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Taxation Concessions As Instruments Of Agricultural Policy

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Abstract

Economists have rarely considered the implications of taxation systems for the agricultural sector. Management specialists and accountants have usually approached the issue from the perspective of how farmers and landowners can avoid it. Little has been written on the extent to which the special treatments that agriculture commonly receives in national tax systems impact on the sector and its performance. This paper considers these broader issues and builds on an inventory of tax treatments compiled for the OECD by one of the authors. Tax concessions can act as forms of support to incomes and wealth accumulation, though the identification and quantification of this support present fundamental conceptual difficulties and practical problems. Taxes are often advocated as instruments of environmental policy, and these may have income implications. Concessions given by capital taxes, in particular, constrain structural adjustment. Differential tax treatments can also impact on patterns of international trade by distorting comparative advantage, as perceived by farm operators. Some of these effects are of major importance to agricultural adjustment and to policy. This paper examines the main issues involved in achieving a more adequate understanding of the tax treatments applied to agriculture.

1. Introduction

Taxation does more than raise government revenue. It can affect the behaviour of economic agents in ways that complement or conflict with other public policies, including those directed at agriculture. Exceptions to normal tax regimes can be used as an explicit policy instrument or may have unintended impacts.

In developing countries taxes on agriculture (particularly agricultural exports) have often provided a major source of public sector funds. Taxation has also been used to stimulate the transfer of resources from agriculture to the rest of the economy. Though there are different ways of taxing agriculture, there is evidence that taxation has reduced agricultural growth (Khan, 2001).

In developed (OECD) countries the issue is rather different. Rather than facing an additional taxation burden, agriculture (and landownership) is usually treated in a special and preferential way. As in developing economies, such treatment is likely to have implications for the behaviour of the sector and its structure. Another shared feature is that basic information on both direct and indirect forms of taxation is fragmented and the literature on its implications is sparse (exceptions in the UK include Black 1938, Clayton *et al.* 1967 and Sutherland 1980). A recent OECD study on taxation and agriculture, involving one of the authors of this paper, provides an inventory of how this sector is treated (OECD 2005)[1]. This is discussed below.

The absence of academic and governmental interest in tax and tax concessions may have several explanations. Because these involve revenue foregone rather than direct budgetary outlays, pressure for public scrutiny is often reduced (Australian Treasury 2004). A yardstick of normality is required against which concessions can be assessed. Countries frequently view taxation to be purely a national matter and international comparisons are politically sensitive, especially if the focus is on agriculture. As a result, internationally comparable information is hard to find. For example, no inventory of taxation policies, as applied to agriculture, appears to have been compiled for the members of the European Union. Though there is no common EU policy on taxation that might require this, information on differences in the taxation of farmers and agricultural assets are clearly relevant for achieving the income objectives of the Common Agricultural Policy (CAP). State aid provisions also include taxation. But information on these is not available.

Despite this, some OECD countries have been active in documenting tax concessions. In the United States, Stanley S. Surrey (an Assistant Secretary of the US Treasury for Tax Policy in the 1960s) is attributed with introducing the term “tax expenditure” for such concessions and stimulating early attempts to estimate the amounts involved. Today around half of the OECD countries report tax expenditures and nine have made it a legal requirement[2] (World Bank 2004). Coverage varies and the treatment of agriculture is not always explicit. Australia has been at the forefront of identifying and quantifying tax expenditures for agriculture; the Treasury publishes annual estimates as part of a general report on tax expenditures (Australian Treasury 2004).

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[1] The authors gratefully acknowledge this OECD report as a major contributor to this paper. An AES workshop on taxation and agriculture, planned for June 2007, will explore some of the issues discussed here in greater depth.

[2] The countries with legal requirements are Australia, Austria, Belgium, France, Germany, Italy, Portugal, Spain and the United States. Most reporting countries do so annually except Germany (biennially) and Italy (less frequently) (World Bank 2004, cited in Australian Treasury 2004).

The OECD has a long history of examining general taxation and tax expenditures (OECD 1979, 1984, 1993, 1996, 2004). The World Bank has carried out several studies involving developed, developing and transition economies (World Bank 2003, 2004). OECD work on income and wealth in agriculture has touched on preferential taxation and the treatment of social contributions (OECD 1970, 1983, 2003). Though noted in general terms in studies of agricultural support (for example, OECD 1983), little attention has been devoted by economists to tax concessions[3]. Until the recent OECD (2005) inventory, there was no comprehensive international inventory of tax concessions applied to agriculture in developed countries.

