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Indirect Tax Reform in Ireland: A Comment

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This paper essentially applies Irish data to the model developed by Ahmad and Stern. It poses three interesting questions.

(i) Can we find a tax change which will increase welfare, holding total revenue constant?

(ii) What distributional value judgement is implicit in the belief that the present structure of indirect taxes is optimal? This is the inverse optimum problem.

(iii) How can we maximise an increase in revenue subject to no person being made worse-off?

The analysis of the first of these issues provides the core of the paper. Besides, the answers to questions (ii) and (iii) partly follow from that to question (i). As such, I will deal from here on with the section of the paper addressed to the first question.

The key parameter of the paper is λ_i, the marginal cost, in terms of social welfare, of an extra £1 raised via the ith good. This parameter, given the model in the paper, depends on only two factors – distributional considerations and demand responsiveness. In practice, as the data in Tables 1 and 2 suggest, distributional considerations do not significantly alter the ranking of the λ_is, unless very high values of e are assumed. Thus, it appears to me that demand responsiveness – own price and cross price elasticities – is "driving" the model,

i.e., is exerting the major influence on the ranking of the λ_is. This implies that revenue-raising capability emerges as the key consideration in the ranking.

Accepting this for the moment, there is then the issue of providing estimates of the elasticities. This paper employs Rodney Thom's estimates using an Almost Ideal Demand System. Thus, the results and policy recommendations depend critically on the reliability of these estimates. However, elasticity estimates using an Almost Ideal Demand System with the limited degrees of freedom and lack of information that normally characterise the data used can be particularly prone to instability and unreliability – standard errors for the estimates used here are not available. A further factor is whether to use estimates from the restricted or the unrestricted model, as these can vary very substantially.

These problems manifest themselves clearly in Tables 1 and 2. First, as pointed out by David Madden, a number of rather implausible results emerge – a negative λ_i for durables and the highest value of λ_i for rent, using unrestricted elasticities. In both cases the explanation appears to arise from the large cross-price elasticities between both durables and rent and services and transport and equipment, coupled with the fact that the large proportion of expenditure devoted to services and the high tax on transport and equipment give them a large weight. Services, as pointed out in the paper, are acting as a kind of residual term, thus including the errors in aggregating the other goods. The data on this category, therefore, are most unreliable and cross-price elasticities between it and other categories appear to be severely distorting the results.

A comparison of the rankings in Tables 1 and 2 also highlights some rather confusing messages. Table 1 tells us that the one good that should *not* be subject to extra tax is rent whereas Table 2 tells the diametrically opposite story. Less dramatic, but similarly conflicting recommendations emerge in relation to alcohol, tobacco and petrol. Thus, whether elasticity estimates are used from the restricted or the unrestricted model has a far more dramatic impact on the ranking of the λ_is than, for example, variation in e. This is not a very satisfactory state of affairs.

It is almost impossible, then, to make any policy recommendations on the basis of these findings. I was very pleased to see that David Madden did not attempt to do so in his suitably cautious conclusion. A further reason for this caution, of course, is that the data of the study refer to 1980, since when there has been a marked change in the indirect tax rates applicable to different goods and services. In particular, in the early 1980s there was a substantial increase in the VAT rates on some goods and services, an increase that could mean that policy recommendations made using 1989 data could be quite different to those using 1980 data.

I would like to make some general comments now on the model used in the study. Like any model, certain key features of reality have to be omitted. As pointed out, the model assumes separability between goods and leisure and therefore does not include income tax as a source of tax revenue. Likewise, it excludes all other sources of tax revenue. As David Madden says, this would involve much more detailed modelling of the production side of the economy, an extension which would, of course, allow an analysis of the supply responses to tax reform.

A discussion of the reform of indirect tax in Ireland would also have to take into account many considerations that would be difficult, if not impossible, to model. Some indirect taxes are designed to have a corrective, as well as a revenue-raising and distributional, function – this applies, in particular, to three major indirect tax revenue sources in Ireland, namely the excises on alcohol, petrol and tobacco. Furthermore, the extent to which this country *can* exercise an independent policy *vis-à-vis* indirect taxes is debatable given the fiscal harmonisation proposals of the European Community and the existence of a large land border with an economy where quite different tax rates apply. Which prompts me to mention the final factor that it is difficult for a model to capture – namely the difficulties of administering and enforcing a particular indirect tax regime. Tax avoidance and tax evasion possibilities and the costs of administration and compliance are increasingly being seen as important considerations in designing indirect tax systems.

I will conclude by saying that, despite all of the qualifications I have aired, a model such as that used in this paper has an important use. It provides a "filing system" for the way we analyse taxation issues and thereby greatly clarifies and makes more explicit the thought process involved. The danger with such models is that quite unsubstantiated policy recommendations or advice are made on the strength of them. I am pleased to say that David Madden did not fall into this trap and may I compliment him on a valiant attempt to throw some new light on the vexed question of tax reform in Ireland.