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WAGE SUPPLEMENTS THROUGH COLLECTIVE
AGREEMENT OR STATUTORY REQUIRE-
MENT? **

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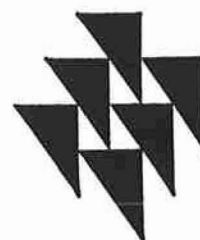
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Abstract

Wage supplements in the form of private fringe benefits and statutory contributions to social welfare account for around 25 per cent of the typical firm's total labour costs throughout OECD countries. Yet the relative emphasis on private and statutory payments differs from country to country. For example, the ratio of statutory contributions to private fringes (excluding holiday payments) was 5.0 in the FRG compared to 0.9 in the USA in 1981. This paper critically assesses the economic arguments for and against both forms of non-wage payment. On the private side, the discussion concentrates on human capital and union median voter explanations for private fringe payments. Attention is also given to the implications of favourable corporate and individual tax concessions with respect both to the demand for private fringes and to the evaluation of their human capital effects. On the statutory side, social security contributions are discussed in relation to general social welfare, government employment policy and employer-union relations. As part of the general assessment, it is argued that governments should provide a fiscal framework in this area which is designed to stimulate more effective individual and firm-level choice between equivalent forms of private and statutory supplementary compensation.

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Wage Supplements Through Collective Agreement
Or Statutory Requirement?¹

1 Introduction

Supplements to wages in the form of employer expenditures on health and pension provisions as well as other welfare benefits can usefully be divided into two categories. One element is largely endogenous in that the employer, either unilaterally or through collective agreement, plays an important role in determining the level of contribution. The other is exogenously imposed on firms through statutory legislation and usually takes the form of payroll taxes which are intended to finance state welfare provision. While there are inevitable differences of emphasis in the coverage of private and state supplements, there are nonetheless major overlapping domains. In particular, a substantial proportion of both private and state benefit provides for old age pension and health insurance cover. It is quite clear, however, that the relative importance of private and state systems tends to vary from country to country and this interesting detail provides the main motivation for the present paper.

The essential issue raised is as follows. Given that private and statutory wage supplements act in large part as potential substitutes for one another, do the economic arguments lend support to more concentration on one rather than the other means of payment? It is argued that it is difficult to make firm a priori judgements. Notwithstanding, there would appear to be some case for allowing greater individual freedom to opt out of state-run schemes and to obtain equivalent private cover. At the same time there are compelling reasons for imposing greater controls on and limits to tax concessions to private fringe benefits.

Throughout the OECD, the three most important wage supplements are comprised of private fringe benefits², statutory social welfare

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1. I am grateful to Felix FitzRoy and Kornelius Kraft for comments on an earlier draft of this paper. All errors and misconceptions are my own.
 2. The most important costs here are contributions to pension, life and health insurance provision while smaller items include contributions to redundancy schemes, guaranteed wages and family allowances.

contributions¹ and payments for days not worked². In most countries, the three types of supplement together account for between 20 and 35 per cent of total labour costs. Hart (1984a) provides detailed breakdowns of these and other supplements in four countries - Japan, FRG, UK and USA - between 1966 and 1981. In all four cases, statutory social welfare contributions as a proportion of total labour costs have grown significantly as have the relative growth rates of payments for days not worked. In the USA, the importance of private fringe benefits within total labour compensation has grown throughout the period and the position is similar in the UK up to 1978, from which time it levels off. Noticeably, this latter picture contrasts with FRG where private fringes have maintained a stable, relatively low, proportion of total labour costs³. Indeed, in general, inter-country differences in the ratios are most starkly displayed when comparing the FRG on the one hand and the remaining three countries on the other. For example, at the end of the period, private fringes in Japan, UK and USA constituted between 40 and 45 per cent of total social welfare costs (ie. private fringes + statutory social welfare contributions). In the FRG, statutory contributions were five times greater than private fringes and, as a proportion of total labour costs, they were roughly double the size of each of the other countries⁴.

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1. The two most important statutory employer contributions concern health insurance and old age pensions but other costs include unemployment insurance and work injury contributions.
 2. The principal example of an exogenously imposed cost within this category is nonwork payments with respect to statutory public holidays. Many other holiday entitlements, on the other hand, result from collective agreements.
 3. For example, between 1973 and 1981, private fringes as a proportion of total labour costs grew from 4.1 to 6.2 per cent in the UK, from 7.4 per cent to 8.9 per cent in the USA whereas in FRG, they remained fairly constant at around 3.5 per cent.
 4. The ratio of total social welfare costs to total labour costs in FRG in 1981 was 20 per cent, about 3 percentage points higher than in the UK and USA. (Japan figures not available).

