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TOWARDS A THEORY OF SUBSIDISATION

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TOWARDS A THEORY OF SUBSIDISATION^{*)}

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0. Introduction

Every now and then, public finance economists are told to come up with a comprehensive theory of subsidisation, of optimal subsidisation, preferably. Our profession is faulted for seeming to lag behind in analysing a phenomenon that has been very much in ascendance over the last three decades. That is nonsense. We do have a theory of subsidisation, and one that is potentially much more comprehensive and more meaningful than the set of truisms implied in a remodelled version of optimal taxation theory. It is all there, it is just a matter of recombining what has been said on tax theory, on the normative framework of welfare economics and public finance, and on the political economy of public administration.

In what follows, I will summarise what seems to be the outline of such a theory of subsidisation, which should cover not just the traditional fiscal analysis, but also identify the elements of a meaningful normative framework and review the political control of property rights. Par.1 reviews the necessary adjustments in "reversing" traditional tax incidence theory, par.2 deals with the normative framework in an effort to identify the types of welfare functions that would seem appropriate, and par.3 reviews subsidisation in terms of the political economy and public administration of the distribution of income, information and authority.

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1. Subsidies and fiscal analysis: a conceptual framework.

Economics explores how people choose in a context of relative prices and a budget constraint. Taxes change these parameters, affecting choice as the tax system develops, and so do public transfers and subsidies, as their inverse. The shorthand of fiscal analysis is that things do not pay taxes, people do. In terms of impact incidence, therefore, we may distinguish between direct taxes on people and indirect taxes on things, as long as we remember that indirect taxes on things are, at the end of the day, borne by people as well. The same goes for transfers and subsidies. In terms of impact, again, we may distinguish between income transfers or subject-related, direct subsidies on the sources side of income and object-related, indirect subsidies on the uses side, bearing in mind that indirect subsidies, ultimately, also end up with people again. To simplify matters, I will refer to all inverse taxes as subsidies or, if I really have to make the distinction, as direct and indirect subsidies.

1.1. Income and substitution effects.

Like taxes, subsidies affect choice through income and substitution effects. The income effect of a subsidy describes how people react to the alleviation of the budget constraint as affected by the resulting increase in income available for private use. The substitution effect describes how people react to changes in relative prices. The two effects tend to come about in tandem, of course: indirect subsidies on goods and services will affect a substitution effect through a change in relative prices, and an income effect as they relieve the budget constraint. Standard theory has it that subsidisation on the uses side of income makes the two effects move in the same direction: people buy more of the subsidised good because it comes cheaper and because the subsidy brings the options for income available to a higher indifference plane. There is a classical exception here: the case of the inferior good, where the substitution effect and the income effect work in opposite directions. If we subsidise margarine, the income effect will make people buy butter instead, as the preferred good on a higher indifference plane. There is universal evidence that inferior goods do indeed exist: in Pakistan, e.g., relative price reductions in wheat, the coarser grain, put people on to rice as the preferred staple.

This summary of received doctrine is meant to highlight where advocacy may be crowding out analysis. It is at the sources side that fiscal analysis has gone wrong. Income maintenance schemes may be perceived as (direct) subsidies affecting the choice between work and leisure or, more appropriately, between (1) declared income from work, (2) subsistence income (including do-it-yourself activities and undeclared income from work), and (3) volunteer work or leisure. Standard tax theory does reasonably well in explaining the trade between (1) declared income and (2) undeclared income, but falls short in explaining what it claims to explain: the trade-off between (1) "work" and (3) "leisure". As for the first trade, the one between declared income from work and undeclared or subsistence income, it seems plausible that direct taxation pulls the income and substitution effects in opposite directions. The income effect makes one strive to maintain declared income available for private use, in what fiscal theory calls a "positive compensation"; the substitution effect draws people into the informal sector. Conversely, the availability of income maintenance schemes, of "direct subsidies" such as unemployment, disability and sickness benefits, makes people seek entitlements, drawing them into the formal sector through a substitution effect, but reduces the stimulus to protect one's real income over time - the essence of the income effect.

