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THE POLITICAL ECONOMY OF GREEN TAXES

THE BELGIAN EXPERIENCE

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ABSTRACT

This article discusses the main problems encountered with the implementation of the ecotax law in Belgium. Ecotaxes are product taxes on drink containers, throw-away products, packaging of certain industrial goods, pesticides and phytopharmaceutical products, paper and batteries.

The implementation of those taxes is by a special commission of experts. It proves to be a complex task, where dynamic, political and institutional problems are 2 serious barriers that have to be overcome.

Key words : taxation, waste, international trade.

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The central objective of environmental policy today is sustainable development. Although the notion is rather vague and there is still a lively discussion going on also among economists about how to make this concept operational, it is generally accepted that the transformation process in a market economy crucially depends upon at least two factors : policy integration and correction of the relative prices of goods and services for environmental disruption caused by their production and consumption. There is also a growing consensus among academicians as well as among practitioners that the traditional command-and-control approach has to be supplemented by economic instruments. In a European context this means mainly fiscal instruments.¹

One of the ways by which the Belgian government has been trying to integrate environmental policy and fiscal policy is through the introduction of the so called ecotaxes by the law of 16 July 1993 (²).

This paper will comment on the practical experience of introducing ecotaxes in Belgium. As for the moment still a lot of implementation problems are being studied it is not possible to present definitive views and solutions on all aspects of the issue in this paper.

¹ E.g. see OECD (1989), OECD (1991), OECD (1993), OECD (1994).

² Here the notion ecotaxes is used in a narrow sense, because in Belgium a lot of emission charges and energy taxes that can also be labelled ecotaxes exist outside the framework of this law.

For a better understanding of the significance and of the impact of this law some preliminary institutional remarks have to be made.

1. THE INSTITUTIONAL CONTEXT

Belgium is a federal state composed of three communities (the Flemish community, the French community and the German community, mainly dealing with cultural and educational affairs) and three regions (Flanders, Wallonia and Brussels, mainly competent for powers in territory related matters, e.g. economy, housing, land use planning, infrastructure). So in Belgium environmental policy is mainly dealt with by the three regional governments of Flanders, Wallonia and Brussels. The national government is left with only limited powers in this field : mainly related to product standards, nuclear waste and to the negotiation and the implementation of the international engagements of the country (e.g. the introduction of EC directives in Belgian environmental law). In this respect it is important to note that there is no hierarchy of legal systems in Belgium. Hence the national government can not impose its will on regional governments in environmental matters. In cases where they are all stakeholders the national government and the regional governments have to consult with each other. They then arrive at a common position by - sometimes lengthy - negotiations. In contradiction to environmental matters which are mostly within the realm of regional competence, with respect to consumption taxes competence rests with national authorities. Therefore, the integration of environmental considerations into the tax system is the task of the federal government. The regions have to agree with any change in the ecotax law, because the law stated that the tax receipts will be transferred to their budget. So they have a clear interest in any amendment of the law. Moreover, most modalities of indirect taxation are governed by the regulatory framework of the European Union.

The introduction of the so-called ecotax law (July, 16th 1993) was only one element in a political 'omnibus bill' that resulted out of issue linking necessary in order to obtain the two third majority needed for the voting of the latest devolution scheme in Parliament. The two-third majority was obtained through the combination of the votes of the government parties (christian- democrats and socialist) and three opposition parties : a flemish regionalist party (Volkswunie) and the green parties both of Wallonia and Flanders. The introduction of ecotaxes resulted from a political demand made by the green parties. The government parties involved - socialists and christian- democrats - came to agree with them after becoming familiar with the arguments put forward and after lengthy political negotiations. The law that parliament accepted was thus mainly the result of political log rolling; the administration was only to a limited extent and on an ad hoc basis involved in the preparation of this law.

The Belgian ecotax law contains both a general framework for the introduction of ecotaxes and a first series of ecotaxes. They will gradually be implemented according to a precise time table laid down in the law. The original time table however proved to be too stringent in view of a large number of implementation problems and accordingly had to be relaxed by parliament. Both in order to follow-up the implementation of the ecotaxes already established by the first law and in order to prepare the introduction of new ecotaxes a follow-up commission was created consisting of 13 experts in environmental economics, ecology, environmental law, waste treatment, fiscal affairs ... It has been given broad powers to amend the existing law, to propose the introduction of new ecotaxes and the abolishment of

existing ones. No amendment of the ecotax law by the government is possible without consultation of the ecotax commission. The final decision of course rests with parliament, which has no legal obligation to consult the commission, but can do so if it considers such consultation usefull.

2. THE BELGIAN ECOTAXES

Belgian federal ecotaxes are product taxes. The general philosophy embodied in the law is that products are only submitted to an ecotax provided that the payment of ecotaxes can be avoided through selecting a more environment friendly alternative. So if consumers will respond effectively to the ecotaxes, tax receipts will be minimal. Somewhat in contradiction to this principle the law stipulates that the tax receipts will be allocated to the regions, thus creating a clear fiscal interest and raising much suspicion in industrial circles that the hidden motive might be tax collection.

Six categories of products are subjected to ecotaxes.

2.1. DRINK CONTAINERS

At the moment containers of mineral water (except non fizzy water), limonades and other soft drinks, colas and beers are subjected to an ecotax. The law makes it possible however to expand the system thus created to other drinks through a proposal of the ecotax commission. The law provides for a rather complex system of exemptions based on the one hand on re-use conditions and on the other hand on recycling rates that have to be met by individual producers or by associations of producers. This exemption system is clearly the result of a political compromise between those who favour re-use and those who favour recycling. The debate is often passionate since part of the Belgian industry has based its product and marketing strategy on refillable bottles and another part on one-way containers. In a sense Belgium lays on the dividing line between the Nord of the EU (where the distribution culture is oriented towards re-use) and the South (where it is oriented towards one-way packages).