The differences are not trivial and the question naturally arises as to whether or not countries with a larger emphasis on statutory contributions within total supplementary wage benefits may suffer relative economic costs compared to more "laissez-faire" economies. For instance, there is a growing economics literature that seeks to analyse why firms, voluntarily or through collective bargaining, pay fringe benefits and which purports to show consistency with rational maximising, or joint-maximising, behaviour. It may appear to follow that if firms are statutorily required to pay significant supplements to their employees then this may prevent the attainment of optimum portfolio mixes of private wage supplements. One possible contrary position, however, may run as follows. Policies designed to limit the state's involvement in social welfare provision may entail more general welfare costs. A significant proportion of individuals are not in a position either to receive or to negotiate adequate levels of private fringes and in these cases statutory schemes may provide a better alternative than trying to purchase equivalent annuities on the private market.

Four other details concerning the composition and distribution of wage supplements are worth recording since they are all pertinent to the subsequent discussion. First, although it is difficult to obtain precise estimates, a very large proportion of collectively agreed supplements contain significant elements of deferred entitlements. An obvious example is that of a private nonvesting pension plan that is designed to reduce turnover costs by penalising employees who quit their job during some pre-specified period. Second, private supplements vary positively with skill level. Taking the distinction between manual and non-manual workers as crude proxies for skill then, in 1981, the UK non-manual ratio of private fringes to total compensation (8.8 per cent) was 1.6 times larger than that for non-manual workers (5.5 per cent); in FRG it was 2.0 times higher (5.5 per cent compared to 2.7 per cent). Third, private fringes vary positively with firm size as measured by the number of employees; evidence for Japan, UK and FRG can be found in Hart (1984a) and, for the USA, in Woodbury (1983). Fourth, private fringes are significantly higher in the union compared to the non-union sector (see Mitchell, 1980).

The structure of the paper is as follows. In Section 2, a critical review is undertaken of varying economic explanations of why firms pay private wage supplements. The explanations emphasise optimising goals of firms and trade unions and they are summarised under three main headings: human capital, agency and median voter models. Other reasons for the payment of private fringes, which often serve to obfuscate their optimising role, are discussed in Section 3. Particular importance here is attached to the generous tax concessions available to fringe benefits and contributions. Arguments are then assessed, in Section 4, which appear to lend support for government intervention within the area of wage supplements. Statutory contributions provide governments with a possible means of improving social welfare, attaining desirable labour market policy goals, enhancing economic efficiency through a reduction in industrial conflict and counteracting monopolistic union influences. Finally, in Section 5, a fiscal framework designed to achieve a more optimum balance between private and statutory provision is suggested.

2 Private Wage Supplements And Economic Optimisation

A broad body of literature has attempted to explain the growth of private wage supplements in terms of economic optimising objectives by firms and trades unions. Particular attention has been given to supplements which involve significant elements of deferred compensation.

(a) Human capital and "agency" approaches

From Oi (1962) and Becker (1964) onwards, mainstream human capital theory has emphasised the benefits to the employer of sharing the quasi-rent arising from productivity gains to specific labour investments with their workforce partly in the form of deferred compensation. In order to realise their full share of the rent, workers are obliged to stay with the firm for a relatively long period. This strategy minimises the frequency of quits¹ and, therefore

1. See Pencavel (1972) for empirical evidence of a negative association between labour turnover in general (ie. both quits and layoffs) and the firm's level of specific human capital investments.

the user cost of labour thereby increasing the expected return to the investments.

This type of approach to the explanation of deferred fringe payments fits in well with more recent developments in this area by Okun (1981) (see also Salop, 1973). Given significant levels of initial specific human capital investments ("toll" payments in Okun's terminology) it seems natural for the optimising firm to evolve a seniority based wages system. The firm may attempt to shift a part of the initial investment on to new recruits by paying a lower wage over some initial period. The incentive for recruits to accept this state of affairs would be an agreement by the firm to pay higher wages/deferred fringes later which, given long enough job tenure, would allow workers to recoup their share of the returns to the investment. At any point in time, this latter wage would lie between the marginal value product of established workers and their opportunity wage or the wage earned if they were new recruits elsewhere. In a contractual arrangement¹ under this sort of dual wage structure, the main signal from the firm to a worker concerning its long-term employment intentions is its willingness to make the initial specific investments. Workers for their part signal intentions of long job tenure by accepting the initial lower wage. If deferred fringes do feature prominently in this type of wages structure then, given that the structure itself is designed to protect specific investments, this sort of reasoning fits in well with the evidence that there is a positive association between the levels of private fringe compensation and worker skill.

