Financing the Welfare State

Kees Goudswaard, Koen Caminada and Henk Vording

Abstract
Insight into the level and nature of taxes and social insurance contributions may be important for the perception of citizens about the costs of public provisions and – associated with this – for their behavioral responses. From the theoretical literature on tax illusion and from several empirical studies we conclude that when a clear relation is experienced between the payment of social contributions and accrued rights, employees perceive contributions more as prices than as taxes. Because of this these contributions will have fewer distorting effects on the labor market than general taxes. Reforms of social insurance programs that strengthen buildup elements, for instance through the introduction of social saving accounts, would therefore have favorable labor market effects.

Key words
welfare state, tax illusion, economic effects of contributions, social saving accounts

* Department of Tax Law and Economics, University of Leiden, the Netherlands.
1. Introduction

From an economic perspective, how arrangements in the welfare state are financed matters. Taxes and social security contributions provoke several behavioral responses. For instance, employees and employers try to shift taxes and contributions onto others through wage and price formation. The extent to which market parties succeed in that shifting depends on many factors (Stiglitz, 2000); the way arrangements are modeled might be one of those factors. For example, it may make a difference whether social security is financed (mainly) through levies that do not entail corresponding entitlements or financed through contributions based on actuarial principles. The question is whether a clearly visible connection between paying a levy and the buildup of employee rights, such as contributions to a pension scheme, increase acceptance of burdens and reduce economic distortions.

In this article, we investigate whether the literature provides any leads for answering that question. In section 2 we discuss the difference between social security contributions, taxes and prices. In section 3, we include in our analysis the theory of the tax illusion. Many citizens don’t know how much they contribute to public provisions. That may cause the costs of public provisions and social insurance to be underestimated. In sections 4 and 5, we analyze the theoretical and empirical literature on behavioral responses to various levies and prices. Is the nature of the levy important for the labor market effects? In section 6, we sketch a perspective on the financing of the welfare state in the future. Section 7 closes the discussion with a few conclusions.

2. Taxes, Social Security Contributions, and Prices

Only a part of wage deductions - for example, a wage tax - can be considered a tax experienced by employees as a reduction of their purchasing power without anything being directly given in return. The revenue may be used for public services, but there is no direct relation between paying and receiving. In contrast, social security contributions to occupational insurance schemes, which are dominant in continental welfare states, have traditionally been based on another idea: an entitlement in return for contribution. Both the benefit and the contribution are typically related to the employee’s wage level. National social insurance schemes, however, are dominated by the solidarity principle: There is no (or hardly any) connection between the level of the benefit and the contributions paid in the past. Therefore, the distinction between national social insurance contributions and wage taxes was abandoned long ago, both in socioeconomic policy and probably in the employees’ perceptions.

Because market elements play a role in social insurance schemes, it seems plausible that the corresponding contributions are seen as the price for an individual return. Various factors are conceivably important here, including competition between providers and freedom of choice of the customers. This can be summarized as a sliding scale.
A pure tax, for which there is no direct return and that is forcibly imposed, is the opposite of the pure price, which is paid voluntarily by an individual for a return that he apparently considers worth the money. In between, there are mixed forms, in which the extent of force can diminish as the connection between payment and return is clearer. Forced participation in a social scheme (for example, within the framework of a collective labor agreement) almost inevitably gives a “tax” character to the payments involved for two reasons. First, employees are included in the arrangement even when they, for whatever reason, would prefer not to participate. In addition, the compulsory nature introduces the possibility of an *ex ante* redistribution or solidarity into the arrangement, so that the arrangement is potentially advantageous for some at the expense of others.

### 3. Tax Illusion

The sliding scale of Diagram 1 hides a potentially important distinction between wage deduction and direct payment by the employee. Does it matter whether an employee pays for insurance through his bank account or by deduction from the wage? Apart from the allocation of the administrative burden, the issue is whether the employee sufficiently realizes what amounts are deducted from his wage and for what reasons. Does the employee derive less information from his pay stub than from his bank statements?