2 A typology of taxes for which special treatment may be applied

It is useful to distinguish the categories of taxes for which differential treatment may apply in agriculture. The OECD (1993) has used the following classification that also forms the basis of other work done on agriculture (NILF 2002 and Khan 2001):

- Taxes on income, profits and capital gains – this may involve concessional rates within a tax category or different progressivity. Taxes on incomes and profits may be on actual (accounted) or presumed income. It is worth noting that capital gains appear in this category rather than among taxes on property, reflecting the view that these represent a form of income.
- Social security contributions – which can be a mixture of a taxes, duties and insurance. In practice, compulsory social contributions can be treated as a quasi-tax. This, and the fact that in some countries the provision of social support is funded from general tax revenue and in others by special social payments, suggests that both mechanisms must be considered together.
- Taxes on payroll and workforce – which concern farm operators as employers – and poll taxes.
- Annual taxes on property – which may be based on a market or presumed value of real estate and other property owned (and are thus regarded as current taxes) or on the occupiers of this real estate.
- Taxes on the transfer of property, such as by gift or inheritance or by sale (such as Stamp Duty).
- Taxes on goods and services – such as sales tax, turnover tax and Value Added Tax (VAT).
- Excise duties on specific inputs (such as fuel) and marketed products.
- Other taxes, such as those on international trade.

Other typologies are possible, including a grouping into direct and indirect taxes (see Khan 2001).

In principle, special treatment for agriculture can be provided under any of these categories. This paper is primarily concerned with general taxes, mainly direct ones but also including some indirect ones, for which special treatment is most common in OECD countries. We shall not consider the way that agricultural products are treated in international trade nor special levies (cess) that may be imposed on particular products to finance market development (such as Levy Board activities).

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[3] A rare example of a study that looks at the distributional implications of tax expenditures is Hanson and Eidman (1985).

3 Why economists should be concerned with tax concessions and special treatments

Tax expenditures can be viewed as having one or more of the following aims (OECD 2005):

a) to provide financial assistance to certain groups of taxpayers, such as farm operators and their families

b) to provide economic incentives that encourage specific taxpayer behaviour, such as investment in fixed assets or the development of certain types of land use (e.g, forestry) or

c) to reduce the cost of tax administration by simplifying the collection process (for example, allowing farmers who yield little tax revenue to pay tax at a flat rate per hectare such as through the '*forfait*' system applied in France, or a simplified VAT).

While the third of these objectives is concerned primarily with addressing diseconomies in tax collection, the first two relate closely to traditional aims of agricultural policy. Tax concessions can provide an alternative to direct expenditures as instruments of policy. If such concessions exist, they should not be ignored in a comprehensive analysis of the support provided to agriculture.

In this respect, there are several possible dimensions that may need to be examined:

§ Impact on the post-tax income of farmers relative to other groups in society and internationally (Hill 2000). Support to farmers is a dominant objective of agricultural policy. Comparisons of living standards between farmers and other social groups are becoming increasingly important in assessing policy aims and outcomes. The implications of differences in tax treatment can be significant, especially if the focus is on disposable, rather than total income.

§ Effects on the opportunity costs of production and the competitiveness of commodity production and trade within and among countries. Such effects can be felt even when tax concessions are broadly applied across countries. Dunlop *et al,* (2005) demonstrate how varying levels of tax concessions among countries can distort trade.

§ Tax concessions may attract resources into agriculture and help to explain why existing resource use is "sticky". In times when the economic, technical and policy environment is changing, tax concessions for agriculture may impose a cost on society by inhibiting industry adjustment and restructuring.

§ Concessions may affect the ability of farmers and landowners to conserve and concentrate accumulated wealth in the face of policies that tend to discourage this in the rest of society. Farmers may be able to take advantage of lower rates of taxation on capital gains than on current income (though in some countries short-term gains are subject to income tax). This may encourage income to be taken in the form of a capital gain with consequent implications for capital and land markets (Eginton 1980). Empirical work (reported in Hill 2000) suggests that such concessions may be used to finance retirement and influence farmers' retirement planning.

To ignore tax concessions to agriculture is likely to understate the true extent of government involvement in agriculture and the amount of support provided. Thus, in the World Trade Organisation agreement on subsidies and countervailing measures (WTO 1999) government

revenue that is otherwise due but is foregone or not collected is treated as a subsidy. Also, in principle, tax concessions are included in the coverage of the Producer Support Estimates (PSE) (see Portugal 2002) though, in practice, they are not covered comprehensively[4].

OECD work on environmentally harmful subsidies has identified tax and similar concessions as a potentially important but poorly documented form of subsidy. For example, exemptions from taxes on variable inputs have been shown to be highly distorting in terms of production and trade. Incentives to intensify production and the use of certain inputs may have significant environmental consequences.

4. Analysing preferential treatment for agriculture

The identification of preferential treatment for agriculture is not a simple process, and valuing the support provided poses challenges. A number of issues are involved.

4,1 What constitutes agriculture in the context of tax concessions?

Agriculture (as derived from international standard classifications of industries such as ISIC Rev.3[5] and NACE Rev.1[6]) is a production activity that is distinct from the provision of other land-based goods and services, such as forestry, tourism on farms, or housing services to farmers and others in rural areas. Conceptually, it can be separated from landownership as an economic activity, though of course many operators are also owners of the land they farm. However, taxation relates not to an abstraction such as an activity but to institutional units that form the "subject" of taxation, real people or legal entities (such as companies) that are required to pay taxes. Agriculture is undertaken predominantly by household-firms so taxes appropriate to individuals or groups of individuals as generators of income and owners of assets must claim the greatest amount of attention.[7]

Institutional units that are involved with agricultural production often undertake other activities. Thus there may be a practical problem of deciding which activities are eligible for tax concessions and which are not. This may involve the issue of who qualifies as a farmer or, more commonly, that a taxed unit will have a mixture of activities and assets, some of which qualify for special treatment (such as income averaging on the income from farming, or relief from annual capital taxes on farm assets) while others do not. Operators can be expected to explore accounting procedures that offer the possibility of switching income or assets into the more advantageous form.

