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Comments on the Discussion Paper

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INCOME DISTRIBUTION CONCERNS IN RELATION TO IRELAND

Introduction

This paper addresses the points for discussion under income distribution concerns listed in the Discussion Paper[2] by de Kam (2002). The two topics under review, competitiveness and income distribution, are crucial where implementation of environmental fiscal reform is concerned. We need only remember the transport demonstrations of 2000 and also, as shown below, the reaction to charges for environmental services in Ireland that were perceived to be (and probably were) unfair.

In this paper, charges are considered alongside environmental taxes. This is because in some countries charges faces similar difficulties with regard to implementation and they are a similarly critical issue for the environment.

Meanwhile, looking on the bright side, Ireland has just introduced the plastic bag tax. Though it may be too early to say, I'll venture that it is the only popular tax I know. One can certainly fault the tax in several ways: it is unjustifiably high by economists' measures and it caused extra work for shops and the Revenue Commissioners, but a good thing about it was the manner of its introduction, which promoted acceptance, see Box A.

Box A: The plastic bag tax

To prepare people for the tax, a short brochure was available in shops, in a question and answer format:

Question: Can one avoid this tax?
Answer: Yes, you can avoid the tax by using a long-life bag.

Note: *This is not the exact wording, merely a paraphrase.*

Unfortunately the introduction of all environmental taxes is not so simple. The plastic bag tax did not have strong implications for competitiveness or income distribution to contend with, but

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[2] Flip de Kam, 2002. *Discussion Paper for Conference on Environmental Fiscal Reform,* OECD and BMU, Berlin 27 June.

at least there is now an encouraging precedent for the introduction of eco-taxes and this may make people somewhat receptive to EFR in Ireland.

This paper concentrates on income distribution issues that arise in implementing environmental fiscal reform and considers the topics for discussion as they are listed in de Kam's Discussion paper.

Addressing distribution concerns in Ireland

The Discussion Paper (paragraph 58) asks for a description of how Ireland has addressed income distribution concerns. Areas where Environmental Fiscal Reform is worth discussing lie in the fields of energy and carbon taxes, agriculture and fertiliser taxes, and environmental services including water and waste water and solid waste. The implications will be different depending on, for example, whether there is to be a new tax, or whether the existing way of paying for environmental services is to be reformed. Only a few examples will be highlighted here.

Water

The discussion paper asks us to flag non-adoption as a result of income concerns. A prominent example must surely be the Irish domestic water charges. A good illustration of how income distribution issues are ignored at one's peril, it would be hard to find a clearer endorsement for paying serious attention to mitigation and compensation options.

In brief, the abolition of domestic water charges was conceded during the run-up to an election campaign in 1996, on foot of an electoral threat to a government seat from an "abolish water charges" candidate. The water charges operating at the time were unpopular in some quarters, probably for several good reasons. Being unmetered they were unrelated to quantity, the bill was infrequent and therefore large (arriving at financially awkward times for some families) and the method for dealing with vulnerable families was not standardised and perhaps not always adequately addressed. Some local authorities had expressed a desire for centralised information on the problem, which was not forthcoming. Because the income considerations were not adequately addressed, Ireland slid into what can only be called Negative Environmental Fiscal Reform and abolished domestic water charges altogether. This has had many serious side-effects.

Since abolition, new house-building has added a quarter to the housing stock. While bye-laws are gradually tightening up on water-using equipment, without the 'hidden hand' of metered charging, bodies that undertake monitoring and house-owners will not be encouraged to check or think seriously about the water using characteristics of new dwellings. Under the 'absent hand', a generation of people is growing up without any inherent feel of water as valuable and expensive to deliver. Investment calculations are misled. Some public sector establishments have also not paid water charges, and it is known that one proposal to invest in recirculation of 'grey water' in a third level education establishment was turned down because correct (or shadow) prices are rarely incorporated in the sums. With excessive water use being encouraged, Ireland is climbing up the marginal cost curve more quickly than necessary, owing to wastage by customers and suppliers. Higher investment than necessary will be indicated, or investment will need to be undertaken sooner than otherwise. Either way, extra costs will be incurred.