Of course, deferred private fringes provide simply one means of attaining a seniority-based wages structure. Indeed, much of the literature discusses this type of compensation system in terms of direct wage increments rather than fringes. The question naturally arises as to whether fringes provide a better means of providing higher seniority compensation compared to an incremental wage system. Ignoring the possibilities of preferential tax

1. Since there would be potential problems associated with inflexibility and moral hazard under an explicit contractual agreement, a more implicit arrangement may well be more suitable to both sides.

treatment (see Section 3), it is possible to argue that fringes may constitute a relatively costly form of compensation. For example, within the firm itself, many types of fringe payment are more "visible" than comparable direct remuneration. Defined pension plans, for example, guarantee a specified amount of pension upon retirement. Where this type of commitment represents a relatively high proportion of total labour costs, it may be difficult for firms to adjust compensation paths in line with unanticipated fluctuations in product demand. Further, irrespective of unanticipated events, there is evidence that defined pension plans per se represent a relatively expensive form of compensation. Barnow and Ehrenberg (1979) show that employers' net pension contributions per employee increase with workers' age and length of service, both in absolute terms and as a percentage of direct wage costs. One way of curbing such cost rises would be for the employer to encourage higher turnover and/or to pay lower direct wages among senior workers. Such strategies involve additional potential costs, however, since anticipation by workers may well result in earlier quits or collective resistance. A more general point relates to the fact that the costs of administering health, pension and other private supplements, which often involve complicated rules and conditions, are probably considerably higher than those connected with direct wage and bonus payments.

Much of the foregoing perhaps relates most closely to the relationship between deferred fringe benefit compensation and initial specific investment. Of course, a great deal of specific human capital is acquired on-the-job and this may involve a somewhat different emphasis towards explaining deferred fringes. In this respect, fringes may provide a more contemporaneous means of paying the workers's share of the quasi-rent since productivity would be expected to rise by length of service. Unfortunately, there is some evidence that productivity grows less than proportionately to earnings by length of service. For example, Medoff and Abraham (1980) find that the earnings and productivity profiles by length of service for white collar workers within certain grade levels in two large USA corporations either display no association or a negative association between experience and

relative performance. Experience and relative earnings, on the other hand, are found to exhibit a strong positive association.

It is not all clear that, under these somewhat traditional human capital lines of approach, the firm is more likely to favour deferred fringe payments rather than seniority wages as a means of reducing turnover costs. A generalisation of the arguments, however, following the approach suggested by Hashimoto (1979 and 1981), does perhaps provide greater substance to this type of private fringe benefit explanation. One major deficiency of much of the human capital literature has been a failure to integrate into the analysis the problems associated with uncertainty on the part of the firm and its workforce over ascertaining the future stream of returns to specific investments. Information costs are probably both high and asymmetrical. They involve obtaining estimates, for the firm and its competitors, of changes in technological innovation, market conditions, worker aptitudes in acquiring on-the-job skills and so on. There may be great incentives to both employers and workers (see also Okun, 1981, pp. 83-7) to misinform one another as to their own estimates of the returns in an endeavour to increase their share of the quasi-rent. One means of reducing "the costs stemming from distrust," using Okun's terminology, may be for both sides to seek to minimise uncertainty by agreeing to deferred fringe payments as an integral part of a quasi-long term contract. Explicit commitments of this form may provide signals from one side to the other of serious long-term intentions despite the possibilities of future disappointments over actual as compared to expected returns. Their joint position could be optimised by choosing a proportion of deferred payments within total compensation the marginal cost of which is equal to the marginal cost of improving their mutually agreed information about expected returns. While this approach perhaps underpins some emphasis on fringe benefit agreements, it would nonetheless appear to fall well short of squaring with the Medoff and Abraham findings concerning earnings and productivity profiles.

Perhaps the observed relationship between the future paths of productivity and earnings can be better reconciled with private wage supplements in the light of a somewhat different perspective. Firms may offer the possibilities of wage supplements at later stages of work tenure as a productivity incentive for new recruits and younger

workers. If workers are paid less than their marginal products in their earlier years with the firm and greater than their marginal products at a later stage, then there is an incentive for them to avoid premature dismissal or delayed promotion by exercising high productive effort. This way of approaching the problem has been examined theoretically by Lazear (1981) through developments of ideas from the so-called agency literature (see Becker and Stigler, 1974). Again, however, this line of reasoning would appear to stop well short of explaining why deferred fringes in particular would form the basis of such a payments system. Firms are likely to gain more flexibility of action by emphasising promotional and/or progressively rising direct wage compensation rather than deferred fringes.