This brings us back to the question of what citizens know about the taxes they pay. The economic hypothesis of tax illusion states that the citizen underestimates his taxes because of how they are levied. In the modern welfare state, the levy of taxes and social security contributions proceeds rather unnoticed, mainly via entrepreneurs/employers. The employee/consumer can perceive is personally responsible for paying only a limited number of levies, such as the property tax and the motor vehicle tax. Levies like VAT and corporate income tax are levied from entrepreneurs. For many taxpayers, income tax is visible mainly as an opportunity to get money from the tax authorities as a refund – money that the tax payer did not perceive as an actual tax payment.

In many countries, employees receive a pay stub showing their taxes and social contributions paid. Does the average employee actually understand that information from his pay stub?

Most pay stubs don’t seem to be designed with readability in mind, but rather are the result of
procedures for payroll recordkeeping. A user-friendly pay stub should give the employee a
rapid insight into the nature of the various deductions from his wage, not only the way
deducted amounts were calculated, but also the performance and rights offered in return for
those payments.

Could the welfare state could actually exist at its scale if there was more awareness of its
costs. After all, a citizen can only make well-informed choices for public provisions if he
fully understands the costs of those provisions. If that is not the case, the price of public
provisions will be underestimated compared with the price of market goods. The result will be
a too large public sector.
Likewise, the citizen cannot easily determine the benefits of the welfare state and may
underestimate them. Making individual contributions more visible may then actually lead to a
too small public sector. To compensate individual benefits of the welfare state should also be
made visible, enabling citizens to evaluate the system.
The idea that citizens should know their taxes has been historically important. The
background of that traditional view is that the right of the state to erode private ownership
rights by levying taxes (or contributions) is not self-evident. Assigning private property rights
is the most efficient solution for the tragedy of the commons, which arises in communal
ownership. When ownership rights are inadequately assigned, the risk of overexploitation
looms. An individual user could enjoy the full benefits of use while bearing only a small part
of the costs of the excessive use by all. What in the past applied to the use of communal
grazing land may at present be applied to numerous arrangements in the welfare state.
Allocation of private ownership rights leads to more efficient use, which justifies a
marketoriented society in which the government is assigned a limited place.
Visibility of taxes and social contributions can, under those views, be instrumental in limiting
the exercise of fiscal power by the state – a point that is clearly present in the mainly
American tradition of the “minimal state”.

That primacy of private ownership rights does not perfectly fit in with the welfare state, which
aims at having an active redistribution of welfare property. John Rawls (1971; 1999) has
shown that private property and income redistribution are not incompatible. He argues that if
citizens are guided by enlightened (instead of myopic) self-interest, they will make their
ownership rights subordinate to the protection of the weakest in the society. They each will
consider the possibility that they themselves may someday belong to the weakest. That will
induce them to agree to a social contract that provides for the optimization of the position of
the weakest in society. An interesting implication of Rawls’s work is that tax illusion might

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1 That is the background of Galbraith's well-known image of “private prosperity and public poverty”; via
advertisements the citizens constantly get information about the possible benefits of private goods, but they
get too little insight into the possible benefits of public goods. However, research by Blumenthal, Christian
and Slemrod (2001) shows that informing citizens about government spending does not clearly affect their
willingness to pay taxes.

be worthwhile. When the government aims to optimize the position of the weakest, it can only be helpful when the wealthy notice their taxes as little as possible. Rawls’s view of social justice has of course led to an extensive – and continuing – discussion and to alternative views. For instance, Ronald Dworkin (2000) asserted that enlightened citizens would not choose maximum “insurance” against the risk that in the future they could belong to the weakest in society. Instead, they would choose a system of equal opportunities. Society, in the form of the state, must then try to provide equal opportunities for all citizens, by redistributing resources. The redistribution of results obtained by somebody's own efforts, given equal starting opportunities, is therefore not acceptable. So Dworkin’s work also results in a synthesis in which citizens will voluntarily accept a limited restriction of ownership rights for the sake of redistribution.

Whether tax illusion is, in principle, desirable or should be avoided can be determined only within the context of competing visions on the proper, just organization of society and the role of the state and the citizen in that society. That doesn’t change that, on more pragmatic grounds, a case can be made for aiming for more transparency - therefore less tax illusion- because of the nature of the political decisionmaking in a welfare state. Lindbeck (2003) gives a recent survey of the relevant literature and arguments. What matters here is that in the political decisionmaking process, the social or individual benefits of specific government provisions may get more attention than the costs in the form of higher taxes.