Carbon taxes

The introduction of these taxes has generally been resisted because of sectional interests and perceptions or otherwise of the harm to competitiveness. Despite the more than adequate revenues available to reduce the impact on low-income households, reform is also thought to be regressive. In addition people have felt unable to trust governments to recycle the revenues. The authorities have not been inclined to give carbon taxes serious consideration[3] until recently in the *National Climate Change Strategy* of 2000 and, until even more recently, researchers have had difficulty in obtaining funding to investigate income and competitiveness issues.

Solid waste

Costs of providing municipal waste services are increasing because higher standards are being applied. Charges for municipal waste services are rising accordingly and also because subsidies are being reduced. In many areas the services are being performed by private companies which charge realistic fees. There are also the beginnings of charging by volume. In order to head off resistance from the same quarters that resisted water charges, income tax relief was introduced. This relief amounts to a flat-rate amount that can be availed of by taxpayers. It does not really address income distribution concerns because low-income households that pay no tax cannot benefit from the relief, as things stand.

Where these low-income households that cannot avail of tax relief are concerned, the Department of the Environment does not have information as to what mitigating or compensating methods are used. The Department says that centralised information or advice on this is unnecessary, because under the Act it is left to the authority. One would need to contact each local authority to find out what procedures are used. Some authorities, such as Dublin Corporation, grant waivers.

Where the service is operated by the private sector, it is unlikely that a waiver is granted, but this is not known for sure. Perhaps there is recourse to the Health Boards. Given that the issue simmers from time to time, some attention to the distribution effects is warranted. At the recent general election a small party mounted an “anti-bin charges” and “anti-local charges” campaign, see Box B. Given that the costs of waste disposal will rise as higher standards are applied, the issue of compensation flagged[4] since 1997 could grow in prominence. In the UK the private (water service) operators cross-subsidise from rich to poor customers. Arguments against this solution can be made on the grounds that, emergencies apart, utilities (or indeed energy suppliers, in the case of a carbon tax) may not be the best bodies to undertake tasks that fall under the remit of social welfare. It may not be ideal for companies to be distracted from concentrating on providing an efficiently run service. Again, short-term emergencies apart, government departments of social welfare would tend to have more focused expertise and routines for dealing with inability to pay and vulnerable households.

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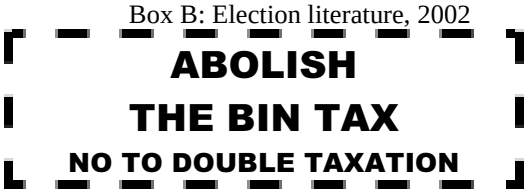
[3] A selection of papers from a decade of work on economic instruments by J. Fitz Gerald and S. Scott at the ESRI and by F. Convery at UCD are listed in the references.

[4] Scott and Lawlor, 1997.

Box B: Election literature, 2002



The issue of compensation versus mitigation

The Discussion Paper invites comments in paragraph 59 on the conclusion that lump sum compensation through the tax and benefit system is to be preferred over mitigation measures. The reason given is that mitigation, through exemptions or reduced or zero rates, reduces the price signal of the tax.

Where feasible, compensation is indeed to be preferred to mitigation because price signals need to be strengthened, in order to encourage technology change as well as behaviour.[5] It is the absence of such price signals that has contributed to the environmental degradation in the first place. People have been allowed to use the assimilative capacity of the environment and invest in lifestyles without thought of paying for the external costs that they impose, as if it belonged to them.

However, systems obviously have to be in place for emergencies, if for some reason the compensation mechanism has broken down. Emergency relief procedures need to be worked out for vulnerable families. Routine mitigation would be a mixed blessing to them at best. It would do a dis-service to people by masking the truth and ill-preparing them, children especially, for when they are confronted with correct pricing, elsewhere perhaps. That said, it has to be acknowledged that in the real world such an approach may sound somewhat glib if the compensation route is not adequately prepared.

Lump-sum compensation?