In fact, quite plausible arguments can be advanced on the basis of empirical findings to suggest that the observed relationship between fringe benefits and the age of workers is such that fringe compensation may be one of the reasons for and not a part of a seniority-based compensation. In a study of wage and non-wage benefits in the USA, Woodbury (1983) observes a negative relationship between the proportion of workers within the total labour force aged between 16 and 34 and the wage share of total compensation. His main explanation for this is that some fringe benefits, and especially health and life insurance, constitute fixed costs to the firm and so, being independent of wage levels, form a relatively high proportion of young workers' total compensation given their relatively low wages. In this event, such fringe payments may act comparably to initial specific investments and, therefore, partly account for the wage profile. Schiller and Weiss (1980) find support for this type of wage/fringe relationship in a study of 133 large USA firms. They conclude that, "younger workers bear a disproportionate share in the cost (in terms of reduced wages) of improved (private) retirement benefits." (p. 537).

(b) Collective bargaining and the median voter

Much recent work has been undertaken to show why unions may also be expected to bargain for significant levels of private wage supplements within total compensation. For example, Freeman (1981) develops his arguments in terms of the supply price of fringe benefits. This is measured as the wage that would be foregone by an

employee in exchange for a desired increase in the proportion of fringes within a time unit of total compensation. The higher the firm perceives the supply price to be, then the greater the incentive to increase the share of fringes within total compensation. Freeman argues that, in general, unions would be expected to increase this supply price above that of equivalent non-union members. Unions are seen essentially as political institutions with the prime objective of maximising the number of "votes" gained from their members. Voting, or paying union dues, is a recurrent activity and accordingly unions are most likely to link their political objectives to the aspirations of those workers with relatively long expected lengths of stay within the firm. On the average, such median voters will be older workers since they have the longest expected rates of job tenure (see Hall, 1982). Not only is there evidence that such workers exhibit a greater preference for fringes anyway (Nealey, 1963) but they also stand to gain relative to other workers if their propensity to remain in a job is rewarded by fringes in the form of deferred payments.

The hypothesis that there will be more emphasis on fringe benefit agreements in unionised as opposed to non-unionised firms with a resulting high proportion of total compensation in the form of fringes would appear to be strongly supported in the econometric work of Freeman (1981) and Woodbury (1983) and in other empirical evidence presented by Lester (1967)¹.

Irrespective of the preferences and motives of the median voter, there would appear to be marked advantages for individual workers who, in any case, show preferences for significant fringe compensation to negotiate fringe benefits by combining within a union. The information costs to any given individual involved in estimating the expected future yields of pension plans, life

1. It is worth noting at this point that the apparent ability of unions to establish, on the average, higher fringe payments than workers in comparable non-unionised establishments has potentially serious implications for the extensive literature which has concentrated on measuring the impact of unions on direct wage compensation. At best, such work greatly underestimates union effects on total compensation and, at worst, it involves serious specification errors given possible demand - and supply-side endogeneity between wage and fringe changes.

insurance etc., in order to assemble an optimal portfolio of benefits, may be prohibitively high. Combining collectively, through a union, to buy information is a far more feasible proposition. Moreover, such collective action may help to limit the possibilities for the firm to extract some of the workers' surplus, that is the gap between optimum and minimum acceptable fringe packages.

While these arguments may help to explain why unions show a relative preference for fringe benefit compensation, they stop short at providing reasons for believing that positive economic returns may also be achieved. At least two additional possibilities are of interest in this direction. First, if firms themselves perceive higher returns to human capital investments through paying deferred fringes then, by enforcing seniority rights, unions may enable the firm to defer more compensation without increasing the risk to workers. Secondly, firms may be relatively compliant with union demands for fringes partly in recognition of the net returns provided by unionisation itself. Two, somewhat contrasting, examples of such returns are provided by the "collective voice/institutional response" literature (e.g. Freeman and Medoff, 1979) and the work of Duncan and Stafford (1980) who concentrate on work environment.

3 Other Influences On Private Wage Supplements

Non-unionised firms also pay substantial fringe benefits (Leigh, 1981) and there is strong evidence that both firms and individuals show preferences for this form of compensation for reasons which lie outside the foregoing models. The most obvious of these is the fact that, in many countries, several important private wage supplements are taxed, at both individual and corporate levels, at relatively low marginal rates, if at all¹. This sort of relative tax advantage would be expected to exhibit itself in high income

1. Often, under privately funded pension and related schemes, individuals receive tax relief with respect to their own contributions while the employer's contributions are not included as taxable income of the employee. Moreover, the funds are either exempted from income and capital gains taxes or incur relatively low marginal tax rates.

elasticities of demand for fringes as income growth moves workers into higher marginal tax brackets. Woodbury (1983) obtains elasticities of substitution between wages and fringes¹ which are well in excess of unity and argues that (see p. 180) it is reasonable to expect on the basis of this that rises in personal marginal tax rates would increase the share of fringes within total compensation. A related effect is that this share would be expected to be a positive function of the age composition of the workforce².