The visibility of taxes and contributions has been eroded by levying techniques, such as withholding by the employer, that keep the average employee out of range. That leaves unclear to what extent the institutions (and money flows) of the welfare state are based on solidarity, self-interest, or nontransparency. A more systematic consideration of arguments might lead to the conclusion that citizens must be better informed about the taxes and contributions they pay in various ways.

4. Who Really Pays the Tax?

The legislator usually has distinct views on who should bear the burden of a tax or contribution. For instance, it is assumed that the burden of the wage tax lies on employees and the burden of the VAT on consumers, even though in both cases, someone else (the employer or entrepreneur) is assessed. The tax is supposed to be shifted in full from the one who pays to the one deemed to bear the tax. However, in other cases – such as income tax on profit and on capital income – the legislator assumes that the one who pays is also the one who bears the tax.

The government however has no grip on the shifting of taxes; after all, it is governed by market forces. Taxes and contributions drive a wedge between cost price and revenue. The

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3 Rawls himself does not draw that conclusion. He follows the usual path in political philosophy; it is better to charge citizens in proportion to the use they make of scarce goods (consumption tax) than in proportion to what they contribute to the societal welfare (income tax).
market party that is the least sensitive to this will bear the largest part of the tax.\textsuperscript{4} It is plausible that, in a small open economy, taxes on the mobile production factor of capital are largely borne by less mobile employees and consumers. Consider, for example, taxes on profits and the employer's contribution to employee insurance schemes. The assumptions of the legislator on shifting can be incorrect. It is difficult to empirically investigate the incidence of taxes and national insurance contributions. The question of how income would be distributed in society if there were no taxes (and no government) cannot be answered. We can only look at what happens in the economy when a small change takes place in the level of taxes and social insurance contributions.

There has been much research on shifting of taxes. The OECD Jobs Study gives an overview of econometric, empirical studies.\textsuperscript{5} Most investigations conclude that there is a positive connection between the level of the taxes (the wedge) and the real wages. In other words, to some extent, taxes are shifted to employers. The extent to which that happens differs by country. That isn’t surprising, because the question of who eventually bears the taxes is related to the flexibility of the labor market in a country. If trade unions have a strong influence on wage formation, shifting can even take place when the individual labor supply is inelastic.\textsuperscript{6} The influence of trade unions makes the aggregated labor supply more elastic. Recently, Nickell listed several studies and found significant tax wedge effects on labour costs; on average each euro by which taxes and social security contributions increase raises labor costs by about 50 cents.\textsuperscript{7} For the impact on employment is concerned, Nickell found that a 10 percent rise in the tax wedge reduces overall labor input by around 2 percent, which he qualifies as a relatively small, but not insignificant effect.

5. Prices Instead of Taxes?

It is plausible that an employee’s perception of social security contributions depends on the nature of those contributions (Diagram 1). If the employee can choose whether, with whom, and to what extent he can take out insurance for himself, the associated contribution is an individual spending decision. Barr states: “If workers discount future benefits entirely, contributions are equivalent to an income tax; but where future benefits are perceived as actuarial, contributions are not a tax but simply the price of insurance which, like any other price, has few distortionary effects”.\textsuperscript{8} Lindbeck views the replacement of taxes by prices as an important reform strategy for the welfare state: “In order to make the actuarially calculated fees as conspicuous as possible to the individual, the individual and not just the firm should, to a considerable extent, pay such fees… (I)f social security benefits are actuarially fair on

\begin{itemize}
  \item Most studies conclude that the labor supply elasticity of working men is low, for women probably better as frequently they are second income earners in a household, and for receivers of social benefits larger effects are found (Gelauff and Graafland, 1994, pp. 102-106).
  \item OECD (1995, p. 247).
  \item Alesina and Perotti (1997, p. 922).
  \item Nickell (2003, p. 13).
  \item Barr (1992, p. 772).
\end{itemize}
the margin, and the fees are based on marginal costs, then marginal tax wedges in these (welfare state) systems would, in principle, be eliminated'. 9 Aaron argues that if the employee sees a clear relation between payments of social insurance contributions and accrued rights, those contributions will actually have the nature of a price and not of a tax. 10 Stated more precisely, the tax element is equal to the difference between the contributions paid and the value the employee attaches to the entitlement received in return. 11 It is then plausible that those contributions will have fewer distorting effects on the labor market than taxes. Whether employees experience insurance contributions as taxes or prices will, in principle, be apparent from their behavioral responses. Does the labor supply react to changes in the level of social insurance contributions as if they were taxes? On the basis of various empirical studies, the OECD Jobs Study concludes that changes in the taxation mix have at most a limited effect on labor costs and employment. 12 That suggests that social contributions and taxes are shifted more or less to the same extent. However, the OECD looked only at social contributions that can be considered to be taxes. As argued above, the situation may be different for social contributions that are paid for an individual and visible return.

