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The Challenge of Tax Reform and **Expanding the Tax Base** Geary Lecture - 2009

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I INTRODUCTION

D oy Geary spent his career using applied economic analysis to tackle $oldsymbol{\Lambda}$ important questions in public policy. I am deeply honoured to join the list of previous Geary lecturers who have celebrated the memory of such an important contributor to global economic policymaking. Were he alive today, Geary would find a plethora of issues to tackle – the economic challenges facing the world economy today are greater than at any time in at least a generation.

My topic today is the design of tax policy, and in particular the role of socalled "tax expenditures" in income tax systems. It is a topic that is important not just in Ireland but in many other nations - including the United States. I shall begin by talking about the revenue imperative, the challenge that policymakers around the world will face as they struggle to raise revenue to rebuild public treasuries in the aftermath of the recent economic crisis. I will illustrate the importance of thinking about economic considerations, such as taxpayer behavioural response, in designing tax policy. I will then share with you some of my experiences as a member of the Presidential Tax

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Reform Panel that was commissioned in the United States in 2005. I will conclude by discussing the perennial challenge of broadening the tax base and by suggesting institutional structures which may help to avoid raising revenue from a narrow tax base with very high rates and high distortions.

II THE REVENUE IMPERATIVE IN THE DECADE AHEAD

The last two years have been a punishing period for the public finances in most countries, including Ireland. In the face of global economic downturns of a scale that we have not seen since the Great Depression, many nations have responded with dramatic expansion of their fiscal programmes. This has ballooned public deficits and added substantially to public debt. In the US, the deficit to GDP ratio is expected to exceed 10 per cent this year – a level not seen since World War II. Current projections suggest that the debt to GDP ratio will rise from less than 40 per cent in the 1990s to between 70 and 80 per cent by 2020, with some chance of substantially higher levels. The projections at long horizons are uncertain, and they depend very much on policy actions that will be taken in the future. In Ireland, for example, the stated policy is to stabilise the government deficit in the short term and to reduce the deficit substantially by 2013. The long-term trajectory of government debt will depend upon the degree to which these goals are met.

The report of the Commission on Taxation (2009) will play an important role in guiding some of Irelands future policy actions. One safe prediction is that if more revenue is going to be raised, it will have to be done in one (or both) of two ways. The first would be to broaden the base of taxation, expanding the set of goods, services, and activities that are taxed. The other would be to raise rates on the existing tax base. While deficit reduction can take place either on the revenue side or on the spending side, spending reduction proves extraordinarily difficult in most industrial democracies. I therefore expect that revenue increasing measures will play a significant role in deficit reduction in Ireland and elsewhere. My remarks today focus on taxation; I will leave the difficult challenge of analysing potential efforts to prune government spending to those with more knowledge of political economy than I have.

When one thinks about base broadening versus raising tax rates, several key factors need to be borne in mind. The first is that higher rates create greater distortions in the economy. A touch stone of basic public finance theory is that tax-induced distortions rise as the tax rates rise. Consider a worker who supplies hours of work when the tax rate is 35 per cent – the top rate of tax in the US currently. If this person's labour input is valued by the firm as

\$20 per hour, and if the firm pays that wage, the labourer will only receive \$14 per hour. There is a gap between the value the market places on this worker's time, and the after-tax compensation that the worker receives for supplying labour. While the theoretical impact of such a tax on labour supply is ambiguous, and depends on competing income and substitution effects, most empirical work suggests that higher tax rates reduce labour supply, especially among secondary earners.

As tax rates rise, the distortions they cause rise more rapidly than the tax rates themselves. The economic distortion, or efficiency cost, of a tax generally rises with the square of the tax rate, so taking the tax rate from 20 per cent to 25 per cent is less costly than taking the tax rate from 30 to 35 per cent or 40 to 45 per cent and consequently, there is a pressure on efficiency grounds alone to keep tax rates as low as possible. This must be done subject to revenue constraints, which means if you are going to raise a certain amount of revenue you need to try to broaden the base over which you are levying your taxes.

Although it is important to recognise tax-induced changes in behaviour and their associated efficiency effects, these are not the only concern in tax design. Policymakers also need to consider the distribution of tax burdens. There is often a trade-off between an efficient tax system which has a very broad base and low rates and a tax system which has a distributional profile that is more attractive to elected leaders, and which does not put substantial burdens on those with relatively low ability to pay. The trade-off between equity and efficiency is a perennial issue in tax design.

