

FINANCING SOCIAL INSURANCE OUT OF PREMIUMS OR OUT OF INCOME TAX?

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1. SETTING OF THE PROBLEM.

Social insurance has developed considerably since the second world war, as may be seen from table I, where some data have been collected for various countries.

TABLE I.
EMPLOYERS' CONTRIBUTIONS FOR SOCIAL INSURANCE
in some European countries, Dec. 1950 and 1938.
Average percentage of wages⁽¹⁾

1. Social insurance proper	BELGIUM	FRANCE	NETHERL.	UNITED KINGDOM	WESTERN GERMANY
Old-age.....	3.2	} 9.1	1.2	} 2.6	5.0
Sickness.....	2.3		3.4		3.0
Unemployment.....	0.9	—	—	—	2.0
Accidents.....	2.6	2.5	1.5	0.2	3.0
Old-age pension.....	—	—	3.0	—	10.0 to 16
Family allowance.....	5.5	14.6	8.8 ⁽²⁾	—	—
Total (1) 1950.....	14.5	26.2	17.9	2.8	23.0 to 29.0
Total (1) 1938.....	5.2	10.5	4.9	1.8	17.6
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2. Holidays and festivals					
Holidays.....	5.0	6.9	6.0	2.0 to 4	5.3
Festivals.....	3.2	0.3	2.0	2.0	3.7
Total (2).....	8.2	7.2	8.0	4.0 to 6	9.0
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3. Sundry charges (3)					
	1.4	5.4	—	—	0.5 to 1.0
Total (1) — (3) 1950.....	24.1	38.8	25.9	6.8 to 8.8	32.5 to 39.0
Total (1) — (3) 1938.....	8.5	15.6	10.5	5.2	23.8

Sources : M^{lle} A. Devaux, «Comparaison des charges sociales dans quelques pays d'Europe occidentale», *Droit Social*, Mai 1952, No 329 a.s.o., Centraal Planbureau, Sociale verzekeringen en sociale lasten, (Dutch with English summary), The Hague 1952.

⁽¹⁾ Percentages are averages for those below and above wage limits set to certain types of insurance.

⁽²⁾ Incl. «vereveningsheffing».

The question to be discussed in this paper is the well known issue about financing social insurance. The usual scheme provides for contributions to be paid by workers, employers and the State. Of course, the contribution by the State indirectly means a contribution by the other groups, including those who do not belong to either workers or employers. For reasons of simplicity we shall distinguish only two groups, viz. the workers and all others who might be called independents, but will often be indicated as employers. The differences in emphasis upon the three components of contribution between the countries are rather large, as may also be seen from table I. In the United Kingdom e.g. direct contributions paid by the employers are very modest in comparison to what they are in a number of continental countries. In this paper I propose to reconsider, in particular, the choice between financing the employers' part out of premiums, which constitute a sort of indirect tax, and out of profits, be it directly or indirectly. Financing out of profits may be called indirect, if there is a large State contribution and a corresponding increase in income tax.

Some new light may be thrown on the well-known controversies on this subject by a recent report⁽²⁾ of the Dutch Social-Economic Council (Sociaal-Economische Raad). The Council was requested to advise the government on the general economic consequences of the new Dutch Act on unemployment insurance. They did so by studying these consequences for a number of alternative cases, which may also be used for our present topic.

2. THE PHILOSOPHY OF SOCIAL INSURANCE ; SHIFTING THE BURDEN.

One aspect of the problem is touched upon by the usual foundation given to social insurance proposals. Mostly, a certain philosophy is presented as to the necessity of distributing the burden among workers, employers and the State. In this philosophy, as a rule, the nominal contribution made by each of these groups is considered to be its sacrifice. This is, of course, not quite correct. It would only be correct if these contributions could not be shifted. Two questions here arise :

(a) Is it possible to impose the burden in such a way as to avoid shifting ?

(b) If not, what is the real burden ?