Things go wrong when we apply the same analysis across the board to the work/leisure choice. In terms of comparative statics, marginal adjustments are still explained with some credibility: a high marginal tax rate reduces effort through the substitution effect (workaholics excepted), as long as institutional arrangements - flexible working time - allow for marginal adjustments in the first place. Likewise, in income maintenance, a high marginal benefit reduction rate seems to give the substitution effect almost a free run, since real income is more or less protected anyway, over the relevant range. In a dynamic setting, however, the labour supply elasticities resulting from the income and substitution effects will be affected by people's expectations over time: for people hoping to make some sort of a career, behaviour is not just conditioned by the present tax or benefit reduction rate, but also by the development of their professional opportunities over time. More generally, if work itself or work experience is deemed important, labour supply will be more inelastic and the substitution effect will lose grip. The essence of this proviso was already identified

long ago by Scitovsky (1952, pp. 86-88). On this continent, it will become more important over time, as the quality and sophistication of the European labour force increase.

Far more disturbing than these marginal notes, however, is the treatment of leisure in the standard literature on job search by the unemployed entitled to income maintenance. Clearly, if leisure were a "normal" good in the choice patterns of the unemployed, the combined income (maintenance) and substitution effects of high unemployment benefits would unambiguously reduce labour supply. The benefits under the unemployment scheme make that the income effect of employment - the incentive to take a job - is limited to the excess of the earned wage over the unemployment benefit foregone. The substitution effect of entering the labour market pulls in the opposite direction again, if work is considered a disutility. Work as a disutility, that is what economists seem to believe in, and that is where analysis is in danger of being crowded out by advocacy in the making of economic policy: treating leisure as a "normal" good easily leads to the hasty conclusion that high unemployment benefits may be helpful in optimising job search but, all in all, are bad for employment (on the received doctrine, see e.g. Grubel and Maki, 1976). In their thorough, if not exhaustive review of the literature on the work/leisure choice in social security, Danziger, Haveman and Plotnick (1981) report on three potential labour supply effects of unemployment insurance. First, unemployment as such may increase if workers go for benefits rather than for wages. Second, the duration of unemployment may be extended for similar reasons. Third, the above mentioned entitlement effects may pull in the opposite direction, inducing some people to enter the formal sector to qualify for future benefits. They do not identify a single study challenging the basic assumption that leisure - to the unvoluntarily unemployed - is a normal good, nor am I aware of a substantial body of more recent economic literature that has meanwhile done so (Wolfe et al, 1989, for instance, do not raise the issue). Yet there is every reason to believe that, for part of the unemployed, work would not represent a disutility. Empirical research on job search suggests that many people value participation as such and that at least some of the unvoluntarily unemployed see their imposed leisure as an inferior good.

1.2. Producer and consumer subsidies

The above analysis holds regardless whether we are, in an institutional sense, dealing with producer or consumer subsidies. Clearly, that distinction is useful as far as the institutional notion of the impact incidence of the subsidy is concerned. But in buyers' markets, producer subsidies will be shifted onward to consumers, and in sellers' markets, consumer subsidies will end up with producers. This raises the question of whether, in an economic sense, there is such a thing as a producer subsidy. Yes there is. To the economist, any subsidy that ends up in the pocket of a producer is one. This is why social security arrangements are, potentially, in the realm of producer subsidies. In a buyers' market for labour (a sellers' market for jobs, as in the early '80ies), relief in social security taxes on employees reduces the wage bill in the same way as a reduction in employers contributions, as the economic incidence resulting from the outcome of collective bargaining will not respect the institutional boundaries of the impact incidence. In institutionalising tax/subsidy systems, choosing the point of impact (producer or consumer; employers or employees) is primarily a matter of feasibility (access to the tax/subsidy base) and of targeting in terms of efficiency and equity (making the polluter pay; aiming subsidies at the desired or the deserving target: trying for instance, to increase domestic value added opting for producer rather than consumer subsidies). Under special circumstances, subsidies may stick at their point of impact. The general point to grasp, however, is that from there onwards, as a rule, elasticities of supply and demand take over, driving the tax/subsidy to its ultimate economic incidence. In a dynamic society, these elasticities change over time. For labour supply, this has been explored by Schouten (1983), who identifies an endogenous cycle of alternating buyers' and sellers' markets.