The burden of the income taxes in both Ireland and the US are concentrated on those with the highest incomes. In Ireland, half of income tax revenues are collected from roughly 6.5 per cent of taxpayers (Minister for Finance, 2009). In the US, data reported by the Internal Revenue Service (2009) show that the concentration is even greater – the top 4 per cent of taxpayers account for half of all income taxes. Making comparisons of this type across countries is difficult, because not only tax systems but pre-tax distributions of income are different. But the evidence from both countries suggests that policymakers place substantial value on avoiding high tax burdens on households in the lower strata of the income distribution.

III BEHAVIOURAL RESPONSES TO TAXATION

In any analysis of tax policy and tax reform, it is essential to recognise that taxpayers respond to taxation. This is one of the key insights that economic analysis adds to the accounting discussion of potential tax changes. I will illustrate this with several examples of how, as the tax system has changed,

taxpayer behaviour has also changed. History offers some colourful illustrations of behavioural response, although they do not come with detailed econometric evidence. Anyone who knows about the French window tax will also be familiar with the boarding up of windows in medieval France that resulted from that policy. Or have you been to Amsterdam and noticed the very narrow, very tall houses along the canals? At one point the Dutch taxed the width of your house as a measure of your wealth, which resulted in narrow five storey buildings. These illustrations remind us of the importance of avoiding tax-induced distortions when designing tax systems.

To illustrate that individuals and companies who pay taxes can alter their behaviour in response to tax changes, one can turn to the US experience of the last three decades. When there is reasonably clear evidence of identifiable changes in the tax rules, we often find quite clear evidence that tax rules matter. Measuring such behavioural response is critical for revenue forecasting. If you are trying to decide how to balance the budget, you need to know how the tax base will change as you modify the rates. Moreover, as a matter of tax design one would like to avoid placing very high tax rates on commodities or activities where there is a very high responsiveness to those tax rates, because the resulting distortion may be larger than in other settings.

How do we measure behavioural responses to taxation? One necessary ingredient is a major change in the tax system. Economists who are interested in tax policy are attracted to studying countries where the tax system has just been given a big shake up; I suspect that we are going to find many examples of major tax changes in the next few years that will provide the grist for our research mill. Variation over time in tax rates is helpful for studying the effect of taxes on behaviour, although it may be challenging for the households and firms that pay taxes. The best of all is when there are data on the behaviour of the same households, or the same firms, under different tax regimes. The most challenging part of all this is finding cases where the tax system changes for reasons that are unrelated to other shocks in the economy that may affect household and firm behaviour. Such shocks make it hard to disentangle the underlying source of behavioural change.

Let me illustrate this problem of multiple shocks, and the difficulty of disentangling cause and effect, with an example drawn from unemployment compensation. Say a researcher is trying to study unemployment benefits and their impact on job search behaviour. In the US we have unemployment benefits for 26, or in some cases 39, weeks in most states during "normal" times. In the current recession these benefits have been extended in some cases to as long as 99 weeks. A standard subject for investigation is the relationship between the length of unemployment benefit availability and the

length of unemployment spells. Some states extend their unemployment benefits from 26 to 39 to even longer periods during economic downturns. Researchers studying these episodes often find that when unemployment benefits last longer, people stay unemployed longer. But is this evidence that unemployment benefit policies affect job search behaviour? Perhaps. But why do states extend their unemployment benefits from 26 weeks to 39 weeks? Usually it is because the economy is weak, there are many unemployed workers, it is hard to find jobs and the state's leaders are trying to offset that by allowing longer benefits. It is possible that the causal effect does not run from unemployment benefits to unemployment spell length, but from a third factor, the state of the economy, to both variables. Tough economic times lead states to extend benefits, and tough times also lead to longer unemployment spells. So you cannot simply look at the effect of the benefits on the unemployment durations and conclude that you have measured the effect of unemployment benefits on unemployment spells without trying to unwind the economic milieu in which the benefits policy is set.

The same thing is true for tax policy: you cannot simply say the taxes changed therefore we can study their impact, because in many cases taxes are changed for a reason — and that reason may also induce changes in taxpayer behaviour. Another perennial challenge in studying taxpayer behaviour is finding reliable measures of the activity that may be affected by the tax system. Some variables, for example labour supply, are multi-dimensional and very difficult to measure. How does one quantify effort devoted to a job? Hours may be measured, but they represent only one component of labour supply.

