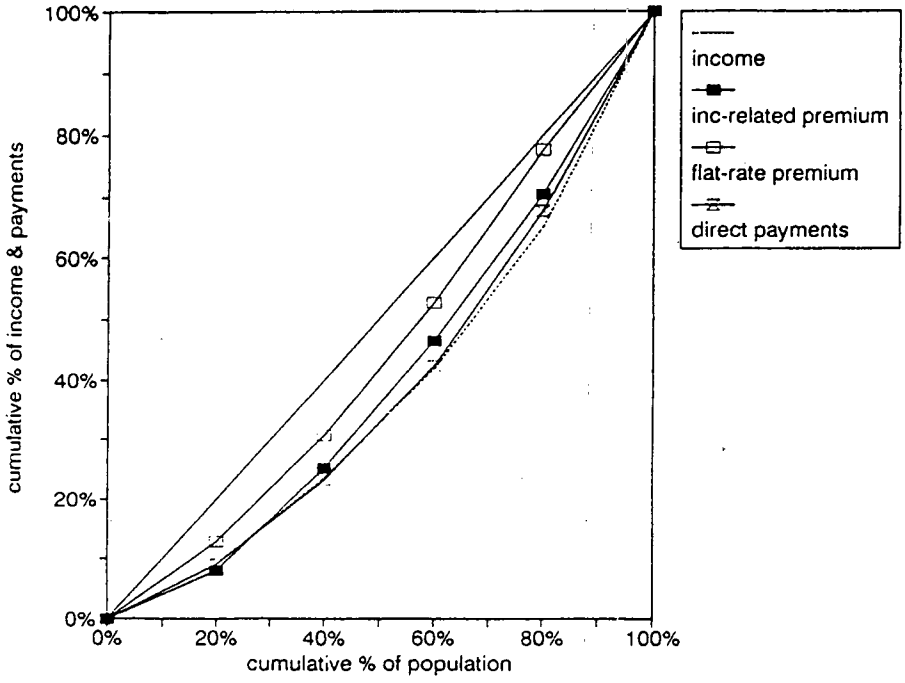


Figure 5: *Post-Reform — Risk Averse Scenario*

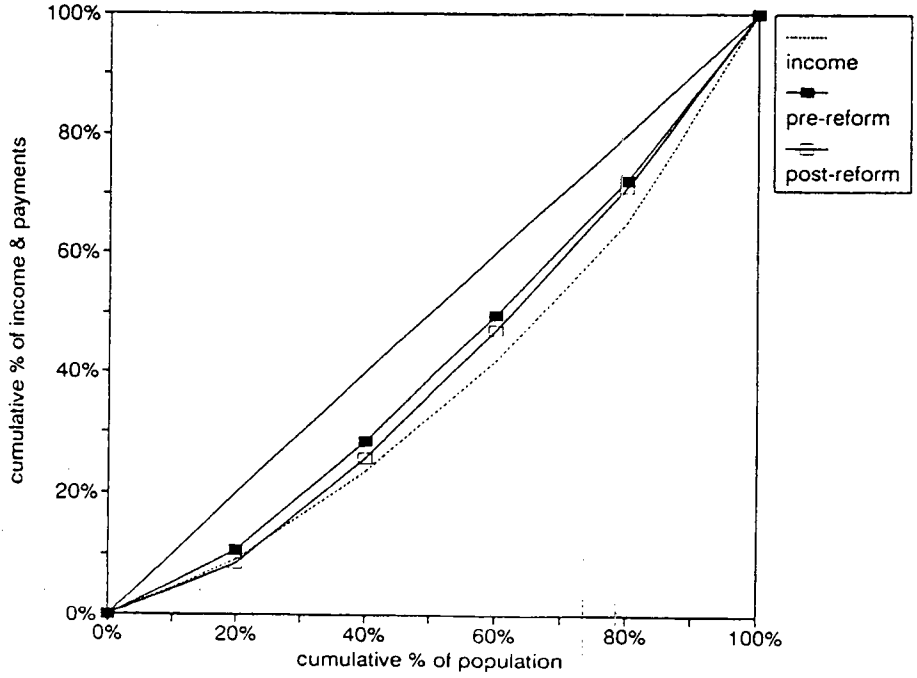


Figure 6: *Comparison of Pre-reform and Post-reform Distributions*

The overall results are hardly affected when the risk-neutral scenario with a compulsory deductible is substituted (see Table 3). The requirement to take a minimum deductible amount does affect the respective shares of premiums and direct payments substantially. The share of direct payments in total revenue is doubled compared to the previous scenario (now 8 per cent) whereas premiums are now only 6 per cent. Also the respective distributions have changed considerably: flat-rate premiums are now less regressive and direct payments much more regressive. But because their respective weights have also changed, the resulting overall distribution is only slightly less regressive than in the first scenario. This result seems counter-intuitive: the requirement to have a minimum deductible seems to make the system less rather than more regressive. This may be a consequence of the fact that the direct payments may deter the poor more from health care utilisation than the rich (cf. e.g. Newhouse, *et al.*, 1981). The question then becomes whether these direct payments only deter "frivolous" or "luxurious" consumption.

Table 3: *Risk Neutral Scenario with Compulsory Deductible*

Income Quintile	*Pre-tax Income* %	*Inc. Rel. Premium* %	*Flat Rate Premium* %	*Direct Payments* %	*Total Payments* %
Bottom	9.2	7.9	10.8	11.4	8.3
2nd	14.4	17.4	17.1	16.9	17.3
3rd	18.2	21.3	20.8	21.1	21.3
4th	23.3	23.9	25.0	25.4	24.1
5th	34.8	29.6	26.3	25.3	29.0
Revenue Share (%)		86.0	6.0	8.0	100.0
Gini/Conc. index	0.2531	0.2060	0.1556	0.1452	0.1928
Kakwani		–0.0471	–0.0975	–0.1079	–0.0603

VII CONCLUSIONS

The current Dutch health care financing system has two features which the proposed reform would do away with: separate cover for "catastrophic" and "non-catastrophic" expenses, and a provision for the well-off to make their own arrangements via private insurance for cover against "non-catastrophic" expenses. Under the proposed system cover for both types of expenses would be provided by the same insurance policy and everyone — irrespective of their income — would be required to pay contributions according to their income. Flat-rate premiums (required partly because the income-related premiums would not cover the full amount of expected costs) and out-of-pocket payments (attributable in part to deductibles) would be limited, together accounting for only about 14 per cent of total revenues.

Our results indicate that the overall effect of the reform would be to reduce the regressiveness of the present system but that the new system would still be regressive on balance. In part this is due to the fact that although demand for complementary insurance and deductibles is likely to rise with income, neither demand is likely to rise in proportion to income. But the regressiveness of the proposed system also stems from the fact that income-related premiums are to be proportional only up to a ceiling, so that even this source of finance will be regressive.

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