Another example of subsidy "pouching" is the ill-conceived Dutch "consumer" subsidy on thermopane windows during the oil crisis of the '70ies which, falling on inelastic supply, turned out to be a producers' windfall. In the longer run, additional supply was forthcoming of course, but the targeting was off all the same, as demand was strong enough to induce additional supply regardless of subsidy. Targeting crucially depends on whether one can get the relevant elasticities under control; if not, subsidisation amounts to shooting from the hip.

1.3. Cross subsidisation

The analysis, so far, suggests that it is hard to generalise on the incidence of subsidisation. Maybe subsidies end up with the desired or the deserving target, maybe not. The picture is even bleaker if we recognise that subsidies - not just individual subsidies, but all subsidy programmes in the aggregate - have to be paid for, somehow, and if we remember that it is people who pay (or don't pay) taxes. Regardless of the merits of individual subsidies, experience shows that the wedge created by taxation in the disposable income of labour and capital develops an endogenous growth of its own. As income available for private use is reduced, people claim new subsidies to maintain their real income, widening the tax wedge again, and so on and so forth. At the end of the day, everybody subsidises somebody, and that somebody, in turn, everybody, in a generalised pattern of cross-subsidiation. It is obviously too easy to claim that the best subsidy is no subsidy. Would "optimal subsidisation" provide a meaningful concept? No, not if we look for the Holy Grail of an unambiguous counterfactual based on fiscal neutrality and efficiency, within the normative tradition of Paretian welfare economics. But yes, perhaps, if we manage to specify a more meaningful criterion of optimality and of "normal" factor prices. This is what the next paragraph is about.

2. The normative framework

Incidentally, I am not claiming that neutrality as such is a normative concept, nor that Paretian welfare economics necessarily belongs to the normative branch of economic theory. With Hennipman (1976), I believe that Pareto-optimality can be seen as an analytical tool, a counterfactual against which we measure performance. My point is, however, that neutrality is used as a normative concept, as a criterion of what should be - and a shaky one - whenever it is introduced as a doctrine.

2.1. The excess burden and "optimal subsidisation".

According to the efficiency-doctrine of neutrality, fiscal interventions should aim at minimising the excess burden of distortions from the shifting of tax burdens. Within such a narrow framework, the theory of (Pareto-)

optimal taxation yields some pretty weird results, telling us how economists get carried away when trapped in their own logic. If we do away with the technicalities, the basic finding is simple: "if you wish to corner the tax payer, hit the inelastic supply and the inelastic demand, so that both are reduced proportionally across the various tax bases".

In terms of real world policy analysis, that is a weird position on all possible counts: in terms of (1) hypothesis (input), (2) practicability (throughput) and (3) credibility of result (outcome). The hypothesis that we wish to corner the tax payer presumes that taxes are imposed on an ideal world, that we do not wish to disturb. It ignores the fact that the real world, a distorted world of imperfect competition and market failure, may be improved by countervailing distortions inducing intended behavioural responses (Break 1974, p. 224). Moreover, it presumes that the only function of taxation is to find money to pay for public goods in an isolated allocative branch of government, operating under conditions of unadulterated consumer/voter sovereignty. Now suppose, for the sake of the argument, that we accept the efficiency framework as a starting point for the analysis, how about the practicability of such an optimal taxation recipe? Suppose - again - that we have sufficient information about the relevant elasticities of supply and demand, could we manage the complications of a rate structure approximating the required proportionality in reducing demand and supply? Finally, in terms of policy outcomes, just think of the credibility of a tax system sharing the bulk of the burden between the poor (inelastic labour supply) and the desperate (inelastic commodity demand). To practical men, the traditional doctrine of optimal taxation as a set of efficiency criteria is not altogether helpful (Krause-Junk 1987; Harberger 1988). For the appraisal of the over-all performance of the tax system it remains, at best, an ambiguous counterfactual, as it (1) takes the efficiency of the initial position (the "virgin tax base") for granted, (2) fails to integrate concepts of equity, (3) ignores the role of political imposition in the handling of information, and (4) postulates consumer sovereignty as the answer to the fundamental question of who's values do count, in an empirical sense, or should count, in a normative sense.