The contribution of the wage earner will not be shifted, if at the mo-

(2) Advies inzake de invøering van de wachtgeld-en werkloosheids-verzekering, Publicaties van de Sociaal-Economische Raad, 1951 No. 4.

ment of the introduction of the insurance wages are kept constant. In the short run therefore and under this proviso the workers' contribution is a real burden to him. In the long run it is less certain what happens exactly. Probably wages (excluding workers' Premiums) will in the future increase less than they would have done, should the insurance scheme not have been introduced. There will be a tendency in the mechanism of the labour market to regulate the total of wages and all premiums instead of wages alone. Only in so far as the worker experiences the payment of the premiums (both employer's and his own premiums) as a separate burden, e.g. forgets that the premiums mean a postponed income to himself, he will try to get higher wages—as far as the market permits. If he, however, remains aware of the character of the premiums just indicated there is no particular reason to ask for higher wages. Under this hypothesis it is actually true that the market will only determine the sum total of wages and premiums and, hence, that both premiums mean a real burden to the workers.

If the contribution of the employer is given the form of an employers' premium, it will be considered by him as a cost element and therefore simply be shifted on to the consumer, as far as the market permits. Al though certainly part of the premiums therefore will in the short run be borne by the employer, there is no guarantee that this is a large part, and in the long run, for the reason just indicated, it is probable that the employer does not bear any burden at all. For a real burden to be laid on the employer it must be in the form of a contribution out of profits, directly or indirectly. This contribution therefore represents a reason to choose the second alternative.

3. THE REAL BURDEN (SHORT RUN) IN THE CASE OF FINANCING BY PREMIUMS.

As we saw, the real burden in the short run is not equal to the premiums paid by the worker and the employer. In that case the question under (b) above arises, viz. how can we find the real burden? Evidently it is the decrease in real income suffered by each of the contributing parties. This change in real income not only depends on the direct payments made by these two groups, but in addition on the further repercussions of the scheme on the general economic position. It is these further repercussions that have been estimated by the above-mentioned report of the Social-Economic Council. First there is an increase in costs and, hence, in prices. This increase in prices has a negative effect on the volume of exports, and therefore on real national income and

employment. The report gives careful attention to these various repercussions and calculates them for a large number of alternative cases as to the price increases charged by the employers in response to the introduction of the insurance and the increase in the wage rates as a result of that introduction.

The calculations are based on a simplified model of the Dutch economy. This model, which has been described elsewhere⁽⁴⁾, may be shortly characterised in the following way. The Dutch economy is supposed to consist of two groups of people, workers and independents (employers and the liberal professions). It produces one final product, «the» national product, which is sold at home as well as abroad. The product is being produced with the help of imported goods, and there exists a linear relation between the volume of production on the one hand, and the quantity of labour on the other hand. Likewise the quantity of imports is linearly dependent on the volume of finished products, but in addition it depends on the difference between home and import prices. The foreign sales or exports of the product depend on the price demanded. Total gross receipts are distributed among imports, wages, indirect taxes and profits. Wages and profits are spent on direct taxes, consumer goods and investments according to two simple schemes.

The introduction of the unemployment insurance scheme means the creation of a fund into which the premiums accumulate and out of which benefits are paid to the unemployed. Two alternative hypotheses are made as to the investment policy of the fund : one being that the accumulating amounts are hoarded or «sterilized» the other that they are invested at the capital market and hence indirectly spent.

As said before, several alternative situations have been considered concerning the attitude of workers and employers vis-a-vis the rise in costs caused by the insurance scheme. These alternatives range from one extreme, where it is assumed that both workers and employers bear themselves the extra costs and hence do not demand any nominal income increase, to the other extreme where it is assumed that both workers and employers charge their premiums and the rise in the cost of living. In total 28 different cases have been considered, some of which have been reproduced below in table II. For fuller information the reader is referred to the original report. For four cases the consequences are given special consideration and here also the changes in real income are

(4) G. van Duyn, *The Consequences of the Introduction of Unemployment Insurance*, The Hague 1952.

calculated. Two of them (Nos 18 and 19) are included in our table. Thus it is found that in case 18, where the workers are compensated for the premiums they have to pay and the employers are compensated for the rise in wages and for the premiums they pay, the decrease of real income of the workers is 1,2% and the decrease in real income of the employers is 3,4%.

TABLE II.