First of all a general exemption is given for those containers that can be re-used at least seven times, that are effectively collected by means of a deposit refund system and are also effectively re-used. The law fixes the minimum rate of the deposit refund and states that in accordance with the polluter pays principle the collection has to be entirely financed by the producers themselves. For those containers that do not fulfill this condition an exemption is still possible provided that a certain re-use percentage is reached in a particular time period. The re-use percentage differs according to the material of the packaging and according to the product packed. A distinction is made in this regard between fizzy water, cola, beers and other limonades in order to take into account the existing differences in consumption habits, especially with respect to the use of one way or refillable containers. The objectives are strenghtened in the period 1994-1998. E.g. for fizzy water from 44 to 69 pct., for cola from 44 to 60 pct. and for beer from 94 to 95 pct. With respect to the non-re-used containers the producer who asks for an exemption must in addition fulfill recycling conditions which differ according to the material they contain : 80 pct. for glass, 70 pct. for plastic and 80 pct. for metal. In order to fulfill those conditions the producers can adhere to a collective orga-

nisation, that has to be recognised by the regions because they are competent in environmental matters. The recycling requirements are stiffened up over time in the sense that they are related to a certain percentage of the Belgian population. This percentage is gradually increased from 12 pct. in 1994 to 100 pct. in 1998. It is important to note that those exemptions do not apply to bottles made in PVC. This is another hot topic in the law. The green parties want to ban PVC as a part of their global demand for a reconversion of the chemical chlorine industry. Industry disputed this conclusion heavily arguing that the scientific data put forward to motivate such an important conclusion were weak and that the socio-economic consequences would be too hard. As a political compromise the law now states that the ecotax commission will have to advise on this problem. Within the first trimester of of 1995 the government will then decide whether or not to apply the discrimination foreseen in the law.

Partly as a response and partly as an alternative to this law the Belgian industry created Fost Plus, which will function more or less in the same way as the German Dual system but with a more precise cost allocation to the participants and a more gradual expansion, putting emphasis on recycling and to a minor extent on prevention. It has to be noted that the Fost Plus system is a global effort made by industry in order to deal with packaging and waste in general and as such covers not only the drink containers. There still remain however a number of difficulties with respect to the coordination between Fost Plus and the ecotax law.

1. Industry advances the Fost Plus system as an alternative to the combination of the re-use and recycling requirements provided in the law instead of considering it as a way to fulfill only the recycling conditions. In fact, it considers re-use and recycling as alternatives, where the law ranks re-use clearly higher than recycling.
2. The recycling objectives advanced by Fost Plus are global ones relating to all materials collected, whilst the ecotax law stipulates specific recycling requirements for glass, metal and plastic from drink containers.
3. The recycling objectives put forward by Fost Plus remain inferior to the ones required by the law.

The creation of Fost Plus must be seen in anticipation of efforts undertaken by the regional governments to conclude an interregional agreement installing a Dual like take back system all over Belgium based on a general take-back obligation for consumer packaging.

2.2. THROW-AWAY PRODUCTS

The objective of this part of the law is to create an incentive for the consumer to substitute those products by more durable goods. During the negotiations a long list of products were considered as possible candidates to be ecotaxed. At the moment however only throw-away razors and throw-away cameras are subjected to the ecotax. It is clear that those products are in no way the most important ones with respect to the objectives put forward by the legislators (amongst which the reduction of the amount of waste is an important one), so these ecotaxes serve perhaps more an educational than a real environmental function. The follow-up commission will have to add other more important goods to the list.

Once again exemptions are provided for in the law. The most important one stipulated that for those producers that could prove that 80 pct. of the spare parts of the cameras are actually re-used in cameras of the same type, the ecotax did not apply. When proof was given that 80 pct. of the spare parts were recycled a lower tax rate applied. The ecotax law thus de facto favoured those producers that have oriented their environmental management systems towards re-use over those that in the past opted for recycling. Industry protested against this discrimination. The ecotax commission proposed to make recycling and re-use equivalent for those throw-away cameras.

2.3. THE PACKAGING OF CERTAIN INDUSTRIAL GOODS

The tax does not have to be paid if a deposit- refund system is installed and if the packaging collected through this system is re-used or disposed of or usefully applied in conformity with the existing solid waste regulations and on the condition that those operations are financed by the producer. The ecotax does not apply to products for non-professional use.

2.4. PESTICIDES AND FYTOPHARMACEUTICAL PRODUCTS

The objective of the tax is to give an incentive to the users of toxic products to substitute them by cleaner alternatives. A list is published that makes a distinction between very toxic, toxic and less toxic products. The tax rates differ accordingly. A large number of exemptions is provided for of which the exemption granted to farmers is the most disputed one.

2.5. PAPER

The goal of this ecotax is to stimulate the use of recycled paper and to limit the use of chlorine gas in paper production. So the law stipulates the objectives with respect to the recycled fibre content of different kinds of paper. These objectives have to be met between 1994 and 1999. The tax is lowered by 50 pct. if the paper pulp is not chlorine bleached. The system of taxation incorporated in the law runned into serious problems because it proved scientifically not possible to ascertain with enough reliability the exact recycled content percentage or the absence of chlorine bleaching during the production process. Therefore, on an advise of the ecotax commission the execution of this part of the law was postponed with one year.