Modern versions of the theory of optimal taxation try to deal with the first two criticisms, of course. They allow for a second-best world, and try to specify the Big Tradeoff between efficiency and equity, weighing also the

cost of over-doing the fine tuning either way. They also recognise that constraints on utility information mar the approximation of (Pareto-)optimal solutions, but they fail to recognise the element of political imposition in the handling of utility information and remain vague on how societies deal with issues of sovereignty. They simply invoke society's Social Welfare Function as 'an efficiently determined set of objectives' (see par.2.2, below), and that's that (see, e.g., Stigler 1986, p.397).

All this does not augur very well for our leading theme: to what extent is traditional fiscal theory, traditional tax theory, that is, adaptable - reversible - into a theory of subsidisation? Other than as a "reverse-counterfactual" in our thinking on cross-subsidisation, (Pareto-)optimal taxation does not seem to be a very meaningful concept to begin with. Adding insult to injury, the basic hypothesis of neutrality breaks down almost completely where indirect subsidies are concerned. If structured at the uses side of income, most subsidies (with the exception of the subsidised social services referred to as 'freed goods' in par.2.2) are meant to be non-neutral, are meant to change behaviour.*) The one broad-based, neutral subsidy of a reverse-lump sum nature that I can think of is a government pension for the elderly on the sources side of income: whatever we do to achieve longevity is probably not inspired by the wish to receive a public transfer if we make it. Old age pensions may have second order effects on the uses side in reducing private voluntary savings over the lifecycle but, other than that, they are virtually neutral. All other direct subsidies (transfers) are much more fraught with moral hazards or entitlement-induced substitution effects. Am I slipping away now into the belief that the best

*) To my mind, there is indeed a fundamental difference between indirect subsidies and taxes here. It is often proclaimed that 'sin taxes' on liquor and tobacco are also meant to change behaviour. I doubt that. I think the 'demerit argument' provides a handsome front to exploit an inelastic demand. Environmental charges are non-neutral, of course. But they are market price-adjustments rather than taxes: if properly structured they have a 'Coase-optimal' yield, balancing the social cost of non-avoidance of the negative effects on the environment with the individual cost of avoidance (intended substitution). On the reciprocal nature of environmental problems, see Coase (1960 and 1988).

subsidy is no subsidy? No, I am pleading for a more meaningful counterfactual in subsidy analysis, combining elements of efficiency, equity, information management and political imposition.

2.2. Motivation analysis and social welfare functions.

My reservations vis-a-vis an optimality concept based on the neutrality doctrine are beautifully summarised by Musgrave (1959, p. 141): "Neutrality is efficient only in the avoidance of effects that are not an intended part of an efficiently determined set of policy objectives". This brings us back in the real world. What are our intentions, our policy objectives, and how do we determine them? In my mind, these questions show the way towards a more meaningful approach to social problems than the neutrality doctrine in which - for fear of the mortal sin of making interpersonal comparisons of utility - we first ridicule man into an "efficiency-partisan" (Dasgupta and Pearce 1972, p. 67) and then put some flesh on the bones, introducing other motivations by way of amendment. Why not approach the issues simultaneously: we are not efficiency maximisers, we are utility maximisers, our utility functions contain trades between efficiency arguments and other things that make life worthwhile. The following matrix brings together (1) motivations and policy objectives as inputs in the policymaking process (what are our intentions?), (2) systems of individual and public choice (how do we determine objectives?), yielding (3) private and public goods (including subsidies) as delivery systems and policy outcomes.