The advent of large survey datasets in the 1970s made it possible to study household-level, micro-economic responses to tax policy changes. More recently, the growth of access to administrative records from tax authorities in various nations has made even more powerful data analysis possible. Tax economists have benefited from both of these developments, and they have made great strides in the last four decades in quantifying how tax policy affects taxpayer behaviour.

Labour supply is one of the most-studied behavioural responses to taxation. Every undergraduate economist learns that when an individual's wage rises, say because tax rates have been reduced, there are two opposite-signed effects on labour supply that make it difficult to sign the net effect. Because the wage is now higher, the individual would like to sell more time to the market as a result of the substitution effect, but at the same time the individual is now richer because her endowment of time is now worth more. The individual will therefore demand more leisure – hence reducing labour supply through the income effect. Theory does not offer a clear prediction about how hours of work will respond to an increase in the after-tax wage, so

one must turn to the data to investigate how labour supply responds to tax changes.

Two examples of tax reforms that have been used to study how labour supply responds to tax reductions are the 1986 Tax Reform Act in the US and the 1989 Swedish income tax reform. Here in Ireland, research at ESRI — Callan, et al. (2009) — has examined how the shift from a couples-based tax system and an individual-based tax system for labour income of husband and wives has affected labour supply. The findings suggest that labour supply is in fact quite responsive to the after-tax wage, with larger positive effects on women than for men. This finding is consistent with much of the evidence from other settings; in general there is much more robust evidence suggesting a positive labour supply elasticity for secondary than for primary earners.

In studying how tax changes affect behaviour, it is helpful to focus on large tax changes because it is likely to be easier to identify the resulting changes in behaviour. Where are the largest tax changes? One way to answer this question is by studying the time series of average marginal tax rates on wages, or the time series for the marginal tax rate on a household that earns the average wage in the economy. Sweden is actually the league table winner for changes in this regard. Some calculations suggest that the Swedish tax reform of 1990/91 resulted in after-tax wage increases that averaged close to 25 per cent. Not surprisingly, this truly dramatic change has attracted attention from economists who would like to study how taxpayers respond to changes in their after-tax remuneration. In the US, the largest post-war tax change occurred in 1986, when the highest marginal tax rate on earned income declined from 50 to 28 per cent and the average after-tax wage rose by 5 per cent. The availability of survey data in 1986 is much greater than in earlier decades, which enhances the feasibility of studying this reform.

One careful study of the 1986 Tax Reform Act concludes that reducing taxes on labour earnings has a substantial and positive effect on the labour supply of secondary earners, primarily married women. Let me explain the research methodology. Eissa (1995) exploits the fact that married couples pool their income for US tax purposes. In the presence of a progressive tax schedule, this means that a woman married to a high-earning husband faces a higher marginal tax rate on the first dollar she earns than her identical twin who has the same earning capacity but is married to a husband with lower earnings. In households with very high earning husbands, the marginal tax rate on the wife's earnings was 50 per cent in 1985, but only 28 per cent by 1988. For such wives, the after-tax wage associated with working increased by 44 per cent. By comparison, for a woman who was not married to such a highearning husband, the positive effect of the tax cut on her after-tax wage would

be substantially smaller. Eissa compares the change in the labour supply of the wives of very high earning husbands, those in the top 1 per cent of the earnings distribution, between 1984/1985, right before the tax reform, with the analogous change in labour supply for similar women with lower earning husbands. She tries to control for as many factors as the survey permits. What does she find? There is a sharp increase in the labour force participation rate of the wives of the very highest income husbands after the tax reform, and a modest increase in the labour force participation rate of the women who are married to husbands who earn a bit less, and consequently face lower marginal tax rates. In other contexts, for example in Sweden, there also is evidence that changes in the tax system led to greater labour supply by those who were affected most substantially.

The Tax Reform Act of 1986 also changed the tax treatment of realised capital gains and created another opportunity to analyse taxpayer behaviour. In the US, we have a realisation based tax that levies a burden on the difference between the sale price and the purchase price for assets like shares of corporate stock. The Tax Reform Act of 1986 raised the tax rate from 20 to 28 per cent, and the tax change was announced in advance. When a tax increase is pre-announced, taxpayers take steps to avoid the new tax, and try to move economic activity forward in time to take advantage of prevailing lower tax rates. By midsummer in 1986, taxpayers knew that beginning in January 1987 they were going to face a 28 per cent tax rate on long-term gains. What happened? The taxes collected on realised capital gains spiked upward in 1986. This is hardly a surprise; capital gains realisation is one of the most elastic components of tax payer behaviour. The decision to sell an appreciated security is fundamentally a timing decision. An investor might have reasons to hold shares in a company for a long time, but in the absence of such information, if there is clear evidence of rising tax rates, she may decide to sell appreciated shares and to re-balance her portfolio. That is what happened in 1986 – revenues surged before the tax change, and were lower than expected in the years immediately after the reform.