The literature pays a lot of attention to behavioral reactions to pension contributions. Do employees view higher pension contributions as being the price for higher personal entitlements, so that they reduce their private savings? 13 An overview by Barr shows that the results of empirical research are mixed. 14 In a well-known paper, Feldstein (1974) found that public pension provisions lead to a substantial reduction of private savings; however, that conclusion has not been confirmed in later studies. 15 That might indicate risk evading behaviour, but it might also indicate that public confidence in the continuity of social insurance schemes is low.

Disney (2004) reports on an extensive empirical study in several countries on the economic effects of pension contributions. He distinguishes between a tax component in the contribution and a savings component that reflects the buildup of individual rights. Disney concludes that when the savings component in the contributions is larger - that is, as the system is more “actuarially fair”- the distortive economic effects of the contributions are fewer.

It is conceivable that also in collective wage negotiations a link between contributions and provisions is established. Research by Ooghe, Schokkaert, and Fléchet (2003) tested the hypothesis that in collective wage negotiations, contributions with a clearly recognizable return have less impact on wage costs than general taxes. Ooghe, Schokkaert, and Fléchet used data for several European countries and found support for their hypothesis. According to

9 Lindbeck (1994, pp. 7 and 11).
10 Aaron (1982, pp. 54 ff).
13 It is, in particular, the question of whether a capital funding system has a different effect on the private savings than funding on a pay-as-you-go basis.
15 A recent empirical study for the United Kingdom concludes that changes in the flat rate basic pension do not have a clear effect on private savings, while changes in the system of wage-related supplementary pension
their study, trade unions would be more inclined to incorporate increases in the burden of taxes and social security contributions into net wage offers if there is a recognizable provision for employees in return.

All in all, support can be found in the international literature for welfare state reforms that lead to a more individual connection between the payment of contributions and the return.

6. Social Contributions in the Future

In the coming decades, the social system will be affected by many trends. The aging population will have a strong impact on the sustainability of the system. There is also a growing awareness that the system does not sufficiently fit with several social developments, such as individualization, changing labor patterns, and more varied life courses. In addition to the “typical” social risks (such as unemployment and disability), the system will have to address the so-called new social risks, such as loss of income due to care activities or education.\textsuperscript{16} A modern social system would have to offer more opportunities to combine and interchange activities, while actively encouraging people to control risks and invest in one’s own human capital (Leijnse et al., 2002).

To give households and individuals more flexibility and freedom of choice on one hand and improve incentives for labor participation on the other hand is to partially replace social insurances with individual savings. Several authors have recently argued that introducing mandatory private social saving accounts would contribute to the sustainability of the welfare state.\textsuperscript{17} Individual savings may be used for unemployment or temporary disability, care leave, education and training, and pension. During a period of unemployment, for example, individuals would be allowed to draw from their account. If a person is short of funds, they could borrow from the government or from a private institution. Thus, the saving account provides liquidity insurance (De Mooij, 2004). By using individual savings, the incentives for labor participation are reinforced. Periods of nonparticipation would lead to a decrease in savings and therefore to a decrease of future income for leave, pension, and so forth. The accounts should include a combination of old and new risks. That’s important because those risks may be correlated. For instance, investments in training may contribute to the prevention of unemployment. And taking leave help prevent burnout and thus prevent an employee’s possible occupational disability or prematurely leaving the labour market.

However, those social saving accounts have some drawbacks. They lack the redistribution potential of social insurance and the efficiency of risk pooling. People may be forced to save inefficiently high amounts. However, persons that end up with a negative account at their pension age may be bailed out, which introduces a moral hazard problem. Those problems can be relaxed by allowing savings accounts in addition to a basic level of social insurance. A combination of insurance and saving is probably optimal economically. Also, the problem of schemes have a negative effect. In the first case, an increase of the entitlement to benefits does not lead to a reduction of private savings, while in the second case it does. See Attanasio and Rohwedder (2001).