If relative tax advantage is an important consideration for receiving deferred compensation, a conclusion hard to avoid from some of the more elaborate econometric studies, then the economic consequences of reduced turnover may differ substantially from the usual human capital story. Low labour mobility may be encouraged by tax considerations in certain sectors of the economy when general economic efficiency would have been enhanced by a greater movement of workers elsewhere. For example, Mitchell (1983) argues that the cost of changing jobs due to an anticipated loss of nonvested or partly vested pensions may account for the propensity of U.S. workers to remain within declining industries when better long-run (non-fringe) opportunities are available elsewhere.

Moreover, irrespective of union influences, the individual has other incentives to acquire fringe benefits through firm-designed schemes. Insurance and other benefits bought through the firm may be cheaper than equivalent purchases on the open market due to the availability of group discounts. This sort of advantage would appear to be positively related to firm size. As pointed out by Freeman (1981), large firms not only can spread the fixed costs of implementing and running deferred compensation schemes but also can

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1. This finding is particularly strong in the case of wages and retirement benefits.
 2. Some caution should be exercised here, however. Lester (1967) reports substantial growth in health and life insurance relative to wages in US company plans from 1944 to the mid 1960's. This growth would appear to be primarily functionally related to the growth of wages per se rather than the movement into higher marginal tax brackets.

expect to pay lower per worker fees for management of the various funds. Further, the longer job tenure in larger firms due to greater possibilities for internal mobility should provide more encouragement as to the worth-whileness of instigating and developing schemes. This kind of reasoning is clearly in line with the observations, referred to in Section 1, that the fringe ratio is positively associated with firm size. Notwithstanding scale-economies, however, Lester argues that, to many workers, the very fact that the firm takes over the individual need to search for suitable insurance cover, to accumulate funds to meet periodic premium payments and to process the necessary paper work provides in itself considerable advantages. "The automatic character, convenience, and security of a company program are attractive features to persons on hourly pay" (Lester, p. 490).

Not only do tax and scale considerations provide alternative motivations for firms and workers to show preferences for private wage supplements in the form of certain types of fringe benefits, but also they serve, incidentally, to complicate the evaluation of evidence relating to the human capital model. The central role of private wage supplements in human capital theory, especially those involving deferred increments, is to reduce the turnover rates, and therefore the turnover costs, of those labour units endowed with relatively high levels of specific investments. Unfortunately, very little direct data are available on turnover costs and so most analysts have resorted to using proxy measures. The three most commonly used are (i) worker skill differentials, (ii) turnover rates and (iii) earnings rates. Due to greater possibilities of internal mobility in larger firms, turnover rates would be expected to be negatively related to firm size and specific investments positively related. Therefore, the problem arises with the first two proxies of determining to what degree they reflect the "minimising turnover cost" explanation for paying fringes as opposed to fringe benefit purchase due to scale economies¹. As for the third, and crudest, proxy, it has already been noted that the growth of this

1. See Rice (1966) for a further discussion of this point.

variable may lead to fringe-wage substitution for taxation and other reasons. In the absence of direct turnover cost data, therefore, it is clear that the use of proxy measures can lead both to serious estimation problems and to misleading policy evaluation.

4 Statutory Wage Supplements

In most OECD countries, statutory social welfare provision is financed partly by employers' contributions and, in the absence of full tax shifting (see below), provides another form of wage supplement. Apart from a few exceptional cases, such as the UK, the main structural foundation of Western countries programmes was laid down during the Great Depression. Feldstein (1977a) highlights two broad design features of current programmes that were specifically drawn up as a reaction to the experience of that time and, moreover, that reflected contemporaneous changes in economic orthodoxy. First, the schemes were designed to provide a substitute for private saving given that the depression severely reduced the lifetime savings of many families. The risks of this happening in the future would be reduced in the sense that important elements in the motives behind individual saving, such as against the risk of long illness, industrial injury or unemployment as well as to provide income for retirement, would be effectively removed. Second, within a climate of both high and long term unemployment, benefits to the retired and the unemployed would have the beneficial results of replacing lost savings and stimulating consumption which, through well known Keynesian channels, would eventually filter through into new job creation.

In the following, some of the economic arguments for and against significant levels of statutory wage supplements relative to total labour compensation are reviewed.