The two previous examples of behavioural response have focused on individuals taxpayers. Firms are also responsive to tax changes – one clear illustration comes from the case of dividend payout policy. In 2003, the US reduced the marginal tax rate on dividend income received by individual taxpayers from a top rate of 35 per cent to 15 per cent. Chetty and Saez (2005) find that corporate dividend payout rose sharply, with some firms paying special dividends well in excess of their typical payout, some firms that had never paid dividends initiating such payouts, and other firms with existing dividends raising their payouts. It seems likely that the tax rate on dividend income will increase in 2011, and we will consequently be able to study the "reverse experiment" in this case.

The common lesson of all of these examples is clear: taxpayers, whether households or firms, adjust their behaviour in response to tax changes. Estimating the potential magnitude of such responses, and incorporating them in any analysis of the revenue effects and the efficiency costs of tax reform, is an essential step in the analysis of tax reform.

IV BASE-BROADENING AND TAX EXPENDITURES

Base broadening is one way to expand revenues while avoiding high marginal tax rates, but it is difficult. There are many constituencies that would like to plead for special treatment under the tax structure and that ask for their particular activities to be treated in a favourable way. The phrase that is often used for such special treatment is "tax expenditures," a term coined by the late Harvard Law Professor Stanley Surrey who was an adviser to the US Treasury Department in the late 1960s. He recognised that when we provide a deduction for homeowners or when we allow a deduction for charitable giving or something else along those lines we have essentially committed to a government expenditure program. However, instead of the fiscal authority spending the money, we have delegated that spending decision to the taxpayer and provided government support in the form of reduced taxes. The deductions and credits that result from such special treatment inevitably narrow the tax base and create pressure for higher tax rates. For example, if there are no rates on residential housing, then less revenue will be collected and the tax burden on other sectors will need to be raised to make up for the foregone revenue associated with this tax expenditure.

Sometimes one can think very directly of replacing a tax expenditure with an analogous expenditure programme. For example, in the US today we have a number of programmes to encourage homeowners to adopt energy efficient technologies. We have special tax credits for adopting solar home heating systems, or energy efficient appliances, or purchasing energy efficient vehicles. Those could all be replaced with government expenditure programmes which, if you buy an energy-efficient automobile, provide you with a subsidy of a given amount. Rather than operating these programmes as expenditure programmes, they have been run through the tax system as tax credits. The bottom line impact on the budget is the same in either case, but the choice affects tax revenues. An Energy Department credit for purchasing solar heating panels would show up as an outlay of the US Department of Energy, but a tax credit for purchasing solar heating panels shows up as a reduction in income tax liability. One difficulty is that there is no link between the foregone taxes and the budget of the Department of Energy – and there

may be real consequences for spending levels from this lack of transparency. Tax expenditures are often criticised on the grounds that they are effectively camouflaged expenditure programmes, and that their true effects are not obvious.

There are similarities along a number of dimensions between activities that are subsidised under the US tax code and those that receive special treatment in Ireland. For example, there is mortgage interest relief in the United States. On mortgages of up to \$1 million the borrower can deduct all of the mortgage interest against their taxable income. This is a long-standing subsidy in the US, and although many have asked if this subsidy contributed to the recent collapse in US house values, it seems unlikely that the recent market gyrations were attributable to this long-standing provision of the tax code. The favourable treatment of owner-occupied housing has probably contributed to a larger stock of owner-occupied housing in the US than would have been built otherwise. In Ireland of course, the rules are somewhat more complicated since eligibility for the mortgage interest deduction depends on how long the mortgage has been in place: relief applies only for the first seven years of a mortgage. Furthermore, the rate at which relief is allowed depends not on the individual's marginal rate, but on whether the taxpayer is a first time buyer (20 or 25 per cent relief) or not (15 per cent). One of the proposals that the US President's Tax Panel suggested in 2005 was moving towards a system in which the mortgage interest deduction would be allowed at a lower tax rate than the taxpayer's marginal tax rate on the last dollar of income. This proposal would decouple the taxpayer's marginal tax rate and the value of the tax subsidy.