2.6. BATTERIES

The purpose is to separate the waste stream of batteries from other domestic waste. So ecotaxes are not due if industry sets up and finances an individually or collectively organised deposit refund system that enables it to valorize the collected batteries.

3. IMPLEMENTATION PROBLEMS

Although the taxes have to be installed gradually and the implementation of the ecotax law is still object of intense discussions both in the follow-up commission and in the admi-

nistration some preliminary lessons can be drawn with respect to the implementation problems with respect to such product taxes.

3.1 THE NEED FOR CLEAR AND AGREED ENVIRONMENTAL OBJECTIVES

Perhaps the most important and in a way a somewhat paradoxical experience is that the instrument as such is less disputed than the goals it is meant to serve. This phenomenon could be observed on a great number of occasions : the choice of the harmful pesticides and phytopharmaceutical products, the favouring of re-use over recycling, the justification for imposing recycled content provision in the paper industry. The conclusion is obvious : in order to avoid great difficulties in implementing ecotaxes the environmental philosophy behind the introduction of the ecotaxes has to be clearly defined, understood and accepted by the public and by the actors concerned. Furthermore the ecological links that are crucial for the success of the ecotax solution have to be clearly established. Gradually it became clear that in a number of cases this condition was not fulfilled in the Belgian ecotax law.

Problems often arise because one instrument (the ecotax) is used to reach several goals, whilst the relationship between those goals is insufficiently established out before. Whenever one violates the old Tinbergen rule of economic policy (Tinbergen 1970) that for every goal a different instrument has to be chosen, one ends up in trouble. The ecotax on drink containers illustrates this point perfectly. The apparently prime objective of the law is to limit the production of solid waste. If so recycling and re-use have to be judged on their relative effectiveness and efficiency in attaining this goal. Should the two options have the same effectiveness in this regard than one could leave it to the individual producer concerned to select the best option for himself. It would be very unlikely that all would be driven towards the same conclusions. Instead it is more likely that the final decision will depend upon the individual situation of the producer. Re-use systems are e.g. cheaper when one can easily organize several trips, when the distance from the polluter to the consumers is rather small, when the distribution sector has the possibility (e.g. space) and the willingness to collaborate, etc. Mineral water producers e.g. in general have more problems with the REF/PET solution than other soft drink producers because they are afraid that the quality of that product might deteriorate. So a general assessment of the relative benefits of the two options that would lead to the same optimal outcome for all producers of all drinks in all circumstances is very difficult, if not impossible to achieve. The experience rather confirms the wisdom of the Austrian School : correct assessment of benefits and costs of alternative actions is only possible by the actors themselves. So emphasis should lay on creating the right institutional environment that enables producers to take the appropriate decisions as to the design of their products and distribution systems instead of on government prescriptions of the products they should produce and the distribution systems to be used. This presumes of course that the other parameters that influence the decision are correct. Important in this respect are e.g. correct energy prices. The efforts to render a global judgment on goods based on a multitude of environmental criteria and irrespective of the other non-environmental criteria that are important for utility will almost certainly fail. In this respect there is a general demand for ecobalances although this instrument does not prove to be the magic tool that solves all problems in the discussion (King Baudouin Foundation, 1995). Amongst others because data in most cases are obtained from industry and as such are disputed by the other actors concerned and because

some basic choices (e.g. what effects have to be incorporated, and how are different effects to be aggregated, what is their relative weight) continue to provide ample stuff for discussion.

Moreover, goods create a large number of environmental problems from cradle to grave. To be able to solve them all by way of an ecotax on the product level seems an illusion and is very likely to be inefficient because doing so one limits the number of options open to producers and consumers for remedying those environmental problems. Once again the old economic prescription that the instrument must interfere as near to the problem as possible seems to be the best rule to follow. Within this philosophy product taxes on consumption goods are also a good solution for environmental waste problems created by consumption; they are in general only a second or third best solution for problems during the production phase. Along this line of thought the principal aim of limiting waste should be the prime objective of the ecotaxes and this should be reflected clearly in the modalities of application. Sometimes a trade-off has to be made between this efficiency rule and the practicability of the solution proposed. A clear danger nevertheless exists : the administration in general has the clear tendency to favour practical solutions; so one must be careful that this does not diminish the efficiency.

Another example of unclear goalsetting is provided for by the ecotax on pesticides and fytofarmaceutical products. At the basis of this tax lies the classification of products in very toxic products, toxic products, less toxic products and least harmful ones. At the moment this classification is still heavily disputed, both because of a lack of scientific justification and of a lack of clearly defined environmental goals. In particular it became clear that in a number of instances a clear difference exists between the ecotoxicity of some substances and the human toxicity of those products. The scientific material with respect to human toxicity is more available, but unreliable with respect to eco-toxity. Moreover, evaluating only the substances is insufficient because the effect on the environment depends also upon the concrete formulations in which those substances are applied and upon their concrete application for certain specific purposes. In this case a general instrument like a tax is less suitable to solve the problem. Because our knowledge is too limited and we cannot make a global judgment on all pesticides and products together, one must be very careful not to create perverse incentives : newer products are ecotaxed because their harmfulness has been scientifically proved; thereby a incentive is given to buy older products that are not tested for ecotoxicity. All of this of course makes the tax system very complex, provides ample room for discussion, creates a severe impediment for the acceptability of the new tax and makes it more difficult to implement it.