Motivations, systems of choice, delivery systems and policy outcomes

	individual choice	public choice		
		reallocation	redistribution in cash	redistribution in kind
<u>demand for goods</u> consumer/citizen sovereignty	<u>individualism</u> private goods (including charity)	<u>social efficiency</u> public goods	<u>general altruism</u> income transfers	<u>specific altruism</u> quasi-public goods, subsidies
<u>supply of policies</u> political imposition	<u>pursuit of power</u> private merit goods private privilege goods	<u>pursuit of power</u> public merit goods public privilege goods	<u>pursuit of power</u> expropriation	<u>pursuit of power</u> quasi-public merit goods quasi-public privilege goods

Let x_i and x_j be the bundles of individual and quasi-public goods going to individuals i and j under conditions of consumer/citizen's sovereignty, u_i and u_j their utilities, x_g the bundle of pure public goods, and x_i^P and x_j^P the bundles of goods going to i and j under conditions of political imposition of wants. Then, utilities as generated under the considerations and conditions described in the above matrix may be specified as follows:

$$\begin{array}{ccccc}
 \text{individualism} & \text{social efficiency} & \text{general altruism} & \text{specific altruism} & \text{political imposition} \\
 u_i(x_i) & u_i(x_g) & u_i[x_i, u_j(x_j)] & u_i(x'_i, x'_j) & u_i(x_i^P), \dots \text{etc.}
 \end{array}$$

$$\text{where } \frac{du_i}{dx_i} > 0 \quad \frac{du_i}{dx_g} > 0 \quad \frac{du_i}{du_j} > 0 \quad \dots \quad \frac{du_i}{dx_j} > 0 \quad \frac{du_i}{dx_i^P} \neq \frac{du_i}{dx_i}, \dots \text{etc.}$$

In bringing these three elements together, the matrix defines the building blocks of the welfare functions determining our subsidy systems. Starting clockwise from individualism as a basic motivation, it is recognized, first, that people may pool their individual property rights to capture the welfare gains of social efficiency by organizing the provision of public goods, that may be conceptualised as provisions with 100 per cent indirect subsidy. Second, people may renounce individual rights by organising income transfers (direct subsidies) motivated by considerations of general altruism. Third, people may prefer the provision of quasi public goods or indirect subsidies on considerations of specific altruism. Moving away from individualism, however, people will see the exercise of their property rights frustrated by the use or abuse of power in political imposition, through the provision of merit goods and privilege goods (see par. 2.3), or through expropriation of income beyond their consent. Individualism is a widely prevailing motivation in western societies. Up to a point, everyone of us is an individualist. As elaborated upon elsewhere (Wolfson 1985), at issue is only to what extent individual property rights prevail.

Social efficiency captures the familiar public goods-case. Where individual property rights cannot be defined satisfactorily self-interest explains both social cooperation and a common defense against free riders through mandatory tax contributions. In this particular case, interdependence may be characterized as 'goods interdependence', representing the possibility to increase the command over goods and services through cooperation. Policy outcomes providing external economies (non-excludability) or least-cost (non-rivalry) conditions may be derived from traditional public goods such as defence and, more generally, from subsidised government programmes to promote growth, stability, risk aversion and control of the environment (including such non-altruistic pursuits as 'keeping the undesirables in place' and 'getting unsightly beggars out of the way'). There is no utility interdependence or altruism involved in these cases. Jointness of supply is the carrot, making social cooperation attractive (Mueller 1979, p. 14).

Altruism is in evidence to the extent that people are driven by altruistic motives and utility interdependence (Collard 1981). Just as individualism, in its "purest" sense, is formalised by specifying the relevant utility

functions as separable and indeed separate, general altruism may be represented by specifying the utility functions of others as positive arguments in the individual's utility function. Altruism may also be exercised individually, through private charity. We speak of general altruism when people organize themselves in social contracts to institutionalize their concern with the welfare of others. Specified in terms of the welfare of others, general altruism explains only direct subsidies (transfer payments), or redistribution in cash as a proxy of individual (command over) utility.

Specific altruism is revealed where

$$\frac{du_i}{dx_j} > 0$$

because people care about specific (elements in the bundles of) goods other people have.

As Okun (1975) observed, contemporary American society is a 'split-level structure', with market institutions generating substantial disparities among citizens in living standards and material welfare, and political and social institutions providing universally distributed rights that proclaim the equality of all citizens. This is all the more true of the Western European welfare states, which provide excludable, rival goods such as education and health care for free as basic social services, thus transforming scarce commodities into 'freed goods', as far as the individual consumer is concerned. The welfare state institutionalises specific altruism by providing these services as a social right, not as charity.