A second similarity between the US and Irish tax expenditure setting concerns contributions to retirement savings programmes. Reasonable people could disagree about whether contributions to retirement saving accounts should be considered as tax expenditures or not. This disagreement is rooted in the long-standing debate about whether the appropriate base for taxation is income or expenditure. If you think that income provides a basic measure of ability to pay, where income includes both labour earnings and returns on capital, then allowing special treatment of savings through superannuation programmes or similar structures represents a tax expenditure. If on the other hand, you subscribe to an expenditure-based notion of the appropriate base for taxation, then the return on capital should not be part of the tax base, and allowing a deduction for saving, in retirement accounts or elsewhere, would not constitute a tax expenditure.

Finally, deductions for health insurance premiums and medical costs are treated in special ways. In the US, health insurance provided by an employer is not included in the tax base. As a result, we have an enormous number of employer-provided health insurance plans and these plans are often very generous. US tax policy economists have often suggested that the value of health insurance policies should be included in taxable income, but there has been little support for this concept among policymakers. The US and many other countries, including Ireland, are struggling with trying to find ways to rein in the growth rate of health care costs. Eliminating the tax subsidy for health insurance would cause consumers to face the full price of the insurance they receive. There are both efficiency and equity arguments in this direction, since the largest beneficiaries of excluding health insurance from taxation are those with the highest income tax rates. Nonetheless it is very difficult to build a political consensus for taxing health insurance. This was very clear during the recent US policy debate concerning expanding health insurance coverage. In Ireland, insurance costs are deducted at a 20 per cent rate and that creates a net cost to households that encourages health insurance purchase. The cost of this deduction, is somewhat smaller in Ireland than it would be in the US because the US does not have the first tier of public provision of health insurance that is present in Ireland.

It is helpful at this point to place various tax expenditure provisions in context for Ireland. The Commission on Taxation (2009) has provided information for tax year 2006, when total income tax revenue was \leqslant 12,375 million. The reduction in revenue associated with the tax treatment of medical insurance was \leqslant 261 million, and that associated with mortgage interest deductions was \leqslant 352 million. The revenue reduction associated with supplemental pensions was nearly ten times this magnitude: \leqslant 2900 million.

Because tax expenditures narrow the tax base, it is necessary to set average tax rates higher than they would otherwise have to be. A key challenge for economists and other policy analysts is to review tax expenditures and to ask if there is a justification for these exemptions and deductions. What do we know about the impact of the current tax treatment? What do we know about how tax rules affect taxpayer behaviour and are there better ways to achieve whatever policy objectives are served with deductions under the income tax schedule? These are time honoured questions that arise almost any time there is serious discussion of tax reform.

V US PRESIDENTIAL PANEL ON TAX REFORM, 2005

With the discussion of tax expenditures as background, let me describe the tax reform panel that I served on in 2005. The challenges that we faced, the recommendations that we arrived at, and the reception that they were afforded may offer some insights of relevance to the tax reform debate that is likely to take place here in Ireland. Our panel was a nine person group established in early 2005 by President Bush and charged with making recommendations that would make the individual and corporate income taxes simpler, fairer and more pro-growth. We faced only two constraints. One was that we were supposed to recognise the importance of home ownership and charity in American society. We loosely interpreted that as saying we could not recommend eliminating the favourable tax treatment of home ownership or charities. The other was that we had to propose revenue neutral reform options.

We faced an important challenge with regard to revenue neutrality. There is a feature in the US income tax called the alternative minimum tax (AMT). This is in effect a parallel tax system that operates in tandem with the regular US income tax structure. It was enacted in 1969 to raise revenue from a handful of very high income taxpayers who had large deductions and large gross incomes but who paid no tax. The parameters of this tax were not indexed to inflation and over time the point in the income distribution at which it takes effect has crept lower and lower. Now, if the AMT were not modified by Congress on a year upon year basis, it would affect most taxpayers with incomes above about \$100,000. Reforming the AMT has become increasingly expensive, and as a result, Congress has addressed this only on a year-to-year basis.