3.2 THE AVAILABILITY OF AN ALTERNATIVE AS A POLITICAL CONSTRAINT

Economists have advocated the use of ecotaxes because they were seen as an instrument that is in conformity with market logic. They change relative prices and as such they give a direct incentive to the consumer to alter his consumption pattern substituting ecotaxed products by non-ecotaxed alternatives. Industry however does not accept this argument because it protests against the heavy financial burden that the ecotax puts on it, which according to industry drains away the funds necessary for technological innovation. This objection can partly be overcome by an early announcement of new taxes, in order to increase the adaptation period, or by temporarily exemption clauses that allow industry to use the taxes it would have to pay under the ecotax law to cover the costs of its additional research efforts.

The economic argument in favour of green taxes goes even one step further. Even when no alternatives are available, eco-taxes have a clear advantage over standards because they stimulate technological innovation³. Market competition will induce polluters (producers and consumers) to search actively for new methods to lower their tax burden. Environmental taxes thus make it possible to mobilize the great potential that research and development offer in favour of the environment. Therefore, confronted with economic theory the necessity that a non ecotaxed alternative must be available which is incorporated in the Belgian law can be reduced to what it really is : a political constraint for the application of the ecotax, instead of a solid economic argument.

When substitutes do exist, is it not feasible simply to ban the environmentally undesirable product and as such force the previous users of it to opt for the available alternative ? This is true provided :

- a. the undesirable product has to be banned completely;
- b. the international trade rules allow the government to act as such;
- c. the alternatives are correct substitutes for the undesirable products.

If one of those conditions is not fulfilled the administration will be under pressure to set up a complex set of administrative rules to govern the use of the undesirable products. In this case it is easier to use a product tax than a system of standards.

E.g. the pesticides and fytofarmaceutical products submitted to ecotax seldom have a perfect substitute in concrete applications. Instead different products have different degrees of substitutability with respect to each other in concrete applications. Potential users have to judge the relative performance of those products for a number of criteria (effectiveness, price, frequency of application, facility of use, technological and administrative requirements for use, depreciation period of existing capital stock, market position with respect to possible suppliers ...). The administration does not have enough information at hand that enables it to decide where the product is still necessary and where not. If it would try to do so this would lead to a complex system of permits that could easily be manipulated by the private sector. In such a situation ecotaxes have the great relative advantage that they interfere only indirectly in the choice process. Ecotaxes interfere in this evaluation affecting one but only one parameter - price - , thereby tilting the balance in favour of substitution in one case, inducing towards a more limited use in another or towards abolishing the practice altogether etc. As a consequence only a hard core of users will remain after the installment of the tax, those where - according to the market and not according to the administration - the use of the tax really has an economic justification.

³ te typen

3.3. POLITICAL BARRIERS TO THE INTRODUCTION OF ECOTAXES

Standard text book economics favours environmental taxes because they are more in conformity with the market system. Why do they still meet such stiff resistance then ?

1. First of all it is clear that the business community does not like the ecotax idea. The business community favours voluntary agreements and the regulatory approach to incentive charges for several reasons.
 - Those instruments are less costly for them, because residual pollution is for free.
 - The regulatory approach provides polluters with much more room for influencing environmental policy goals than taxation. Specific environmental policy regulation in most instances arise out of negotiations between polluters and environmental bureaucrats about the exact meaning of "BAT or BATNEEC, so they can be manipulated by industry, which has a clear information advantage over the administration.
 - In some less calvinistic countries (e.g. Belgium) the effectiveness of the regulatory approach is still rather weak due to a lack of control and a lack of effective sanctions. Most textbooks state that environmental standards are in general more effective than charges. This statement may be true in theoretical models, but in practice it can be doubted. The economic analysis of law on the contrary suggests that there is no much difference between both instruments in this respect. Most differences between charges and standards, mentioned in the literature, are on closer examination not convincing⁽⁴⁾. The compliance with standards must indeed be seen as the result of micro-economic decisions by members of the target groups based on balancing marginal non-compliance costs (determined by moral beliefs, public pressure, consumer behaviour, subsidies, expected sanctions) with marginal compliance costs (marginal sanitation costs). According to this analysis, compliance with regulatory standards seldom is an all - or - nothing decision, but on the contrary leads to the establishment of some optimal rate of compliance. Hence, regulations also are not 100 % effective. Furthermore, behaviour that conflicts with policy goals is immediately sanctioned in the charge system whilst sanctioning in the bureaucratic system may require a long bureaucratic/juridical and even political decision process, the outcome of which is highly uncertain. It is precisely this lack of effectiveness that sometimes makes the regulatory approach interesting for some target groups.

⁴. See R. Osterkamp, (1984) and H. Weck-Hannemann and B.S. Frey (1994).

- The business community also opposes to charges because they suspect that incentive charges after a while will be seen as an easy way to raise government revenue. Especially in countries - like Belgium - with a high average and marginal tax rate this fear is very real.