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4 In 2005 the OECD (PSE database) contained estimates relating to seven countries (Australia, Canada, Czech Republic, Hungary, Norway, Slovakia and the United States) but these did not appear to be comprehensive (for example, only two of the six known concessions in the USA had been quantified for PSE purposes).

5 ISIC Rev 3 is the United Nations International Standard Industrial Classification of All Economic Activities. See para 1.47 of the SNA93. This is linked with the United Nations Central Product Classification (CPC).

6 NACE Rev 1 is the General Industrial Classification of Economic Activities within the European Communities. It is a more detailed version of ISIC Rev.3 adapted to specifically European circumstances. It is also directly linked with the statistical classification of products by activity (CPA) within the European Union, which is the equivalent of the CPC.

7 The corporate sector is increasingly represented and is particularly important in farming in central and Eastern Europe.

4.2 WHAT CONSTITUTES DIFFERENTIAL TREATMENT, AND IN PARTICULAR WHAT IS A TAX CONCESSION?

Differentials can be negative or positive, though there is a particular interest in those that treat agriculture favourably by reducing taxes that would otherwise apply. As noted above, this implies that tax revenue is forgone and economic incentives created in much the same way as if budgetary expenditures were used – hence the use of the term "tax expenditure" in this context.

In broad terms, tax expenditures are concessions that fall outside a tax norm or benchmark (World Bank 2004). A useful more detailed description is "any law … that exempts, in whole or in part, certain persons, income, goods, services, or property from the impact of established taxes, including, but not limited to tax deductions, tax deferrals, preferential tax rates, and tax credits" (State of Oregon 2003). The implication of tax revenue forgone is clear. Alternatively, according to James and Nobles (1992) quoted in NILF (2002), tax expenditure occurs when a fiscal advantage is conferred on a group of individuals, or a particular activity, by reducing tax liability rather than by a direct cash subsidy. Another formulation of tax expenditure, defined in the Congressional Budget and Impoundment Control Act of 1974 ("the Budget Act") is "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax or a deferral of tax liability" (quoted in JCT 2003).

Special tax treatment can serve as a policy instrument when the provision of an income or wealth benefit is not a central aim. For example, accelerated depreciation of investments in pollution control equipment can be used to encourage improvements in environmental quality[8]. Income from some forms of subsidy (such as payments for undertaking environmentally-friendly practices) can be made tax-free as a way of encouraging their uptake. The settings of such instruments will reflect some notion of the value to society of a service and the additional cost to the business of providing that service. The primary purpose is not to increase the income and welfare of the units taxed, but there may be an income effect if producers are over-compensated for their actions.[9] A similar case could be made for special treatment of rural real-estate when passed between generations if continuity of ownership is important for the maintenance of social cohesion or landscape features

The concept of a concession is only valid within the context of a "normal" taxation system against which differential treatment can be judged (e.g., exemptions from the tax base, allowances from the benchmark to arrive at the tax base, credits deducted from tax liability, relief in the rate applied, deferral in payment). The yardstick of normality will usually be the national taxation system, but this may be difficult to establish where there are substantial variations between local tax regimes (such as in a Federal system in which property taxation is set at the state or sub-state level).

The issue of what is normal, and thus the benchmark against which concessions are judged, is more than just technical; it is rooted in different views of the normative tax base (OECD 2004). Nevertheless it is important to be clear about what is considered normal in any particular case. As

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[8] An important parallel is product price support which may primarily have the aim of increasing the quantity supplied by domestic agriculture in times of food insecurity and which also increases the income of farm operators.

[9] The incorporation of an incentive component in environmental payments may mean that these do not qualify as "Green Box" payments under the WTO's Agreement on Agriculture (see Blandford 2006).

an example, Australia publishes explicit benchmarks for each tax as part of its annual Tax Expenditures Statement, against which departures can be assessed (Australian Treasury 2004).

If the aim is to make international comparisons of support provided to agriculture through tax concessions, it is important to be aware of the wide variations in national taxation systems. A tax concession in one country may not be a concession in another. For example, in a country that has an annual wealth tax, an exemption for agricultural assets may represent a major form of income support, but if no such form of tax is applied nationally, no concession to agriculture will be recorded. To take another example, allowing farmers to average their incomes over a series of years would be viewed as a tax concession in many countries, but in the Netherlands this is permissible across the economy and does not represent a special dispensation for farmers. Yet one more example is provided by two countries that use the same type of tax with the same effective rate, but accomplish this in different ways. One country could impose a high rate of tax but with numerous deductions and exemptions for agriculture. The second might impose a low rate of tax with no deductions. While the level of tax on agriculture could be identical in the two situations, a tax expenditure would occur in the first case but not in the second. While a policy analyst may find the presence or absence of a particular form of taxation (say, taxes on energy use) or the effective rate of tax of some interest, these differences between countries do not necessarily imply the presence of a tax expenditure or concession. The appropriate benchmark is how other businesses or individuals in the country in question are treated and whether the treatment of agriculture differs.