(a) Efficiency gains and fiscal advantages

The continued real growths of statutory social welfare expenditure since the depression years combined with an expansion in the range of cover, may suggest that both individuals and governments have realised mutual benefits. Feldstein (1977a) goes on to enumerate a number of apparent advantages to both parties. For example, many individuals may find it difficult to purchase

annuities on the private market equivalent to certain state social welfare provision. Also, statutory schemes help to circumvent the high information costs to the individual of choosing equivalent private insurance cover in complex markets. In that individuals, collectively, may well have revealed a preference for a portfolio of cover similar to that provided by state social welfare programmes, then the economy might well realise a net efficiency gain. Another popular rationale for the growth of state schemes (see, for example, Pechman, 1977) runs as follows. Whatever their initial motivation, social welfare programmes have grown away from the simple insurance principle. Beneficiaries have tended to receive significantly higher benefits than their tax payments, allowing for a reasonable rate of return. One major reason for this is that governments try to maintain the real worth of benefits, even in times of high inflation. The resulting strong pressure on the schemes have usually meant that firms' and workers' contributions are not accumulated and invested in order to be paid as future benefits but merely used as payment for current benefit. Thus, it is argued, social welfare programmes have provided a simple taxation device to enable governments to finance social programmes.

This latter point reflects the fact that the great majority of OECD countries have evolved a pay-as-you-go system of financing state social welfare provision rather than developing or maintaining funded pension schemes. There are at least two potentially serious offsetting difficulties associated with this form of financing. The first concerns the quantitatively most important item, pension provision. The implicit intergenerational transfer of income from the economically active population to the retired population will produce, in the absence of radical changes in financing¹, increasing pension burdens on the former given demographic movements weighted more and more towards the post-retirement cohorts. Given present demographic trends, this

1. Such as designing the sort of intergenerational pension contracts which divide the risks, associated with demographic and productivity changes, more evenly between economically active and retired populations. See, for example, the discussion in Musgrave (1981).

particular problem is expected to become acute in many countries by the early part of the next century. The second difficulty relates more generally to pay-as-you-go financing. It is possible that the growth in social welfare contributions has served to depress savings and so may contribute to increasing capital shortages in future years as demographic trends worsen¹.

(b) Employment policy initiatives

By changing firms' payroll tax rates and tax ceiling limits, perhaps by a reallocation of the contribution burden as between employers and employees, governments have the means of altering both the absolute level of real labour costs to the firm as well as its relative factor prices. This in turn provides the possibility of direct intervention to stimulate employment at, say, the cost of labour utilisation and/or the stock of capital through induced scale and substitution effects (see Hart, 1984 (a and b); Hart and Kawasaki, 1984)².

This type of intervention relates to the discussion of the previous section. Government action to change payroll tax rates and tax ceilings would appear to provide a more direct counter-cyclical employment device than several other fiscal possibilities. In the light of the type of approach, implicit subsidies to privately funded pension and other schemes through relatively favourable tax rates can be self-defeating. For example, in times of recession, governments may attempt to stimulate or protect employment by reducing real labour costs through cuts in payroll taxes. Other cost-reducing devices are also liable to be implemented, however.

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1. See Feldstein (1977b) for international evidence of a negative relationship between the size of the pay-as-you-go system and the savings rate. However, there is by no means general agreement over the strength or significance of the effect; see, for example, Modigliani and Sterling (1983) who claim that the relationship is relatively weak.
 2. The effectiveness of such intervention is clearly limited by the extent to which firms are able to pass-on payroll tax contributions through lower wage rates (backward tax shifting) or price mark-ups (forward tax shifting). Recent evidence (e.g. Hamermesh 1979 and 1980; Beach and Balfour, 1983) suggest that firms pass-on only a fraction of their contributions (somewhere between 20 and 60 per cent) in the short term.

These may include direct wage controls and/or social contract-type agreements with industry-level union organisations. Tax benefits on private fringes provide labour with a possibility of counteracting and undermining such initiatives. By increasing the share of private fringes within total compensation, labour can attempt to preserve real living standards by taking greater advantage of the relatively favourable tax position¹.

(c) Counteracting negative union influences

While the median voter approach provides a reasonably robust rationale for explaining why unions may be expected to reveal an above average preference for fringe benefits, it stops short of providing insights into the resulting net economic effects on the firm. The exit-voice literature suggests one possible mutually beneficial role played by unions in this connection (see Freeman, 1976). Further, if employers perceive strong reasons for paying fringes anyway, on grounds of economic optimisation, then unions' own preferences help to facilitate such action. Of course, it has to be recognised that the achievement of higher than average fringe payments may be largely the result of the monopolistic position of certain unions and involve private wage supplements over and above those dictated by maximising or minimising goals of the firm. To the extent that this is the case, governments may help to counteract potential market advantage by ensuring significant levels of insurance and other cover irrespective of the unionised position of the firm².