2. Not only the business community is opposed to the ecotax idea. The ecotax idea met stiff resistance by other segments of the population too. The main preoccupation of economists is efficiency. This is not the main preoccupation in the political arena where distributional issues and the relative bargaining power of the target groups dominate the outcome of the decision process more than the theoretical economic analysis based on the efficiency motive does.
Environmental charges are to a large extent still seen as licences to pollute. Economically this argument only holds ground if adaptation costs are very high and the elasticity of demand is very low, which in most cases is certainly not true in the long term. The short term however prevails in the political arena. From a distributive perspective the argument is a little more convincing. Political actors often take a moral stance and resent that some people willing and/or able to pay are allowed to do something which according to their opinion should be forbidden altogether. This moral approach is coupled with a somewhat naive belief in the effectiveness of government regulations and laws (⁵). Partly to overcome the scepticism of the population it was decided to accompany the introduction of ecotaxes by a media campaign.
3. It is generally accepted that the environmental bureaucracy is not keen on environmental taxes, because they fear their influence in important policy decisions will be diminished. Although one would have expected the opposite reaction from the fiscal bureaucracy, the fiscal administration too proved to be rather reluctant to this new instrument. This could be explained by several factors. The financial approach presents a clear turn-away from tradition in fiscal policy. Recent developments in fiscal practice favour indeed more simple fiscal systems in order to raise the effectiveness of tax collection and to affect as little as possible the allocation of goods and services in the economy (tax neutrality). That policy approach allows only for taxes to finance government expenditures.
4. The Belgian experience clearly shows that producers and consumers of products that bear the risk of being ecotaxed remain not passive actors in the decision process itself. In other words they do not wait until the ecotax is installed and then react to it. Instead they intervene in the decision process offering advice, asking for changes in the legislation, suggesting new solutions, pointing to application problems and attempting

⁵. See e.g. Kelman (1982).

to twist the regulation gradually in their advantage. The Belgian experience also points in this respect to the importance of the announcement effects. A lot of adaptation clearly occurs before the actual system is in force, because once industry knows in what direction government regulation will go it has a clear interest in reacting early enough in order to strengthen its market position. As a consequence it might well be that when we will be writing the history of this new tax bill a lot of taxes will in practice never have been paid. They will only have served as a stick for the private sector to come up with alternative solutions. E.g. in the law on several occasions deposit refund systems were suggested as an exemption to the ecotax. Industry proposed alternatives to the deposit refund system in the form of voluntary collection and treatment systems. It is clear that such collective efforts by industry could only be obtained because of the threat of a collective enemy, being the ecotax. Moreover the continuation of the threat proved to be crucial for the viability of the industrial initiatives. Without such a threat industry could never have found the cohesion necessary to make such solutions work.

3.4. THE IMPORTANCE AND THE DANGERS OF CONSULTATION

While working out the concrete details of the Belgian ecotax it became clear that there is a great need for consultation with the sectors concerned.

Putting into practice the ecotax idea asks for a lot of specific decisions for which a detailed knowledge (data) of the sector concerned is indispensable. This information is in most cases not known by the administration, so it has to rely on the information obtained from the industry concerned. Only industry knows or can foresee to a certain extent e.g. the possible reaction of the sector to a certain measure, the concrete market structure and the eventual reactions of the buyers and the importers and exporters, the technological details of the production processes. Obtaining the voluntary cooperation of producers and users in a mixed economy proves to be an important political challenge for any proposal in this field.

This however creates the well known danger described by STIGLERS regulatory capture theory ⁶: the regulated sector takes over the regulatory process itself and tries to create rents by erecting artificial market barriers. Many modalities of application (time, exemptions, stock treatment, import treatment, definition of products) could serve de facto as a barrier to entry. In this respect it is understandable that industry is seldom united. Representatives of an industrial sector are indeed at the same time competitors, and therefore distrusting towards each other (leading e.g. to large representations during consultation). Representatives are often not only representing the groups interest, but at the same time they are pursuing their own specific targets in order to strengthen their own market position. In a mixed economy lobbying for regulation which affects differently subgroups of an industry, is a well known strategy for rising rivals costs. This strategy is indeed more efficient for attacking enterprises than predatory pricing, because it is less costly. The firm does not need high financial reserves ⁷. The danger of hidden protectionism as such is very real because importers are

⁶ See Stigler (1971).

⁷ See S.C. Salop and P.T. Scheffman (1983) and also S. Oster (1982).

seldom represented by such sectoral delegations. Thus domestic industry does not only ignore the specific interests of foreign firms but in some cases even tries to use the ecotax law as a hidden import barrier.

Although very useful and even imperative the consultation process constitutes a complicating factor in the decision process. It is often not easy for industry to speak with one voice. Common positions are only arrived at after long internal negotiations. They are based upon whealing and dealing and do not always reflect economic efficiency. After all, the different firms are in a somewhat uncomfortable position : they must collaborate to combat a common enemy, whilst on the market they remain competitors. So one must be very careful with advice coming from the industry; small and medium enterprises e.g. are not adequately represented by great multinational firms. Producers do not have the same interests as the distribution sector. Moreover in order to strenghten the political acceptability of the new tax it is important to consult not only with industry but to extend the consultation also to other groups involved : employees, consumers, environmental groups, local policy makers. All this argues for a balanced and coherent consultation policy.

One more complicating factor : industry concerned does not always have the necessary insight into the environmental philosophy that led to the imposition of the ecotax and as such does not speak the same language as the legislators, a factor which is crucial for getting the right message around. In Belgium industry was clearly surprised by the political debate and as such was at the beginning unable to play its full role in the discussion. This explains partly why so many implementation problems were put forward only after the voting of the ecotax bill.

3.5. THE INSTITUTIONAL INTEGRATION PROBLEM

Both the effectiveness of action and the political acceptability are negatively affected if on the field elements of the new ecotax law prove to be in contradiction to other parts of the regulatory framework. Once again in the implementation process in Belgium the collaboration of the sectors concerned proved to be crucial for detecting this implementation problem. A complicating factor in finding adequate solutions to this problem proved to be that both for political and juridical reasons it is in most cases not possible to change other pieces of regulation in order to accomodate for the introduction of ecotaxes. Therefore solutions for this kind of conflicts have to be found nearly always in the ecotax system itself. This complicates the task considerably. With respect to the Belgian ecotax law this coordination problem mainly exists with respect to waste policy initiatives taken on other policy levels (both the EU and the regions) and with respect to the incorporation of the new ecotaxes into the existing fiscal regimes.