Concessions for social contributions pose additional problems. Preferential treatment might be interpreted to be a lower level of contribution paid for a given level of benefits, or more benefits received for a given level of contribution. However, establishing the existence of preferential treatment in social security is particularly complex. In some countries the social security provisions for farmers are separate from those for the rest of society, and there may be a number of other sector-level schemes (for miners, fishermen etc.). Such fragmentation complicates comparison with a national norm. While the farmers' social security scheme may be characterised by government transfers to fund the payment of benefits, this does not necessarily imply special treatments. Even in a unified system, the age profile of people in agriculture may mean that there are substantial net transfers to groups with disproportionally high number of older people, and a specific scheme for farmers may merely be making these transparent. The determination of a concession in the area of social contributions requires an examination of both the contribution and benefit sides of the equation with adjustments for technical factors that influence the level of government contributions.

4.3 WHAT CONSTITUTES A SPECIAL TAX CONCESSION FOR AGRICULTURE?

The "*for agriculture"* part of the concessions issue can also be more complicated than at first sight. Generally there will have to be some legally robust articulation of the sorts of situations to which a concession applies. What constitutes "agriculture" will often be designated within this description.[10] But agriculture may not be the only activity to which the concession applies, and this lack of exclusivity poses a conceptual problem in classification.

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[10] A helpful parallel exists in the classification of subsidies and the identification of those that are "specific" to agriculture. While some subsidies are clearly exclusively associated with the production of agricultural commodities, others (such as government financial support to infrastructure or to basic research) cannot be allocated to particular activities (or groups of activities) so that, at the level of the

Often a tax concession will include agriculture and some other activities, such as forestry, so that specificity is diluted and the problem of deciding the counter-factual is made more difficult. For example, income averaging in some countries is open to farmers and some other professions (such as writers). This applies in the UK, but averaging could reasonably be classed as preferential treatment for agriculture on the grounds that farmers are the dominant beneficiaries. If, however, agricultural preferential treatment is extended to other small businesses (as happened to averaging in the USA) then this becomes the norm. It is then harder to classify averaging as a tax expenditure for agriculture.

The identification of a concession is made difficult if the basis of the tax is unique. For example, some would argue that exempting agricultural land from annual taxes on business real estate does not represent a concession, as this form of asset is peculiar to agriculture and is not directly comparable with other uses of land (for office premises or golf-courses, for example). But since agricultural land potentially has non-agricultural uses, it seems logical to view a tax treatment that only covers one category of the use of that land as a concession and its value as a tax expenditure.

Explicit mention of agriculture in a concession's description in legislation may not always strictly be necessary for one to exist. For example, a tax concession nominally available to all rural businesses but, in practice, largely used by farmers would probably be regarded as specific to agriculture. Thus, in deciding what to include as a concession to agriculture both the way that it is labelled and the *de facto* way in which it is operated should be taken into account. Transparency of detail in coverage is clearly a necessary part of any inventory of such concessions. Though a decision tree may be helpful, an element of subjective judgement is inevitable.

5 THE MEASUREMENT AND EVALUATION OF CONCESSIONS TO AGRICULTURE

Assuming that broad agreement can be reached on the conceptual definition of tax expenditures, the next issue is how to value these. There is no widely accepted operational methodology (Canada, Department of Finance 2001). A range of approaches exist internationally, some are very broad in terms of what forms of concessions are included. Here emphasis is on the way in which estimation is carried out for a single tax. Nevertheless, where some of the more complex special treatments are involved (such as deferments) there are a number of elements that might be disputed.

5.1 Measuring the loss of government revenue

Though tax expenditures are defined in terms of special provisions in tax regimes that give rise to revenue losses, the evaluation of these concessions does not conventionally depend on the measurement of those losses. Rather, what normally happens is that a rather crude calculation is made of the difference between the amount of tax currently paid by the taxed units under the preferential rate and what they would pay if "normal" taxation rates were employed, assuming that such a yardstick of normality can be found. For the USA, the Joint Committee on Taxation unequivocally states "A tax expenditure is measured by the difference between tax liability under present law and the tax liability that would result from a recomputation of tax without benefit of the tax expenditure provision" (JCT 2003, p.17). Where several concessions exist, the calculation for each is done separately and these are summed, implying that possible interactions between concessions are ignored. In the few OECD countries that make tax expenditure estimates, this simplistic approach seems to be used to answer the question "with the existing pattern of resource

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whole economy in which all flows have to be consistent, a special category for these non-specific subsidies will have to be created..

use and income, what reduced tax liability to tax payers result from using the concession". Any adjustments that the taxed units might make were normal tax rules actually applied are ignored[11].