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1. Mabry (1973) suggests another possibility provided to labour by private fringe payments which permits an escape from the maximum rigours of recession. When vacancies are low relative to unemployment, unions may attempt to preserve living standards by bargaining more for fringes than for wages. Rises in wages would attract a relatively high response in labour supply while rises in fringes are "less visible" to the outside market.
 2. Clearly, this argument is not so tenable if, in the absence of unions, significant levels of tax shifting are possible. Here, the monopoly power of a union may manifest itself in the degree to which it prevents the firm from shifting statutory contributions.

One of the strongest question marks over the appeal of union bargaining models arises from a simple international comparison of the relative importance of private wage supplements and the degree of unionisation. The proportion of the US workforce that is unionised (under 20 per cent) is less than half that of the comparable figure in FRG and yet the proportion of private wage supplements to total compensation in the USA is twice that in FRG. Taking this comparison slightly further may admit a set of explanations for the level of private wage supplements which relate to individuals bargaining for wage compensation to cover major benefits excluded from, or inadequately covered by, statutory provision. The relative standing of the USA and FRG is reversed with respect to statutory wage supplements while total supplements are roughly comparable.

Although unions are numerically much stronger in the FRG than in the USA, they are functionally less important. A major body of social legislation, over health, pensions, unemployment, short time working etc., has evolved in the FRG and this has effectively superseded part of the role played by unions in an earlier, more adversarial, climate of industrial relations. The absence of the same degree of statutory cover in the USA may in part account for its stronger emphasis on individual and union bargaining for equivalent insurance opportunities on a private basis and/or alternative non-wage compensation. If it can be argued that governments provide cover that, more or less, would have been bargained for anyway then it may well be that the virtual removal of this aspect of collective bargaining contest provides some real efficiency gains. It may help to remove, for example, the negative aspects of both exit and voice strategies from the domain of workplace bargaining. It is interesting to note that in the extensive, though generally inconclusive, wage compensation literature (for a useful summary, see Brown, 1980) this particular avenue does not appear to have been adequately explored.

5 A Fiscal Policy To Stimulate Effective Choice

Private and statutory wage supplements, in the large part, provide broadly similar cover. Throughout OECD, the average firm contributes significantly to both types of supplement and the

question naturally arises as to whether it is appropriate to lay emphasis on one form of compensation or another. Unfortunately, the exercise of weighing the pros and cons of each side is particularly complicated in much of this area. The fact that, typically, governments allow generous corporate and individual tax concessions to privately funded schemes makes it difficult to ascertain the extent to which given outcomes result from fiscal or other considerations. Stripped of the fiscal elements, however, there are a number of persuasive reasons for believing that, on grounds of economic efficiency, more scope should be given to employers and employees who wish to lay a greater relative emphasis on private supplements. First, there are possible internal and external advantages in allowing the firm and its workforce a strong control over turnover costs through contractually agreed deferred fringe benefit compensation. Second, certain types of private fringes may be provided by the firm more cheaply than equivalent state provision. Third, a switch away from pay-as-you-go state pension schemes towards privately funded pension plans may help to reduce the intergenerational transfer cost problems associated with adverse demographic (and productivity) trends. Fourth, the trade-off between exit and voice achieved by certain unions bargaining over private fringes, may produce a superior set of employment-compensation outcomes than a more non-discriminating package of statutory social welfare entitlement.

This may suggest that there are advantages to be gained from designing a fiscal policy that promotes effective choice between equivalent private and state provision largely on the basis of assessments of the above sorts of economic advantages. In turn, this would seem to require three broad changes of emphasis with respect to tax concessions to private supplements. First, no special tax advantage should accrue to private fringe benefits which lie outside the areas covered by state provision. Second, in many instances, corporate and individual tax concessions should be more modest in size. Third, the concessions should be targetted more narrowly towards these firms and individuals who switch from a given state to equivalent private scheme.

More specifically, a movement towards the following fiscal framework may offer some possibilities along the required lines.

(1) Special tax treatment with respect to private wage supplements should be limited to the areas of life insurance, health and old age pension.

(2) More opportunities should be given to individuals (and firms) to opt out of participation in state schemes provided they attain (provide), at least, equivalent private cover.

(3) Those individuals who do opt out of part or all of the state system should be allowed to re-enter only under exceptional circumstances.

(4) Corporate and individual tax concessions should be limited, as far as possible, to individuals who have opted out of equivalent state schemes.