1. Belgium is a decentralised state where competence for environmental policy mainly rests with the regions. Therefore they are involved in the implementation strategy. Regions are for instance responsible for the recognition of the recycling associations that have to be created by industry in order to fulfill some of the conditions to get exemption of ecotaxes on drink containers. Within the framework of their competence with respect to waste treatment they are negotiating a take-back obligation with respect to package which could lead to a waste recycling structure similar to the German Dual System. The need for coordination between the regional take-back system on the one hand and the national ecotax system on the other

hand is obvious, but difficult. In general Belgian industry seems more attracted by the regional recycling system and lobbies in favour of a change in the ecotax law in such a way that it would accept adherence to the less stringent regional global recycling scheme as a sufficient condition for ecotax exemption. The separation of powers already has created an incentive for forum shopping. The same phenomenon of forum shopping could be observed with respect to the consultation procedure. The national ecotax commission has an obligation to consult the three regional environmental councils and the national economic council before advancing definitive proposals. Here also the incentive is real for those who do not obtain the result they want from the national ecotax commission to try once more to get their wishes fulfilled in other fora. Forum shopping also occurs with respect to the European Union. The negotiations with respect to EC waste package directive were very important in this regard. Belgian industry tried in vain, together with industrial circles of other countries to obtain at the European policy level that re-use and recycling would be considered equivalent in the hierarchy of waste treatment measures and that consequently the implicit ranking provided for in the Belgian ecotax law - re-use prevails over recycling - would have to be dropped.

2. Integration problems arose mainly with respect to the existing tax laws. The Belgian ecotaxes are product taxes. Apparently in order to limit the administrative costs of implementation, the law makers tried to link the ecotaxes as much as possible with the existing indirect taxes by stipulating that the ecotax is due the first time an indirect tax has to be paid on the goods concerned in Belgium, be it import duties, value added tax or excise tax, in other words when the goods are put into consumption. On the other hand in elaborating the law one had to take into consideration the special characteristics of the Belgian economy. Belgium has a small open economy. Most of the sectors submitted to ecotaxes are confronted with heavy competition both on the international markets and on their home markets. In order not to create a competitive disadvantage to exporting industries the ecotax law contains a general exemption in favour of exported products. Furthermore the country fulfills an important distribution function in the European economy. As a consequence a lot of goods are temporarily imported in the country and are later re-exported sometimes after additional processing. It is clear that if one does not want to give an incentive to distribution centers to move outside the country, the ecotax regime must also provide an exemption for this sort of activities. Also one must be careful that the implementation of the ecotax law should not endanger de facto unnecessarily and unproportionally the free movement of goods and services in the European Union. The fact that the border controls within the European Union are forbidden makes it more difficult to apply the ecotax also to imported products, which provokes fears among local producers of a worsening of their market position.

The combination of those considerations resulted in a complex set of legal provisions governing the import and export regimes of goods and as such raised complicated problems with respect to the implementation of the new ecotaxes. They are not easy to solve because most of the indirect tax law is determined by the European Union and as a consequence cannot be changed in order to accommodate for the introduction of the new ecotaxes in Belgium alone (). Because the structure of those taxes is focused on revenue raising and not really suited or even unsuitable to environmental purposes.

A special report on this problem was prepared for the ecotax commission by the Belgian fiscal administration.

1. The law states that the tax is due the moment goods are put into consumption. Using this provision intermediate trade created large stocks just before the introduction date of the new ecotax on throw-away raisors, thus circumventing the ecotax payment for many months. This clearly undermined the political credibility of the new tax initiative because consumers were informed about the new tax and how they should respond to it without actually seeing any ecotaxed products in the shops.

2. Linking the payment of ecotaxes with the first payment of any indirect tax in Belgium - as is foreseen by the present ecotax law - makes it difficult in practice to exempt goods for export. Furthermore, because of the impossibility of border controls in the European Union the application of ecotaxes to imported products becomes very difficult. This creates a risk of a worsening of the competitive position of Belgian industry on the home market. EU consumers are free to shop within the common market. So direct import of non-ecotaxed products by consumers for personal reasons is always possible. This constitutes of course a severe handicap in a small country where the border is near whereeven.

Linking in the EU-context the payment of ecotaxes to the payment of import duties is not an effective solution. It is of course clear that import duties are only to be paid on goods shipped from non EU members to the EU markets. As the EU has a common import regime and has instituted an internal market import duties to be paid in the EU are the same in all countries of the EU. They are due the first time the non EU goods cross the fiscal border of the EU. From there those goods can be either consumed in the importing country itself or they can be shipped to another EU-country (intra-union shipments). Three cases must be distinguished in this regard.

Firstly goods from outside the EU can be imported in Belgium and consumed in Belgium itself. In this case import duties, value added tax and eventually excise duties are to be paid. One could link in this case also ecotaxes to the import duty tax payment.