Tax expenditures measured in this way do not, therefore, represent accurately the size of the *actual loss of tax revenue* incurred by the concession, nor do they correspond to the value of the concession to the taxed unit. Estimating the amount forgone would involve a calculation of the impact on revenues that would follow the repeal of the concession. Most, perhaps all, concessions result in changes in the behaviour of the unit taxed (farmers and landowners). However, the degree of change (and hence the importance of estimating it) will vary with the type of concession. Concessions on taxes on profits and incomes, and on social contributions made by individuals, may be largely decoupled from production decisions in the short term, so that adjustments might be ignored. In the longer term, if there is a differential between the effective taxation of incomes in agriculture and other activities, a reallocation of resources towards the less-heavily taxed activity would be expected. This could affect decisions on diversification and pluriactivity.

Concessions on taxes applied to outputs or inputs (such as reducing the liability to make social contributions for hired labour, or reduced tax on fuel) could have a substantial impact on production decisions and it could be more important to take into account changes in the volume of output and inputs when estimating tax revenue forgone[12]. Other reasons why the conventional valuation of tax expenditures does not coincide with revenue forgone by the tax authorities are (a) timing – the withdrawal of a concession may only feed through as additional tax revenue when payment is due, which may be in a following tax year, and (b) there could be implications for other parts of the tax system, such as where the removal of a concession on income averaging could lead to farmers falling below thresholds for social security contributions in a majority of years, with a net reduction in overall government revenues.

5.2 Valuing the benefits from concessions

A distinction should be drawn between tax expenditures (tax revenue forgone) and the value of the benefits these bring to the taxed units (farmers and landowners). A parallel exists in the cost to the public budget of mechanisms to support farmers' incomes (such as the cost of intervention buying and disposal on the world market using export subsidies) and the net increase in those incomes. Transfer efficiency may be low, as adjustments in markets (especially for inputs) may pass benefits to other economic agents. Furthermore, there are distributional implications. With support given through commodity markets the distribution of benefit is often less than ideal, in that benefit will follow volume of production rather than income need. With tax concessions, there is the rather obvious distributional implication that direct benefit only goes to those units that would otherwise pay the tax at non-differentiated rates. Again, in a progressive income tax system, concessions will tend to be worth more to those with the highest incomes. Reduced taxes on inputs (e.g., fuel) will benefit most those types of farming that use relatively large amounts; often these are larger farms.

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[11] This also applies to the assessments by Dunlap et al. (1995) of the impacts on competitiveness and trade resulting from differential tax subsidies applied to dairy farms in Canada, Germany, New Zealand and the USA.

[12] Specialist literature on the taxation on land has a long history, with the concept of economic rent being bound up with the low opportunity costs of keeping land in production, low transfer earnings and hence the possibility of imposing taxation without changes in use.

One approach to evaluating benefits is to express these in terms of their “outlay equivalents”. This can be thought of as the budgetary cost of a programme involving direct expenditure that would provide producers with net benefits equal to what they currently receive from a tax expenditure. In the USA, the Treasury Department presents estimates of outlay equivalents of tax concessions in the President’s budget, in addition to the conventional calculations, (JCT 2003). In the present context, there is an advantage in evaluating tax concessions on this basis, as this would make the estimates compatible with the OECD’s estimates of other forms of support in the PSEs. However, the complexity of tax concessions to agriculture suggests that the calculation of the budgetary cost of alternatives could be a highly complex and contentious process, especially where the purpose of concessions is to achieve specific physical objectives (e.g., improved environmental quality). Calculations might be made of the direct payment required to achieve the same effect on net income as an existing tax concession, though this would not be uncontroversial in terms of technical details (for example, assessing transactions costs) and could generate political resistance because of transparency in the distribution of benefit.

6 An over-view of the treatment of agriculture in tax and social security systems

Despite the potential difficulties of identifying tax expenditures for agriculture, in practice there are many instances in which special treatments are unambiguously present or where they are hard to contest. The recent inventory published by the OECD reveals a wide range of special treatments in national tax legislations; an over-view is given in Table 1. A detailed description is given in OECD (2005), in which treatments are broken down by type of tax and by country. Most, if not all, special treatments appear to impact positively on the rewards to the factors used in the sector, the quantities of inputs used and the personal incomes of farm operators and landowners. The OECD report also contains metadata, such as the number of groups with which concessions are shared, which aid in deciding whether a special treatment for agriculture exists. By examining Table 1 we can highlight a number of issues.

First, the use of tax concessions for farmers and landowners is widespread in OECD countries. Concessions relate to the taxation of incomes, property (both annual taxes, taxes on capital gains, and on transfers of assets) and inputs. In a substantial number of countries (and six of the EU Member States for which information has been obtained) farmers’ personal incomes (their profits of unincorporated businesses and other incomes where appropriate) are taxed using a special system of assessment. Typically this is based on notional income rather than actual financial accounts and is often a reflection that book-keeping among farmers was not common when the taxation applied to other self-employed people were established. Such flat-rate systems are usually assumed (with some empirical support[13]) to represent a preferential treatment for the sector as a whole, though the benefit is not spread uniformly[14]. Where such a system confers an income advantage to a significant numbers of farmers, they are likely to oppose any attempt to shift them to being taxed on actual incomes. A system similar to the present French *forfait* applied, for example, in the UK before the second World War, when farmers were encouraged to adopt book-keeping by the government progressively raising the (per acre) flat rate tax. A

[13] Guillemin and Legris (2007) have shown for France that, while taxes under the *forfeit* system took 3.8% of total income of farmer households in 1997, if they had been levied on actual income taxes would have taken 7.0%. Figures for 2003 were 2.1% and 5.3 respectively.