Our tax panel took what we thought was the high road and sought to achieve revenue neutrality under the assumption that the AMT is part of the current tax code and needs to be reformed. That meant that we began our work by trying to collect a trillion dollars in revenue over the next 10 years to fill the hole that the AMT would leave. That made our task difficult; once you need to propose a revenue-neutral reform and to replace a trillion-dollar revenue source, it is difficult to allocate benefits to many taxpayers. One thing that emerges from the experience around the world with tax reform is the recognition that reform is a lot easier when you are cutting taxes than when you are raising them. The sad truth at the moment is that most of the industrial democracies are going to face the challenge of tax reform in a revenue raising environment rather than a revenue cutting environment. This will really challenge policymakers, because it is more difficult to move in promising directions for tax reform when most or all taxpayers must pay higher taxes than when there are some opportunities to reduce payments by some taxpayers as the tax system evolves.

The 2005 tax panel report in the United States suggested eliminating the AMT. In addition, it proposed simplifying the US income tax system. One of the two specific proposals we offered, the "Growth and Investment Tax," was a modified version of an expenditure tax. The other was a simplified version of

the current income tax. Policymakers did not rise to the challenge of implementing our recommendations. I think there are two reasons for this. One is that we took on the challenge of fixing the Alternative Minimum Tax and wrestling with the rest of the tax structure simultaneously and that meant that the package as a whole looked pretty unattractive. Because the AMT had always been postponed, taxpayers were unaware this was a big problem – they never actually faced the tax burden that was implied by the underlying law. Our proposals on the AMT were therefore fixing a problem that was not yet evident to the public. At the same time we recommended a whole set of base broadening provisions that were likely to be quite painful when they took effect. These provisions, which would have eliminated some tax expenditures, met with no support from the Congress.

Our report asked a variety of questions about what tax expenditures do and were designed to do. First, we looked at the equity of various tax expenditure provisions. Tax provisions that allow taxpayers a deduction against their taxable income are more valuable to high-income taxpayers than to their lower-income counterparts when the tax schedule is progressive. The US mortgage interest deduction, for example, subsidises mortgage borrowing by more for a household in the top marginal tax bracket of 35 per cent than for one in the 15 per cent bracket. It is not clear why one wants to encourage housing demand more for those at the top end of the income distribution than for those lower down. Our panel tried to ask the question 'what are the cost/benefit ratios for some of these tax expenditures. Why do we have them?" If the objective is to encourage home ownership would one do that by allowing a deduction of mortgage interest or would one do that by allowing a credit for becoming a homeowner? Is it the margin between owning a home and renting that one wants to affect with the tax system, or is it the total level of housing spending? The current structure affects both the average cost of renting versus owning, and the marginal cost of the last unit of housing services – hence the amount of housing the household will choose to purchase.

We also tried to ask 'have we targeted these benefits in the right ways?' For charitable giving, for example, there is a deduction in the US tax code. One can ask the question 'is there a different behavioural response to a discounted price for giving to charity at different points in the income distribution?' If there is such a differential elasticity, perhaps there is a rationale for different tax subsidies at different points in the tax schedule. Some people have argued that higher income households are more responsive to the after-tax price of charitable giving, and as a consequence there is a case to be made for allowing a larger deduction at the top of the income distribution than elsewhere. The evidence is not dispositive, but this is the sort of argument that needs to be considered when exploring the structure of tax expenditures.

Finally, just as a matter of political economy it is very important to recognise that there are entrenched interest groups, such as homeowners, charitable organisations, and the health insurers and workers who benefit from the tax exclusion for employer-provided insurance, which are very strongly opposed to any changes that would broaden the tax base and increase the burden on activities that are currently receiving favourable tax treatment. Even when tax reforms are proposed as a package, there is a powerful pressure for interest groups to "cherry pick" the proposal, offering their support for the package except for the specific provisions that might affect them. The US legislative process seems particularly prone to this kind of legislative dissection and therefore particularly challenged for enacting broadbased tax reform legislation. It is possible that the current fiscal challenges that the US and many other countries face will break these legislative logisms, but there are few encouraging signs at this point.