The motivation behind the provision of what I just labelled freed goods is often mistaken as 'paternalistic altruism', although there may be no paternalism in evidence. Citizens may decide that the command over specified goods and services should be based on need, rather than (effective) demand. That does not necessarily imply that these goods and services are imposed on people, as a paternalistic motivation would suggest. Free provision does not

force children to school (we may have compulsory education for that, as a separate instrument), nor does it, as such, limit the choice of educational facility. Free education and free medicare do not intend to interfere with individual preferences. On the contrary, the intention is to let people satisfy their basic needs as they see fit, freed from their budget constraint.

Specific altruism in the social services aims at the (real) income effect, and ignores the substitution effect. Collard (1981, p. 122) and many others note 'the overwhelming weight of impressionistic evidence' that people are concerned less with other people's incomes or utilities than with their consumption of specific commodities. But that does not necessarily make them paternalistic in attitude. It may just show the common conviction that the realm of individual property rights should be constrained in favor of an extension of traditional human rights into specified basic needs or social rights, because 'money shouldn't buy some things' (Okun 1975, p. 13).

If only we could believe that public policy is demand driven, with politicians behaving like ideal democrats and civil servants acting as yours truly, we could aggregate society's policy objectives in a social welfare function derived from the upper half of our matrix, as follows:

$$W = U_i(x_i, x_g, u_j, x_i', x_j') \quad (1)$$

2.3. Merit goods, privilege goods and the policymakers' welfare function

The difficulty is that we cannot. The social welfare function is an 'ideal' counterfactual that fails to acknowledge political imposition in social policy. Once it is recognized that need is an external demand representing one party's view of what another party should have (Culyer 1980, p. 70), and once the authority to specify needs has been delegated to (or taken by) the policymaker, one should allow for the possibility that policies are imposed by policymakers (politicians and bureaucrats). 'Idealistic' models of 'Pareto-optimal redistribution', as developed by Hochman and Rodgers (1969), may explain individual redistributive efforts in the charity-category of the matrix above, but fail to recognise that public redistribution relies on political power and tend to be donor-depend in real life. As Archibald and

Donaldson (1976, pp.501-502) point out, models of Pareto-optimal redistribution create as much equality as between a Dog and his Master: "It is a characteristic of these models that the Dog's preferences do not count (....). It is a Good Dog; that is to say, he does not presume to entertain any opinion about his master's income or the justice of the distribution".

Against this background, it is more helpful to expand Musgrave's notion of merit goods into a generalised concept of political imposition, regardless of whether the intentions of the policymaker are benevolent or abusive. The preferences and motivations of the policymakers should be explicitly recognised as immanent constraints on consumer sovereignty and citizens' preferences. In a descriptive sense, there is no cause to specify policy outcomes in terms of citizen's preferences only, as these preferences are observed to be disregarded in the pursuit of power, not just marginally by self-promoting bureaucrats but, in the limiting case, also fundamentally by 'benevolent despots' imposing merit goods on others, or by 'kleptocrats' providing privilege goods for their own benefit (Wolfson 1979a, pp.12-16). Under conditions of political imposition, marginal consumer/citizen satisfaction is bound to diverge from utility under a social welfare function as derived from the top-half of our matrix. The imposition of (quasi-)public or private (marketed) merit goods and privilege goods means that marginal utility derived by citizens (the people ruled) from (bundles of) goods imposed will be lower than marginal utility derived from a preferred mix of individualism, social efficiency and altruism. Conversely, a constrained availability of what policymakers may consider demerit goods (freedom of speech, abortion, liquor) means a higher marginal utility of whatever the policymaker allows. Our counterfactual, then, is found in a policymaker's welfare function in which n indicates to what extent individual preferences are overruled by elite preferences for (de)merit goods and privilege goods, as follows:

$$W^* = \sum U_i\{(x_i + \eta_i), (x_s + \eta_s), (x'_i + \eta'_i), (x'_j + \eta'_j), (u_j + \eta_u)\} \quad (2)$$

In this perspective, optimality is not a matter of neutrality, not a matter of a big Tradeoff between efficiency and equality either, not even a matter of democracy as such (however much we may value democracy ourselves), but

simply a measure of the extent to which policies fit the prevailing set of policy objectives in a least cost solution. That brings me to our final question of how these objectives are determined. But before I get there, allow me one further digression on "non-economic policy objectives".