[14] As long ago as 1938 Black noted the advantage to farmers n the UK of the options at their disposal in the way their incomes were taxed, including an assessment equal to the rental value of their farms (essentially a notional income system) or on an accounting basis in the year of assessment or of the previous year.

substantial increase in agricultural income resulting from public support highlighted the extent of the tax expenditure implied by the flat-rate tax system.

Table 1. Matrix of preferential treatments

Country	Income (personal)		Profits (comp's)	Social security	Property			Goods and services	Other
	System	Rates, etc.,- Other			Capital gains	Inheritance	Annual taxes on assets	Inputs, VAT, etc.	
Australia		*				*	*	*	
Austria	*	*						*	
Belgium	*	*						*	
Canada		*	*		*	*	*		
Czech Rep.		*	*				*	*	
Denmark							*	*	
Finland						*	*		
France	*	*		*	*	*	*	*	
Germany	*	*		*		*	*	*	
Hungary			*					*	
Ireland		*			*	*		*	
Italy	*	*	*	*			*	*	*
Japan		*		*	*	*	*		
Korea	*					*	*	*	
Netherlands		*			*		*	*	*
New Zealand		*							
Norway		*		*	*	*	*	*	*
Poland	*	*		*		*	*	*	
Slovakia							*	*	
Spain	*	*					*		
Sweden							*	*	
Switzerland					*		*	*	
UK		*				*	*	*	
USA	*	*	(*)			*		*	

There may also be benefits of a public nature of farmers being taxed under a notionally-based flat rate system. A case is sometimes made that a shift to one based on book-keeping would not only greatly increase the burden in terms of costs to individual farmers (and probably the size of their

tax bills) but also to the public sector in processing their returns.[15] The additional costs to the taxation authorities might not compare favourably with the additional revenue collected. There could also be significant political opposition which might threaten the achievement of other policy aims. Even in countries where normal assessment systems apply to farmers special facilities are often offered to them, most commonly income averaging over several years.

Special treatment of agricultural property for taxation on transfer (inheritance and gift taxes, or stamp duty on the transaction documents) is common, especially when this involves passing agricultural property between generations. The relatively high wealth of many farm households, and the fact that much of this wealth is in the form of agricultural land and buildings, makes this *de facto* an important concession for agriculture. Capital gains on sales of agricultural real estate are also sometimes exempted from tax or are otherwise treated preferentially.

Almost universally agriculture receives concessions on annual property taxes. These are often the preserve of regional or local governments, so the national picture may be complex with considerable variation within a country. Concessions may take the form of exemptions for agricultural land and buildings (though perhaps not for the farm dwelling), special valuations that use a figure lower than market price and below that on which assessments for other types of business are based, or lower tax rates or special starting thresholds.

Also common are special treatments of taxes on inputs that, in effect, reduce the costs of agricultural production and benefit incomes. Mostly these take the form of concessions on duties for fuel used for farming purposes (such as for tractors and occasionally for heating). It is probable that concessions on vehicle licences are more frequent than reported.

The situation with respect to VAT and similar taxes applied to agriculture is complex. A few examples have been found in which agricultural businesses are given explicit concessions in meeting their payment obligations (such as a longer period to pay VAT). However, other ways in which preferential treatment might be occurring have been noted. Thus, it is known that the simplified system of VAT available to some EU farm businesses and the direct payments to farmers that go with it together can result in a net gain in revenue. However, while under the conventional system there is a tax revenue implication when output is zero-rated, this facility was not treated as a concession to agriculture in the OECD study although some tax revenue is certainly foregone. A departure from the "normal" VAT system is clear, but consumers are likely to be the main beneficiaries of this type of concession, not farmers.

Special treatments do not necessarily imply a net benefit for agriculture. For example, several countries have special arrangements for social security contributions. Government contributions for the funding gap for payments to beneficiaries are common and may cover the entire cost. However, deciding whether these arrangements constitute a concession is difficult because the social security system for farmers is typically operated separately from that for the rest of the population. The benefits may differ from those offered to the rest of society. Government funding may also apply to the main system; other sector-specific schemes may exist and also benefit from government transfers. Special benefits available to farmers within a general system of benefits are, on the other hand, clearly concessionary.

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[15] A counter-argument might be that in today's highly competitive economic environment, farmers who do not keep good financial records are unlikely to operate their farms efficiently or to be financially successful. There may be social gains through improved efficiency and private gains in terms of improved profitability if farmers are able to monitor costs and returns accurately.

Estimates of the value of concessions (tax expenditures) are made in a number of OECD countries. However, there are many where there are no calculations or regular reporting. Among the categories of tax, calculation is most common for fuel tax concessions; six of the seven countries reporting any tax concession to the OECD's PSE database include this item. Property tax concessions are only reported by one country (the situation in a second is unclear), and concessions on income tax by five. Thus, there are many gaps.