\textsuperscript{16} It is difficult, however, to get insurance cover for those foreseeable and to some extent endogenous risks.

\textsuperscript{17} See e.g., Bovenberg and Sørensen (2004), Feldstein and Altman (1998), Fölster (2001) and Orszag and Snower (1999).
oversaving can be relaxed by integrating saving accounts for unemployment with retirement insurance, as suggested by Stiglitz and Yun (2002). The saving accounts may be organised individually or collectively (for each collective labor agreement or branch of industry). A collective arrangement will make it possible to introduce solidarity elements and may offer economies of scale. The government can offer some support through tax incentives because of the collective interests that are at stake (labor force participation, development of human capital, and care for children). That support may be provided by applying the deferred taxation rule (contribution deductible, withdrawal taxed) or by giving tax credits when making withdrawals from the savings fund.

How should the financing for that system be arranged? Savings contributions can take various forms, from compulsory and income-dependent contributions to voluntary nominal payments. A compulsory contribution will prevent free-rider behavior. If the contribution is voluntary some would perhaps pay too little on the supposition that the government will help out when the saved funds are not sufficient, for example, for long-lasting unemployment. That is an important reason why in some proposals the contribution into a social savings system is compulsory. A compulsory and income-dependent contribution will also allow the introduction of elements of solidarity into the system. That may be income solidarity or risk solidarity within the collectivity to be formed. However, a compulsory contribution could also be paid individually into the individual savings fund - that is, without an element of solidarity. Then, paternalistic considerations would be the basis for mandatory participation. In that variant, and of course also for a voluntary contribution, there would be a direct and clearly visible return. Negative economic behavioral reactions, such as shifting the contribution onto the employer, are then much less obvious than for a system with redistribution. For that matter, mixed variants are also conceivable, for example, mandatory participation up to a minimum payment – income-related or not – and, on top of that, voluntary contributions.

Whatever nature the savings contribution will have, it might eventually concern one single integral payment. That’s in line with an integrated approach of the various social risks. The savings contribution should then have to show up on the pay stub, or elsewhere. Employers can best make the deduction. That increases the efficiency of the implementation (compared with a large number of individual assessments or invoices). In many cases, employers will be expected to provide a contribution to the financing of the savings funds. Even now, and definitely in a system as described above, it is important that citizens get up-to-date surveys of their entitlement to various benefits and other arrangements and that they have insight into which alternative choices they can make for forms of insurance, savings schemes, and other (collective) provisions.

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19 However, the introduction of solidarity elements does not fit well with total freedom of choice in participation in the scheme or opting out. On the other hand, collective saving schemes with solidarity elements may offer possibilities of choice in the risks covered and the scope, such as in flexible pension schemes.
7. Conclusion

The visibility and the nature of social contributions can be important for a citizen’s perception of the costs of (collective) provisions and – associated with that – for their behavioral responses. The economic theory of tax illusion states that the citizen underestimates the level of contributions because of how they are levied (through withholding). The classic view is that the citizen must know his taxes, because the right of the state to erode private ownership rights by levying contributions is not self-evident. However, that view does not fit well in a welfare state whose goal is an active redistribution of income. A degree of tax illusion would perhaps be needed for that. However, we argue that it is preferable to better inform the citizens about the contributions they pay in various ways, because of behavioral responses. Theoretical and empirical research suggests that it makes a difference whether social security is (mainly) financed through taxes and contributions whose level does not show any relationship to the rights to be built up, or through contributions based on actuarial principles and with a clearly recognizable buildup of rights. With a clear connection between payment of contributions and accrued rights, the employee will see a contribution as a price instead of as a tax. Because of that, the contribution in question will have fewer distorting effects on the labor market, such as decrease of the labor supply and a shift onto the employer, which causes real wage costs to rise. On that basis, reforms of the welfare state that lead to a more direct connection between payment of contributions and individual returns would have favorable labour market effects. Proposals to strengthen the buildup elements in the social security system and to introduce saving elements fit in with this.

References