REPERCUSSIONS OF THE DUTCH UNEMPLOYMENT INSURANCE
SCHEME ON THE GENERAL ECONOMIC SITUATION (*)

P=rise in cost of living, per cent

U=additional unemployment, per cent

D=additional deficit in balance of payments (mln. glds)
(—: surplus)

W=decrease in real workers' income, per cent

E=decrease in real employers' income, per cent

	Employers calculate wage increase and employers' premium in their prices, as far as the market permits.	Employers only calculate wage increase in their prices, as far as the market permits.
Workers receive only compensation for their premium	18) p = 0.9 W = -1.2 U = 2.0 E = -3.4 D = -90	26) p = 0.4 U = 0.6 D = -110
Workers receive only compensation for price rise	19) p = 0.4 W = -2.2 U = 1.6 E = -2.3 D = -110	27) p = 0.3 U = 1.0 D = -120
Workers do not receive any compensation	20) p = 0.3 U = 1.6 D = -110	28) p = -0.2 U = 1.1 D = -110

In case 19, on the other hand, where the workers are compensated for the rise in prices but not for the premiums they pay, whereas the employers behave in the same way as for case 18, the decrease in real income for the workers is -2,2% and for the employers—2,3% of their real income. In both cases premiums paid are 2,1% for both parties. These examples may be sufficient to show what divergencies may occur between premiums and real sacrifices. We may add that for both groups the distribution of the burden will not be even among members

(*) As estimated in the Report of the Social Economic Council. The cases reproduced here are based on the assumption that the accumulating fund will be sterilised.

of that group. In the case of the workers it will be the unemployed, and in the case of the employers the marginal firms that will have to bear most of the burden.

4. REPERCUSSIONS OF THE INSURANCE IN SECTION 3.

We already drew attention to the fact that quite apart from the intention of the legislator any insurance scheme will have certain general economic repercussions not always realised in advance. It is quite evident that these repercussions, which we already partly discussed in section 3, should also influence our choice. In this section I propose to discuss how the two alternative methods under consideration compare in this respect. We are able to do so, since the report also investigates the repercussions in cases where employers would not in any way calculate their premiums in the prices they charge. This evidently means that they would pay them out of their profits. As rightly stressed by the report this will not occur in reality, except when there would be a complete price control.

Exactly the same general repercussions would make themselves felt, however, if the State were to finance the employers' portion out of income tax revenue. In detail the repercussions will be different since the incidence of income tax upon the various individuals may be different from the contributions they would have to make under the scheme. It is interesting to compare a few cases shown in the report (of table II). From this table we see that the consequences of the second alternative of financing (cases 26, 27 and 28) is favourable for employment. With the financing out of premiums unemployment of 2% is expected (case 18), as against only 0.6% in the case of financing out of income tax (case 26). Both these cases relate to the assumptions, with regard to workers, that they receive compensation for their premiums. If they do not get compensation for their premiums, but only for the price rise (cases 19 and 27), or if they get no compensation at all (cases 20 and 28), similar results are found, though less pronounced.

Likewise the consequences for the balance of payments seem to be slightly better, but here the difference is very small and hardly significant. We have chosen for our illustration the cases where the unemployment fund, to be accumulated under the scheme, would be sterilised. It is quite evident that for the case, where no sterilisation would take place, the consequences will be different, but the same conclusion is reached as to the comparison between our two alternative methods of financing

The reasons for the differences are obvious. In the cases of financing out of income tax the «indirect tax character» of the scheme is reduced and the competitive power of the nation under consideration is maintained and not weakened by the scheme. The above figures only relate to a scheme for which the total employers' premiums amounted to 2% of the wages. Since the total burden of the employers' premiums is of the order of magnitude of about 20% in Holland, the effect of the second alternative on the employment situation—were it applied to all social insurance—would be quite considerable and of the order of magnitude of 5–10 %.

5. CONCLUSIONS.

From the foregoing analysis it would seem that the following conclusions may be drawn as to the real merits of the second alternative, i.e. financing the employers' contribution out of income tax revenue. The following advantages may be considered :

(1) it reduces the possibilities of shifting the burden that the legislator wants to impose on the employers as a group ;

(2) its repercussions on the volume of employment and production are more favourable.

As disadvantages we may add two aspects, not yet discussed, but which must certainly be considered :

(3) the burden will be laid to a larger extent on the very efficient firms, since they contribute comparatively more to income tax receipt than do the less efficient ones ;

(4) as far as State expenditure is less efficiently scrutinised with regard to its efficacy, the danger exists that social insurance might outgrow its optimum size.

The comparative importance of these arguments will change from one situation to another. In times when unemployment becomes a major problem argument (2) grows in importance. Our figures show that the dimensions of the favourable effect on employment of our second alternative should not be underestimated.

The Hague, Central Planning
Bureau of the Government