Secondly, non EU goods can be imported in Belgium and shipped from Belgium to another EU-member state. In this case ecotaxes should not be paid because of the export exemption but as the first time indirect taxes (import duties) are paid, the tax is actually applicable. It is also possible that non EU-goods are temporarily imported under a value added bonded warehousing system and later on re-exported to another EU-member state. This practice is common for distribution centers. Import duties have to be paid but no value-added tax or excise duties. Once again, linking ecotax payment to the first time an indirect tax (in this case import duties) is paid, does not lead to export exemption. Furthermore, the customs regime of the EU provides also for a special regime for temporary import. In this case import duties are not due (only a bail is asked for) and goods can later be re-shipped to a destination outside the EU. This special provision could be used to circumvent the ecotax on drink containers. Foreign producers could in theory import their containers under such a regime, collect them and export them or destroy them under the supervision of the tax office, thus avoiding ecotax payment and creating a competitive advantage for themselves without fulfilling the recycling and re-use conditions imposed by the law.

Thirdly, when goods are imported from other EU memberstates, import duties are not due and as a consequence the linking of the ecotax system with the import regime has no practical consequence.

What about linking the ecotax system to the value-added tax ? This also creates severe problems. The value-added tax regime (also EU governed) allows for the possibility to deduct value added taxes paid on goods that are later exported. When e.g. a Belgian enterprise buys goods from another Belgian enterprise, VAT has to be paid, but it can deduct the VAT paid from its total VAT bill. So when the goods are later exported export prices do not include the VAT payment. A similar deduction system should be installed if one wants exported goods to be exempted from ecotax payments. However, this is not allowed by the EU-rules. The sixth VAT directive indeed states that it is forbidden for the member states to install taxes, duties or charges similar to VAT. On the other hand when goods are imported from EU members into the Belgian market VAT is due and so should also be the ecotax. Unfortunately the actual automatic data exchange system operational between the fiscal Administrations in the EU only provides global figures on intra community trade, according to the VAT rate applicable. So if one wants to use the VAT system for ecotax reasons a number of additional information would be required. This means that the tax declaration should also contains the precise import data for every category of goods ecotaxed and that VAT tax payers separate in their declaration goods delivered to other VAT tax payers from goods delivered to non VAT-tax payers. This of course would greatly complicate the administrative requirements.

The easiest way to link ecotaxes to an existing indirect tax scheme is offered by the excise duties. However the actual excise regime is limited to a number of specific categories of goods (alcohol and alcoholic drinks, mineral oils, tobacco, and in Belgium coffee and non alcoholic drinks). To enlarge the field of application of those excise tax principles to all goods submitted to ecotax will require a specific administrative structure.

In conclusion the linking of the ecotax payment to the existing indirect tax regime is for practical and administrative reasons only a solution if the ecotax has a limited field of application. If one wants to make intensive use of product taxes for environmental reasons the installation of a specific ecotax administration seems to be appropriate. Additional studywork is going on within the Belgian fiscal administration to assess the feasibility and the administrative costs of such a regime.

3.6. THE NON-DISCRIMINATION ARGUMENT

The problem of alleged discrimination proved to be very important for the implementation of ecotaxes. The ecotax commission was confronted with many allegations of discrimination. It became gradually clear that this accusation could have several meanings.

3.6.1. Discrimination on ecological grounds

The explicit purpose of any ecotax is to discriminate environmentally unfriendly products and to favour environmentally friendly ones. Although in general this principle for obvious

reasons cannot be disputed, its practical application provokes heavy discussions. E.g. there was much discussion about the relative importance of the ecotaxed products with respect to the environmental problem at hand. Are the products selected for ecotax really the most important ones with respect to the environmental problem at hand? Producers of the throw-away products submitted to ecotaxes argued that the amount of waste created by their products is really insignificant compared to the total amount of solid waste. So why not start elsewhere ... Producers of the ecotaxed (soft) drink containers argued that their competitive position was worsened vis-a-vis non ecotaxed products, without solid environmental arguments : ecotaxed beer versus non ecotaxed wine, ecotaxed lemonades vs non-ecotaxed juices. The answer to those complaints of course is obvious, one has to speed up the introduction of new ecotaxes. So the ecotax commission took the decision to install a general ecotax regime for the drink containers.

A lot of arguments related to the link between the negative external effect created by the products submitted to an ecotax and the exact tax rate imposed on them. Industry often invoked the principle of the Pigovian tax in order to criticize the ecotax law. According to them the tax rate was not equal to the marginal external costs created at the optimal level of economic activity. This theoretically sound principle is however very difficult to put in practice because of the great difficulties in measuring ecological damage. The methods of assessing external damage are far from perfect and very time- and money- consuming. Moreover the economic methodology is often heavily criticized by environmentalists. Behind the rejection of the economic valuation system by environmentalists often two implicit value judgments are hidden. Firstly, they do not accept the principle of consumer sovereignty, the cornerstone of neo-classical cost/benefit techniques. Instead they prefer value judgments based on democratic decision mechanisms. Secondly, their implicit relative price of environmental goods vis-a-vis material wealth is much higher - sometimes even equal to infinity - than the relative value given to both goods by most citizens.

Eco-balances are often advanced as a solution to the valuation discussion, but do not in reality make an end to it. E.g. some time before the ecotax law came into being the Flemish government ordered an ecobalance study with respect to several types of drink containers. It became clear that the results of this study could be used to assess whether the discrimination contained in the ecotax law was justified. The methodology of the study became however very disputed.

Apart from other shortcomings eco-balances suffer from the following weaknesses. There is no general consensus on the effects that have to be taken into consideration when making the analysis. In other words, how far does one want to go in order to assess potential negative effects. As a consequence Belgium ecotax rates are of the Baumol type. They are chosen without an optimisation calculator. Data are provided by industry and as such do not constitute a reliable source of information to everybody. The ecobalance methodology wrestles also with the problem of how to assess the relative importance of different environmental impacts. As a consequence ecobalances are not the magical tool that could solve all decision problems. Although they are of great use in making the decision more objective, political value judgments are inevitably involved. Moreover, much additional research will be needed on the incorporation of this decision tool in the global decision process and on the link with economic decision tools, like e.g. cost/benefit analysis.