2.4. Targeting and the Rule of Law.

To the simple-minded, parting with neutrality as a counterfactual is not neat. It would be so much neater if we could side with the efficiency partisans, declare that efficiency is "the economic end", and let other people worry about a more complete view on life. Perhaps that is how other social scientists see the economist: as the village idiot obsessed with least-cost solutions per se. Many of us behave like that, of course, as if there was no demand side to our problem. But economics is not about supply or about demand, it is about the fit between the two. In a demand-driven perspective on our Global Village, the economic good is the preferred, is whatever our utility function's rank as worthwhile. Those utility functions provide the strange mix of material and immaterial things that we can control by rational choice, once we put our mind to it. As Robbins (1936) told us already half a century ago, there are no "economic" ends, there are only economic means (instruments) to satisfy our preferences. Fiscal policy, then, is about the optimal use of tax and subsidy instruments in satisficing the policymaker's welfare function, trading efficiency arguments (minimisation of unintended distortions, internalisation of external effects) against whatever other arguments obtain.

There is one more point to be addressed at the interface of what to control and how to control it. Constitutional arguments on how we want to control are part of our welfare function - in establishing procedures for what they want to control, people show a preference for what Buchanan (1975) has aptly called "law as public capital". The implications of the Rule of Law for a theory of subsidisation are immense. People want to see government as a dependable agent respecting their privacy. At the macro level, dependability requires that governments define subsidies in terms of entitlements under the law, and stand by their offer, no matter the chit-chat in Treasuries about "controlling" open-ended arrangements. At the end of the day, we cannot control subsidies, as policy outcomes, but only entitlements, as

policy inputs, as long as governments are to go by the Rule of Law. At the micro level, dependability requires unambiguous entitlements, and privacy considerations put constraints on the handling of information in the screening of individual rights. When compared to taxes, subsidies are, on the whole, more narrow-based and require more case-by-case decisions. This renders subsidy programmes relatively expensive to administer, and vulnerable to administrative abuse. This is why targeting is so difficult. Under the Rule of Law, we are bound to overshoot our targets - that seems to deliver the final blow to the neutrality-counterfactual.

3. The Political Economy of Subsidisation.

Things do not receive subsidies, people do. Behind every subsidy there is someone reaping the benefits. That is the crux of the political economy of subsidisation. It explains the ultimate incidence of subsidies on the distribution of income, the funny ways in which information on needs and policy outcomes is handled in the public sector, and the power games played. Let us now look at the uneasy relationship between politics and economics in the distribution of income, information and authority.

3.1. Subsidisation and the distribution of income.

In par. 1, it was noted that the burden of social security taxes and employers' contributions is shared between labour and capital as a function of the distribution of power in the labour market. Therefore, in a buyers' market for labour, relief in social security taxation may be passed on to employers as an implicit producer subsidy. As a matter of fact, it has actually been used that way, to reduce the share of labour in disposable national income in The Netherlands, in order to overcome the "Dutch disease" of the late '70ies and early '80ies. Furthermore, it was stressed that income maintenance may not reduce labour supply as much as is generally believed, if we allow for the possibility that involuntary leisure may be considered an inferior good. Why, then, should the European producer be wary of the social dimension of Europe 1992, especially now that industry is so much better organised than labour, on a European scale? That seems to be a good question. It demonstrates how advocacy - "let's have no nonsense, now, in Europe" - can get into the way of analysis. But it also shows that

analysis alone is not enough: it is a Good Question indeed, I don't have the answer for you, as long as you don't give me the long-term supply elasticities of labour.