In paragraph 60 the Discussion Paper invites comments on various strategies to compensate households, and in the lead-up discussion, three options are given: (1) lump-sum compensation, (2) income tested compensation and (3) reduction of other taxes or "tax shifting". These raise several conflicting issues.

There is an argument in favour of (3) tax shifting, such as replacing or reducing pre-existing distorting taxes like labour taxes, because this makes the economy function better and thereby provides an added bonus (the term "double dividend" is to be avoided unless one is sure that it really is double). But lifting the economy does not guarantee that "all boats" are lifted and diversion of at least some funds is required to compensate vulnerable households. In fact Barker and Köhler (1998) found that it would lift all boats but rich ones higher that poor ones. The tax shifting investigated would be "weakly regressive".

Income-tested compensation (2) can be administered through the benefit system in Ireland at the risk perhaps of affecting the "replacement ratio" (the relative wage that employers have to pay to entice a person to work) or the supply of labour. The risk would depend on the magnitudes

[5] In addition to the Discussion Paper's example from ISI of the technology-inducing effects of high energy prices (footnote 8), Popp (2002) looked at patent data to study the impact of energy prices on energy saving technology, which were found to have a strong positive effect. The research also suggests that innovation needs such encouragement.

and thresholds. Other forms of compensation might be desirable, such as improvements to the heat retention of the house and the efficiency of heating equipment.

Compensation by (1) lump-sum transfers via the tax-benefit system has the disadvantage of foregoing the benefits of tax shifting but the advantage that it risks less upset to incentives than under (2). It has the potential for being efficient in application and perceptibly "fair". The question is what type of lump-sum transfers?

Lump-sum non-wastable tax credits are the best guarantee?

Finally, paragraph 61 of the Discussion Paper asks whether lump-sum compensation in the form of non-wastable tax credits against personal income tax offers the best guarantee that all qualifying households are compensated.

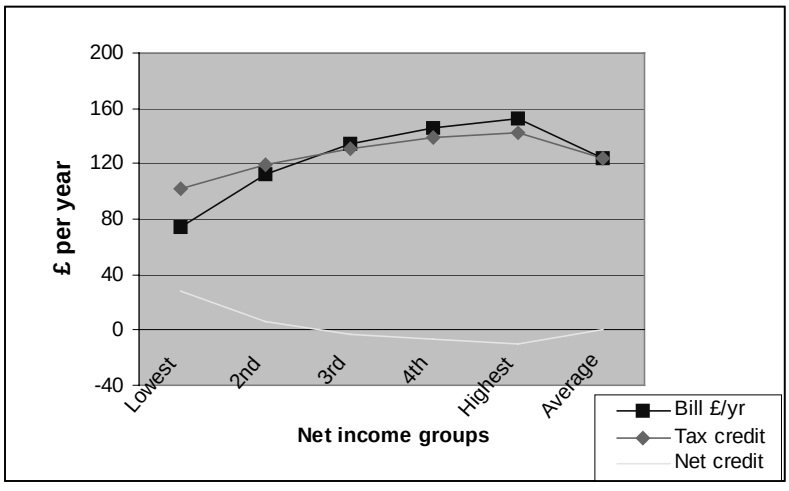
Not only could non-wastable tax credits offer the best guarantee of comprehensive compensation but they could also be the best way of making the introduction of environmental taxes or charges acceptable. Before, however, discussing some drawbacks, a recently calculated hypothetical example for compensating households for the re-introduction of water charges in Ireland is summarised here.

Metered water charges: An example of how revenue could be recycled as lump-sum compensation

This example takes account of actual ownership of water-using equipment in Ireland by income group. It further takes into account the fact that use per head declines with increasing numbers of inhabitants in the household, and it uses UK water usage patterns. It assumes that only current costs of water and waste water services are charged for. Evidently the charge on its own would be regressive, with amounts per household being in the region of 1.5 per cent of net income of households in the lowest income group (quintile), falling to 0.35 per cent for households in the highest income group.