3.6.2. Discrimination due to the implementation process

It became gradually clear that the decisions concerning the implementation are as important with respect to possible discrimination as the actual legal provisions themselves. The timing of the tax, the way one calculates recycling and re-use rates, the interpretation of possible definitions by the administration (e.g. what exactly is a throw-away raisor?), stock treatment, exemptions... are administrative details but often could offer an important competitive advantage to one producer over the others. Therefore great attention must be paid to avoiding unjustified discrimination. Our experience made it perfectly clear that in a mixed economy the competition tools are not only price, product, place, promotion, but that influencing government regulation is also a very important aspect of competition. In the same sense we must be aware that many modalities of application are advocated by local industry at least partly because they contain one or more hidden market barriers favouring them over their foreign competitors.

3.6.3. International discrimination

In an open economy consumers and producers are free to move. So if the government of such a country takes action alone it always runs the risk of being confronted with deflection of trade. Consumers can go shopping directly in neighbouring countries. This element is very important in a small country where the border is always very near. Producers could relocate outside the country making use of the fact that the fiscal administration has no authority to control in a foreign country. As a consequence local producers protest when foreign competitors are not submitted to the same stringent standards that are imposed on them. They complain about ecological dumping and argue for the necessity of prior harmonisation of standards. This proves that the ongoing debate on the greening of world trade is very important. This debate as we all know is not an easy one. One has to take into account the regional differences in environmental scarcity in the world as they result out of differences in marginal rates of substitution in preferences between environmental goods and material wealth and regional differences in the supply of environmental services. The international fiscal community must decide to what degree those differences can be used as an element of the competitive position of countries and regions. It must at the same time prevent that environmental considerations serve as a too easy pretext for what is really protectionism, but at the same time one must not forget that the real integration of environment and trade policies implies that the trade system offers positive incentives for those who care for the environment and negative ones for those who do not. There is a clear danger that the first task will dominate too much the second one especially when possible conflicts are not treated by environmental and trade specialist together, but when only the trade community decides over them.

3.7. TRADE OFF'S

Democratic governments pursue a lot of political goals simultaneously. Although for analytical reasons they are often separated, in the reality of political decision making one cannot prevent that even when pursuing one particular goal with a particular instrument the performance of this instrument with respect to the other goals becomes an important political constraint. Environmental effectiveness, efficiency, the impact on the welfare position of

particular groups of the population, the impact on the competitive position, the employment effects all determine the choices that have to be made. As a consequence a lot of trade-offs are inevitable. It remains one of the positive contributions the economic adviser can offer to the political debate to show that many alleged trade-off's can be overcome by clever policy making.

Ecotax experience clearly shows there is a trade-off between administrative feasibility and ecological and political demands. The fiscal administration asks for simple systems in order to limit administrative costs and to prevent circumvention of the law. Ecological reasons sometimes call for more refined tax systems establishing an exact link between the environmental problems created by different products, used by different persons under different ecological conditions. Also political acceptability leads to more complex systems, as the socio-economic impact has to be taken into account. E.g. with respect to the ecotaxes on pesticides a general exemption was made in favour of farmers, although the use of pesticides by farmers is much more important for the environmental quality than the use of pesticides by industry and individual households. So this exemption clearly hampers the environmental effectiveness of the law. Moreover it serves as a pretext for other sectors to lobby for exemptions too. Thirdly, it creates opportunities for circumventing the law : private persons instead of buying in shops and paying ecotax could easily buy through a local farmer thus avoiding the ecotax.

Certainly in an open economy and in the short time a trade-off is inevitable between ecological impact and socio-economic effects. One of the shortcomings of the Belgian ecotax law is the lacking of a socio-economic escape clause. In particular circumstances due e.g. to the specificity of production processes, the time period necessary for depreciation of the old capital stock, the period required for installing new technology, the administrative permits required for changing input use and production processes, an adaptation period and/or temporary relief measures might be justified. As a consequence one of the tasks of the follow-up commission is to establish the criteria that would enable to make an objective judgment as to the different demands made in this respect and to propose the conditions governing this escape clause.

4. CONCLUSION

The introduction of ecotaxes on products in Belgium proves to be a very complicated task, more complicated than the law makers anticipated. It is not easy to combine environmental objectives on the one hand with the economic conditions connected with the free movement of goods and services and the existing fiscal system on the other. As a consequence there is a delay in the implementation process. Nevertheless we should not forget that even before their implementation ecotaxes have already had important effects. Industry has become aware of the underlying problems and now looks very actively for solutions. This 'soft' signalling effect is at least as important as the actual price differentiation that will be created in the market.

Belgian ecotax law, in line with OECD guidelines, provided for the introduction of a follow-up commission. This certainly proved to be a wise decision in view of the many difficulties of implementation. The commission plays the role of an objective forum where implementation problems can be examined thoroughly and sometimes the consumers even acts as a catalyser in the implementation process. From the start it became very clear that two risks had to be avoided. One is that the commission could be overwhelmed by demands for revision or even abolishment of the taxes voted by parliament and thus should served de facto as a court of appeal for which it has neither the competence nor the powers. Secondly, there was a real danger that the commission should take over the tasks of the administration and become involved in all practical decisions. Although today it has not solved all the problems yet, the work of the commission clearly shows that it can play a constructive role in the policy implementation process.