In contrast to many other OECD countries, there are now relatively few examples of special concessions for agriculture in the UK (see Annex 1). Of those that remain, allowing averaging of profits by farmers for is a relatively recent concession (Income and Corporation Taxes Act, 1988) whose rationale could be supported on efficiency and equity grounds due to the inherent variability of revenue in agriculture (though special arrangements with similar results existed before the Second World War (Black 1938). However, the preferential treatment of the excise duty on fuel used for agricultural purposes[16], which dates back to the Second World War, is harder to justify, especially as it now runs counter to the general environmental aim of reducing emissions from fossil fuels. A similar situation exists in relation to the non-rating of agricultural business assets which, potentially, could be of great significance to the rewards generated. This is of concern to the lobby against shooting wild birds who feel that land used for this activity should not enjoy the current exemption (Animal Aid, 2006)[17]. Concessions on death duties were introduced on agricultural land holdings at the end of the 19th century in response to arguments that, *inter alia,* the cost of much rural housing would otherwise fall on local authorities. This became major factor for land purchases. However, with the passage of time the uniqueness of the treatment of agricultural real estate has been dissipated by the extension of concessions in taxes levied on the transfer of assets to business assets in general[18].

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16 According to the answer to a Parliamentary Questions (14 Nov, 2000), the 3.13p per litre rate of duty (red diesel) is restricted by schedule 1 to the Hydrocarbon Oil Duties Act 1979. In 2001 the normal rate of duty on ultra-low suphur diesel was cut from 48.82p per litre to 45.82p per litre.

17 According to the answer to a Parliamentary Question, there were 400 game farms in the UK, of which only 85 were on the Business Rates valuation list in 2002, rising to 128 in England and Wales in 2005.

18 Estate Duty was introduced in the UK in 1894 to be charged on property passing, or deemed to pass, on death. It was agreed at the outset that the value of agricultural land should not be more than 25 times the net rental and could be paid in instalments of up to eight years. After 1919, when the rates of duty were increased generally, those on agricultural land and buildings were not raised. In 1949 the system was introduced in which the duty was levied at 55% of the tax rate which would otherwise be payable, a concession to small businesses generally in 1954. Estate Duty has now been replaced by Inheritance Tax. Landowners claimed that this tax threatened their traditional role as providers of housing in rural areas, with possible expensive consequences for the budgets of local authorities that would then become responsible for providing accommodation. This case was perhaps given greater weight by the fact that landowners were disproportionately represented in the legislature. The concession proved attractive to potential landowners and was in part responsible for increased land values and greater wealth for existing landowners, results that ran counter to the intention for the tax (Clayton *et al.* 1967). The passage of time has seen the concession extended to other business assets, so that there is now no particular advantage to farmland to the modern version of the tax (which is now on inheritance). This gradual broadening of concession first reserved for agriculture to other groups has been seen in a number of examples in the UK, suggesting that this is an easier response to criticism that the system is unfair than would be the removal of the concession to agriculture. Concessions for the annual taxing of agricultural business property and capital gains in the UK have similar histories, although UK farmland (and associated buildings) is still exempt from any annual property tax (business rates).

7 Discussion and need for further work

The recent OECD report on agricultural taxation has help fill an important gap in the basic information about the special treatment of agriculture in national tax systems. However, it represents only an initial step in providing a satisfactory understanding of the importance of tax concessions. There is work still to be done in establishing more clearly the size of tax expenditures for agriculture, which may involve clarification of the "bench mark" against which exceptions from the norm are to be judged.

Assuming that we can agree what constitutes a tax expenditure, and which can be classed as providing support to agriculture, a next step might be to examine why such special treatments were introduced, something the OECD study did not attempt in detail. The present array in each country does not appear to be the result of a carefully planned and consistent strategy. Experience in the UK suggests that they arise as *ad hoc* responses to particular policy problems and thus tend to lack consistency and coherence with other parts of policy, even those within those directed specifically at agriculture. Furthermore, they tend to persist long after the initial problems they were intended to tackle have receded into history, and are resistant to being dismantled in part because of the economic rents they have helped to create. Vested interests are perhaps seen at their most extreme in the concessions available in some countries on the taxation of capital in the form of agricultural real estate. Probing the reasons why existing tax concessions came into being and their current relevance is more than just of historical interest – challenging rationales forms a major element in achieving reform.

But, given the longstanding nature of many special treatments, there is a need to focus on what effects they are having now. It is likely that tax concessions have short-term impacts on the behaviour of farmers and, perhaps more significant longer-term effects on the structure of farming and landownership. This may influence how agriculture responds to trends and shocks in the economic, technical and policy environment. An example is the likely inhibiting effect on structural change of tax concessions on passing land between generations of the same family. Perhaps initially conceived with the intention of promoting stability and hence productivity in the industry, in the present environment such measures may threatened the sustainability and competitiveness of farming. However, the magnitudes of responses to the tax situation are largely unstudied. It could be that, for example, the removal of special inheritance tax concessions for successors might only have a modest impact on farm size adjustment – farm families may still have a tendency to continue farming the same land even in the absence of a tax advantage. On the other hand it could prevent the entry of new farmers and prevent the amalgamation of farm properties into more efficient units. Without additional research the extent to which costs are imposed on society by the present array of special treatments is difficult to assess.