VI GUIDING PRINCIPLES AND TRANSITION ISSUES

The work of the 2005 tax panel in the US along with decades of research in tax economics suggests several broad precepts that prove helpful in considering tax reform. First, focus on levying taxes on a broad base, since that permits lower rates than a more limited tax base. Second, remember that the long-term growth effects of taxes can be among the most important distortions. A number of studies suggest that taxes on capital income are particularly damaging to growth. Third, avoid situations in which relatively similar goods or activities are taxed in different ways under different parts of the tax code: that is a recipe for tax avoidance and for distortions of behaviour. There are many examples of this problem. The tax treatment of housing assets versus other assets is one, and the often uneven playing field between residential and commercial property affects the long-run composition of the capital stock. The differential tax treatment of debt and equity for corporations is another, and it creates an incentive for borrowing and alters the capital structure of corporations. VAT rates that differ across goods create incentives for producers to characterise their goods as falling into the low-tax category, and they are likely to distort consumption in the direction of the lowtaxed goods.

Taxing different activities differently can create inefficiencies in production and consumption. But raising a given revenue need in the most efficient way possible is not the only goal of the tax system: the trade-off between equity and efficiency must always be kept in mind. In the case of capital income taxes, for example, there may be a trade-off between the policy

that avoids long-run distortions, and the policy that distributes tax burdens progressively across income groups. The same trade-off may exist when considering differential taxation of various commodities, and the possibly heavier taxation of luxury goods than necessities.

The US tax panel wrestled with these distributional issues in 2005, and concluded that distribution was best worked out in the political process. Economists are often better at describing trade-offs among alternative policies than at saying 'here is what is good or what is bad,' because the latter statement involves a set of value judgements about competing policy objectives. In our 2005 recommendations, our panel tried to keep the distribution of tax burdens under our proposals about the same across income groups as under the current system. That may not be an option for the reforms that many countries may need to consider in the future, since the taxes paid by most taxpayers may need to rise in order to address the fiscal challenges ahead.

One essential consideration in tax reform is transition. It is important to avoid short-term disruptions associated with tax changes. It is very easy, as the US experience in 1986 suggests, to create powerful incentives for taxpayers to re-arrange the timing of their economic activity or even their underlying activities in an effort to reduce their tax liability. It is also possible to create substantial and often inequitable burdens on taxpayers who have taken different decisions in the past, and who now may be taxed differently as a result of reform. Housing provides a good example of the latter problem: if taxpayers purchased homes assuming there would be no rates on the residence, and then a substantial tax is imposed, the value of their homes will fall. To avoid sharp value changes and associated disruption, one can try to phase in tax changes or to announce a path of implementation that will allow some time for ex ante adjustment.

It is also possible to provide transition relief for those who might be burdened by the tax change – although doing so can require raising additional revenue from elsewhere in the tax system. Consider the discussion of whether to tax carbon emissions from fossil fuel combustion in the US, or to create a cap-and-trade system of emissions trading. Rather than implementing a new system of taxes that would collect substantial revenue, the current legislative proposal would provide grandfathering provisions to virtually all of the current large carbon emitters. While this policy would blunt the short-run transitional burdens, it also forgoes the opportunity to raise substantial revenue from the carbon tax. The transition relief largely avoids the need to address short-run distributional issues, but it does so at substantial revenue cost.

VII CONCLUSION

Let me close with two suggestions about how to monitor tax expenditures and to try to move toward a tax system that relies on a broad base to raise revenue. One is to require expiration dates on tax code provisions that generate deductions and exclusions from taxable income. Legislative bodies could of course always renew such provisions, and there are cases such as the R&D tax credit in the US in which they have. But, a renewal process would require some attention to the costs and benefits of such provisions, and would have the potential to focus policy attention on tax expenditures on a routine basis.

Second, a pay-as-you-go regime for all legislation that contained tax expenditures would improve the decision-making process that leads to erosion of the tax base. If legislators were forced to identify a new revenue source that would raise the revenue to allow a new deduction or exclusion, for example, by raising marginal tax rates on some part of the income tax schedule or by including something in the tax base that had previously been excluded, there would be a clearer linkage between costs and benefits in the discussion of potential tax expenditures. A PAYGO provision would raise the political cost of implementing new tax expenditures.

Colbert, who was the Finance Minister to Louis XIV, is reputed to have said that 'the art of taxation is the plucking of the feathers from the goose with the minimum amount of hissing.' It is very clear that tax policymakers, whether in Ireland, the US, or other nations, are going to face great challenges in the decade ahead as they try to reduce budget deficits and restore fiscal stability. They will need sound advice from economists and other tax professionals if they are to succeed in 'plucking' the revenue that will be needed while maintaining a fiscal system that exhibits a coherent rationale and that trades off equity and efficiency considerations in a reasonable way. Addressing current tax expenditures is likely to be an important step in the ongoing tax design process.

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