So, to be progressive and fair, compensation is assumed to relate to average water use per head *relevant to the household size*. Compensation calculated on this basis is shown in Box C as the line called 'tax credit'. The bill paid is called Bill £/yr. It can be seen that the credit starts at a level that is higher than the bill in the case of low-income households (on the left-hand side) and then crosses it. Comparing the two lines, households in the lower income quintiles are more than adequately compensated by this method, and those in the higher quintiles are under compensated - a progressive and possibly satisfactory outcome. The net effect, the difference between the compensation and the bill is shown as 'net credit' at the bottom of the figure. For the average household, shown on the right-hand side, the net credit is consequently zero.

Box C: *Hypothetical calculation of the annual household bill for water services, tax credit and net change in the household's financial situation, by income group*



Note: Magnitudes are based on UK consumption and Irish ownership of water-using devices, and are illustrative only.

This outcome can only be achieved if a system of non-wastable tax credits were in operation (called refundable tax credits in Ireland). In addition to the need to set up such a system there is the task of obtaining the numbers of inhabitants in each household. Numbers are required in order to allow the calculation of "credit due" in a way that takes account of higher usage per head in households with few inhabitants, to make the system really fair.

The recently introduced system of tax credits in Ireland brings closer the possibility of granting non-wastable tax credits, and hence the awarding of lump-sum compensation, which would be a simple and progressive way of redressing the regressive effects. At present however, tax credits can only benefit those households that are paying tax. Non-wastable tax credits are currently under investigation by a working group under the programme for government. They hold out the hope of being able to address comprehensively the gaps in using the current social welfare and tax systems to compensate for the introduction of environmental taxes.

The issue of equity competing with efficiency, as was seen in relation to discussion of carbon taxes above, still remains. What on balance are the benefits foregone by not reducing distorting taxes?

Conclusions - the way forward

There is often a world of difference between the ideal and the practical. Furthermore what one person sees as a logical and practical way forward is often viewed by another as simply self-seeking. However, returning to the recent encouraging experience with the introduction of the plastic bag tax, it would suggest that if you can avoid a tax by good behaviour the tax will be perceived as being reasonable. Public acceptability might in fact require going back to mitigation of sorts in certain cases. Something along the lines of 2-tier rates may still need to be considered, for example, allowing everybody a certain quantity of carbon emissions, water, waste services *et cetera* for free. While these approaches are not ideal, it is probably important to keep an open mind on them if others cannot materialise.

International action to overcome competitiveness obstacle (paragraph 63)

Turning to the issue of competitiveness, the World Trade Organisation has a role to play in this. The question should be asked: is not failure to internalise the costs of environmental, and especially global, damage a trade-distorting measure. If a country has a competitive advantage because its exports are "subsidised" by virtue of not having to pay for the sinks or absorptive capacity offered by the globe's atmosphere, does this not constitute unfair trading? This is asking no more that that markets be required to operate correctly.

Priority type and level of action (paragraph 64)

To help to deal with concerns about income distribution, a priority would be to develop and operationalise the system of non-wastable (or refundable) tax credits.

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Appendix

A question on charges in surveys undertaken in 1993 and 2000 was posed as follows:

Finally, to meet EU obligations regarding the protection of the environment, it will be necessary to improve our methods of waste disposal and other services. These improvements will have to paid for, one way or another. This may be through higher taxes such as income tax, VAT etc., or through fixed service charges on households or by charges based on the amount of the service a household or firm uses (for instance, by metering water and charging per gallon used. In relation to each of the following services, how do you feel it should be paid for?

	Increases in taxes	Fixed Service Charge	Charge for amount used
Supply of drinking water……	□	□	□
Dealing with household garbage through recycling, treatment or disposal……	□	□	□

Answer: Chosen method of paying for water

Method of paying	**1993 survey**	**2000 survey**
Increase in taxes	2	12
Fixed service charge	51	26
Charge for amount used	46	56
"No charge, government should pay"	-	6
TOTAL	100	100
Number of respondents	919	1176

Answer: Chosen method of paying for the service dealing with household garbage

Method of paying	**1993 survey**	**2000 survey**
Increase in taxes	3	13
Fixed service charge	53	38
Charge for amount	44	45
"No charge, government should pay"	-	4
TOTAL	100	100
Number of respondents	925	1176

Source: ESRI (1994, 2000)