Additional work needs to be done on the measurement of the support provided by tax expenditure. In the USA and Australia - rare examples of countries where domestic legislation requires calculations to be made - tax expenditures account for 9 and 39 per cent respectively of overall PSEs. These estimates can do no more than indicate an order of magnitude for what might apply in Europe. Clearly the situation in which some countries include tax expenditures in their PSEs and others do not is unsatisfactory. The OECD has been working towards achieving greater consistency in the PSE, essentially by reducing the range of concessions covered to a small number of easily identified and quantified ones (principally those on fuel excise duties), and thus obtain comparable results for a larger number of countries. Regrettably, the concessions that are easiest to address do not necessarily correspond to those that are most

significant shapers of behaviour or structure. And the conventional calculations of tax expenditure give little idea of the value of concessions as instruments of income support.

Special treatments for agriculture in general tax systems can be used as policy instruments. In many countries (including the UK) there is an established infrastructure that can be used in an economic delivery mechanism. Tax systems also contain much of the basic information needed to operate policies (such as income data needed to assess poverty, though in the UK many low-income individuals do not fall into the tax net). Tax incentives can be used to guide behaviour, such as in investment and environmental practices; though not all land users are capable of benefiting from these incentives. However, much work needs to be done on assessing the performance of tax expenditures in agriculture in relation to current policy objectives. Greater clarity is needed on the role of tax concessions – the circumstances in which their use is appropriate or when they are best avoided.

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Annex

Preferential Tax Treatment of Agriculture in the United Kingdom

INTRODUCTION

Taxation of agriculture is comprised almost completely of payments to central government. Though local taxes exist, agriculture is largely exempt. In terms of taxes on current income, agriculture is treated largely as other forms of business, though there are certain special provisions for agriculture and other activities that are characterised by similar income instability over time. A feature of the UK is the number of farm businesses arranged as companies, usually with tax minimisation in mind, though these still represent a minority of farms. The main concessions specific to agriculture apply to capital taxation and affect the value on which real estate is taxed. Forestry is given special treatment. There are no special provisions for social insurance for agriculture.

INCOME AND PROFITS TAXATION

The profits of unincorporated agricultural businesses are subject to normal rates of income tax applied to their operators. Rates are progressive. However, there is a provision for averaging over two successive years; for the purpose of averaging, profits are calculated after the deduction of capital allowances (mostly the depreciation of capital assets according to rates determined by the taxation authorities). This is not exclusive to agriculture, being also allowed to artists and writers, though numerically these groups are probably far smaller than the number of farmers. Special rules apply to "hobby" farmers for the ability to offset losses in agriculture against income from elsewhere; normally losses are disallowed after five consecutive years of loss. Profits of farm businesses arranged as companies are chargeable to corporation tax, and companies are not allowed to take advantage of averaging.

In effect, current income from forestry (both the cost and revenue sides) is now outside the tax system, a decision taken to end what had become an abuse by high-earning individuals to take advantage of the rules then in place to reduce their tax bills.

PROPERTY TAXATION

Annual taxes

Agricultural land and associated buildings used for production are exempt from the annual local property tax levied on other business assets (business rates). There is no wealth tax in the UK, but capital taxes are imposed on transfers by death, gift or sale.

Taxes on transfers

Agricultural land (and associated buildings) receives special treatment when inheritance tax is calculated (a capital tax levied on transfers on death) the taxable value of land being reduced by 100% (that is, not taxed) if owner-occupied, or by 50% if tenanted under normal long-term letting arrangements. Since 1995 100% relief has also applied to the value of land let on "farm business tenancies", a recent form of fixed term letting. Historically, this type of relief was confined to

agriculture and resulted in situations where funds were channelled into agricultural property to secure the relief. Today, similar provisions apply to other forms of business assets (including shares in non-quoted companies). However, it does not apply to other forms of wealth so there is still some incentive to make land purchases for tax planning purposes. In that farmers are relatively wealthy as a group and have much of their personal wealth in the form of land, a case could be made that there is *de facto* some favourable treatment.

Capital gains on assets held by individuals are subject to capital gains tax, a progressive tax that has numerous forms of relief (such as for retirement), but agricultural property is largely treated the same as other business assets. Capital gains realised by farms arranged as companies are subject to corporation tax.

OTHER TAXES

VAT

The standard rate is 17.5%. However, a zero rate is applied to almost all agricultural output (an exception being horses). Though, in theory, a simplified system can operate, in practice, agricultural businesses are subject to the regular value added tax regime (but with output zero-rated, which implies that they can reclaim tax paid on inputs).

Taxes on inputs

There are special low rates of excise duty (a form of tax) on fuel for agricultural use, Concessions for farm vehicle annual taxes were abolished in 2000. There may be other special but small groups that share such concessions (e.g., fishermen).