Let me retreat to the more pedestrian uses side of income, for a quick look at the benefit incidence of subsidisation. If we consider "freed goods" in the basic needs/social rights category, such as education and health care, as goods with 100 per cent subsidy, it is obvious that take-up rates differ across social groups. Comprehensive statistical studies on the social selectivity of government spending and subsidies in The Netherlands show a rather substantial redistribution in kind (Wolfson 1983), suggesting a vital interest on the part of the citizen/consumer in what is subsidised and what is not. But here again, we have to resort to general equilibrium analysis to find the ultimate beneficiary. In an earlier paper (Wolfson 1979), using Wouter Keller's (1979) general equilibrium model, I showed that the use of skills in the Dutch public sector had progressed to the point where relative factor rewards for skilled labour in the economy as a whole increased notably for every percentage point increase in real public expenditures. Later evidence from the 1980's shows a clear link between the decline of the share of public expenditure in GDP and the lagging development of incomes earned in the public sector vis-a-vis the share of labour in the economy as a whole. These data explain why patients or parents seldom demonstrate for medicare or education, but doctors and nurses and teachers do. They also suggest that much of the demand for subsidised social services may actually be supply-induced and that, in the modern welfare state, "consumer" subsidies may well turn out to be the largest category of producer subsidies.

3.2. Subsidisation and the distribution of information and authority.

Markets control demand and supply through the distribution of income, information and authority. Income is generated endogenous, as a quid pro quo in transactions. Information is endogenous as well, as transactions and value added are specified in quantities and prices, and authority is endogenous as it is distributed between consumers and producers on the basis of market power.

It is the Grand Illusion of public finance that it can do anything the market does, and do it better. As far as the distribution of income is

concerned, this may be so, as long as politicians keep targeting under control and manage spending programmes with a view to avoiding bottlenecks in supply. But the management of information and authority is a different affair. With qualities and prices shrouded in non-exclusion, information on public policy outcomes is vulnerable to mismanagement, and closely intertwined with the old Roman riddle of Quis custodiet ipsos custodes - who keeps our custodians in check?. There is ample evidence that politicians and bureaucrats alike are not very keen on promoting policy analysis, let alone on divulging the uncomfortable facts it may bring to light. It is evident, for instance, that subsidies to the performing arts benefit the rich rather than the poor. Yet the stated goals of government continue to be formulated, more often than not, in terms of providing non-discriminatory access. It is evident, also, that student/teacher ratios in secondary education are not a crucial variable in maintaining productivity over a range of 15-30 students per class. Yet, teachers' unions successfully resist retrenchment by telling parents that quality is in danger, and politicians oblige. In health care, crucial information on cost-effectiveness of alternative treatments rarely breaks the hold suppliers have over the structure of provisions. And it is almost a platitude to observe that producer subsidies to European agriculture are hurting the European consumer and the Third World producer disproportionately. These examples support my claim that producer sovereignty over subsidy programmes may be maintained through the management of information.

3.3. Summary and Conclusions.

What then, are the main policy conclusions regarding the analysis, the normative framework and the political economy of subsidisation?

First, traditional tax analysis is not altogether helpful in creating a conceptual framework for a theory of subsidization, as the state of the art in optimal taxation theory has not progressed to the point of producing a meaningful counterfactual for policy analysis. This paper offers some further developments in utility theory to help fill the gap.

Second, reducing producer sovereignty and minimising information and transaction cost in the public sector requires subsidised activities to be controlled at arm's length, in a gamed market mode of output-related, quid pro quo contracts. The essence of the market mode is that it splits

authority over supply and demand and, thus, splits responsibility for efficiency and effectiveness. Subsidising output rather than input or throughput forces political principals to specify the results expected from policies, so that citizens may judge effectiveness, and leaves management responsibility for least-cost solutions where it belongs - with the agents in charge of production. Decentralisation is not just a matter of legitimisation and democratisation of demand. It also requires a structuring of supply in an "industrial organisation" of the subsidised activity that makes it perform with due regard for the checks and balances implied in contract management in a multi-level structure of responsibilities which optimises information and transaction costs. (Rowbottom and Billis 1987; Wolfson et al. 1988; Hazeu 1989).

Third, it should be recognised that policy analysis remains a necessary, but not a sufficient condition of citizen-controlled public choice. In order to break the endogenous collusion between cabinet ministers, parliamentarians, bureaucrats and pressure groups, policy analysis should be, to a substantial extent, exogenised as a source of dependable information to be dispersed through independent media.

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