(5) Tax concessions in (4) should apply up to some specified ceiling limit of (employee and firm) contribution. In many instances funds should also face higher levels of income and capital gains taxation.

(6) Rates of tax relief should be calculated on the basis of two general considerations: (a) they should reflect the average amount of explicit and implicit government subsidy to statutory social welfare provisions accruing to a comparable wage earner within the state system; (b) they should involve extra "premiums" (negative or positive) that are commensurate with the expected degree of perceived efficiency and welfare advantage in switching from a given statutory to equivalent private scheme.

The main purpose of the structure in (1)-(6) is to re-direct the motivations for the payment of wage supplements more towards areas involving real economic gains at both micro- and macro-levels. By more moderate and better targetted tax concessions, decisions to

adopt private schemes are likely to be made more on the basis of their non-fiscal economic advantages vis a vis equivalent statutory cover and this, in turn, may be expected to provide more general welfare and efficiency gains. Nothing in the framework directly prevents the current weighting as between contributions to private and statutory supplements although it provides a stimulus to change by altering the relative cost of each form of compensation. The direction of net aggregate change would be expected to depend largely, though not exclusively, on the degree to which individuals are allowed to opt out of state schemes and on their amount of actual and expected future tax incentives.

With respect to (1), there seems to be little compelling reason, at least in relation to the foregoing discussion, for granting tax concessions to private wage supplements which lie outside the categories stated¹. Of course, it is recognised that, for certain other types of private fringe benefit payments, the cost of fiscal control² may be prohibitively high.

Provided it can be demonstrated that (at least) equivalent private cover can be achieved, (2) states that there should be greater opportunity to opt out of state-run schemes. In order to minimise costly reverse mobility, (3) argues for strict barriers to, or high costs of, re-entry into the state system. A limited example of both (2) and (3) can be found with respect to health insurance in FRG. Those individuals with earnings above a given ceiling limit³, can opt out of the state controlled health insurance

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1. Although it should be added that, in all OECD countries, the categories in (1) represent a very high proportion of existing private supplements.
 2. With the aim, for example, of equalising marginal tax rates on fringes and direct wage compensation.
 3. The ceiling limits, however, are relatively high, effectively excluding eighty per cent of workers from eligibility to change systems. This seems to be unduly restrictive, involving potential efficiency losses and raising equity problems. For those workers who opt out to join the private system (7.7 per cent from an eligible 20.3 per cent in 1980), the employer is obliged to make contributions up to the required limit of the state system. In most of these cases, however, private cover is cheaper and both the employer's and worker's contributions are reduced as a result of the change.

system and into a strictly privately-run scheme. Reverse mobility is largely precluded with the major exceptional circumstance arising in the event of an individual losing private cover through becoming unemployed.

Condition (4) provides for tax concessions that are contingent on prior withdrawal from the equivalent part of the state system. Further, given greater possibilities of withdrawing from the state system, (5) reflects the fact that there would seem to be a strong case for reducing significantly the tax advantages enjoyed by private funds. Apart from the attraction of exchequer saving, limiting much of the tax relief to those who actually switch systems allows fiscal policy to be more finely tuned towards individuals and collective bargainers who exhibit the greatest a priori potential interest in change. Also, where there exists partial government financing of statutory systems, there is little case on equity grounds for some individuals receiving, in effect, a double subsidy¹. Imposing ceiling limits on tax relief also may seem reasonable given equity considerations as well as limiting the ability of individuals to avoid higher marginal income tax rates by increasing their share of fringes within total compensation. Stability in the real worth of tax subsidies can be achieved by indexing ceiling changes to inflation².

Two reasonable ways on which to judge the amounts of tax concession to private wage supplements are suggested by (6). The first simply allows the real worth of existing per-capita government subsidy, if any, to be transferred from state to private schemes. The second is somewhat less clear-cut and is likely to represent a balance between positive and negative influences. An example of a positive extra tax incentive may arise in the event of a desire to encourage privately funded pensions in the cases where governments wish to reduce the size

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1. Where problems arise, particularly in health care, over the private sector sharing public sector facilities, these can be met both by imposing direct commercial charges on the private system as well as by adjustments to tax concessions (see below in text).
 2. In many OECD countries, such indexation is broadly undertaken with respect to social welfare benefits and contributions.

of pay-as-you-go financing¹. On the negative side, a tax penalty may be imposed on private health schemes as one of the methods of compensating individuals in the state system when the privately insured are allowed access to state-financed facilities.

1. For example, in an effort to promote more privately funded retirement income and to reduce the role of state pension financing, a measure enacted in the USA in 1981 provides for a change in the tax law to permit all wage earners a tax-deferred \$2000 annual contribution to an individual retirement account.

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