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Local sales taxation: An assessment of the feasibility and likely effects of sales taxation at the local level in the UK

IFS Report, No. R46

Provided in Cooperation with:
Institute for Fiscal Studies (IFS), London

Suggested Citation: Hall, John; Smith, Stephen (1995) : Local sales taxation: An assessment of the feasibility and likely effects of sales taxation at the local level in the UK, IFS Report, No. R46, ISBN 978-1-87335-743-9, Institute for Fiscal Studies (IFS), London, https://doi.org/10.1920/re.ifs.1995.0046

This Version is available at:
https://hdl.handle.net/10419/64588

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LOCAL SALES TAXATION:
AN ASSESSMENT OF THE FEASIBILITY AND LIKELY EFFECTS OF SALES TAXATION AT THE LOCAL LEVEL IN THE UK

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Published by
The Institute for Fiscal Studies
7 Ridgmount Street
London WC1E 7AE
(Tel. 0171 636 3784)
(Fax 0171 323 4780)

© The Institute for Fiscal Studies, January 1995
ISBN 1-873357-43-5

Printed by
KKS Printing
Stanway Street
London N1 6RZ

PREFACE

The Joseph Rowntree Foundation has supported this project as part of its programme of research and innovative development projects, which it hopes will be of value to policymakers and practitioners. The facts presented and views expressed in this report, however, are those of the authors and not necessarily those of the Foundation.

Likewise, the opinions expressed are those of the authors alone, and not of the Institute for Fiscal Studies, which has no corporate views.

In the analysis of Chapter 6, data from the Family Expenditure Survey made available by the Central Statistical Office through the Economic and Social Research Council Data Archive have been used by permission of the Controller of Her Majesty's Stationery Office. Neither the CSO nor the ESRC Data Archive bears any responsibility for the analysis or interpretation of the data reported here.

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INTRODUCTION

Sales taxes are widely used as sources of local revenues in the US and some other OECD countries, but have been less used within Europe.[1] In the UK, recent debates over the reform of local government finance have tended to follow the lead of the 1981 Green Paper, *Alternatives to Domestic Rates*,[2] and to dismiss the option of local sales taxation without much detailed consideration of its feasibility and likely consequences.

This report aims to identify the range of possible options for using sales taxes as a possible source of local government revenues in the UK, to assess how far these schemes would be practicable and to set out the range of possible disadvantages and advantages of local sales taxes, both from the point of view of the system of local government finance and from the point of view of the wider economy.

The report is in seven main chapters. Following this introduction, Chapter 1 sets out the policy context for the discussion, with the aim of identifying possible reasons for interest in considering the local sales tax option. A local sales tax might be advocated to replace existing local taxation, as a means of increasing locally-generated revenues, or as a way of strengthening links between business and local government. Chapter 1 outlines and assesses the arguments under each heading.

Chapter 2 discusses the experience of state and local sales taxes in the US where such taxes are widely used. Chapter 3 then sets out different forms that a local sales tax could take in the UK. Such a tax could be levied on all local sales or only on certain transactions. There are also various possibilities for how the tax could be administered, including the extent to which it can make use of the administrative structures used for national VAT.

Chapter 4 sets out an assessment of one of the major economic issues raised by using sales taxes at the local level — the potential locational distortion, both in individual shopping and in the location of retail premises, which could arise if local sales tax rates differed across areas.

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[1] A comprehensive survey of international practice can be found in OECD (1988).

[2] Cmnd 8449.

Chapter 5 then considers the suitability of a local sales tax as a source of finance for local government — what its impact would be on the level and distribution of local authority financial resources, and how it would influence the accountability of local government decision-making. Here, the key issues are related to the practical aspects evaluated in Chapter 3 and the economic questions discussed in Chapter 4, especially the implications of cross-authority shopping for local authority behaviour.

Chapter 6 assesses the distributional impact of a local sales tax, under various schemes for its introduction.

Conclusions are summarised in Chapter 7.

CHAPTER 1
REASONS FOR INTEREST IN A LOCAL SALES TAX

As earlier studies of the relative merits of different local tax systems have made clear, local sales taxes have some obvious drawbacks. The 1981 Green Paper, *Alternatives to Domestic Rates*,[1] which investigated a local sales tax, local income tax and a poll tax as the three principal alternative local taxes to some form of property rating, concluded that

> ... a local sales tax might conceivably be capable of providing a source of local revenue to replace in the upper tier of local government a substantial part of the income at present raised by domestic rates. Devising a workable system, however, would involve finding solutions to a diverse range of important problems.
> *(Para. 5.28.)*

Amongst the main problems with local sales taxes outlined in the Green Paper were the following:

- difficulties for local budgeting, caused by the unpredictability of the tax yield, and by the 'lumpiness' of revenues if the sales tax rate can only be adjusted in whole-number percentages;
- restriction of central government's scope for increasing national sales tax rates, if the local sales tax takes combined local-plus-national sales tax rates to 20 per cent or more;
- potential problems of cross-border shopping, which would weaken accountability (since some local sales taxes would be paid by non-residents) and which could lead to a concentration of retail sales in low-tax areas;
- difficulty of excluding purchases by businesses (which also pay business rates) from the sales tax;
- difficulties in metropolitan areas where the bulk of local public spending was undertaken by the lower-tier districts; if the tax rate were to be confined to the upper tier of local government, either the tax rates levied

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[1] Cmnd 8449.

by the (then) metropolitan counties would be much lower than those charged by non-metropolitan counties, or else some arrangement would be required to transfer local sales tax revenues to the metropolitan districts;
- compliance burdens on business, especially where frequent rate changes required stock repricing or where businesses (such as mail-order houses) supplied customers located in many different areas.

We return to these problems and others later in the report. All should be taken seriously, and in sum total they are far from trivial. None, however, is an insuperable obstacle to devising a workable and reasonably efficient local sales tax.

However, given these clear disadvantages of local sales taxes, why should we even begin to consider advocating the introduction of a tax of this form, and reopening once again the whole difficult and controversial question of the reform of local taxation? With the successful introduction in 1993 of the council tax, based on banded valuations of residential property, UK local taxation appears to have made a successful, although narrow, escape from the 'fiscal anarchy' (Besley, Preston and Ridge, 1993) of the poll tax. Why jeopardise the current uneasy equilibrium in the local finance system with a new, and untried, proposal?

In this chapter, we discuss three possible lines of argument.

- First, we dispose of the case for introducing a local sales tax as a *replacement* for the council tax. This seems to us to be a weak argument.
- Second, we consider the arguments for supplementing the council tax with other tax instruments. This section returns to long-standing arguments, aired throughout the 1980s by many commentators on UK local government, to the effect that what is wrong with local taxation is not that the UK has the *wrong* local tax, but that it does not have *enough* local taxes: too little revenue is raised from local taxation and too much local spending is financed by grants from central government for the system to function efficiently and with effective accountability.
- Third, we look at a wholly different line of argument, concerning the relationship between local government and local business. Some have argued that the 'nationalisation' of the local business rate has left local government with too little interest in attracting local business, and that reintroducing some form of local tax on business might help to restore a better mutual awareness between business and local government. This argument rests, in part, on a false premiss: even with local business rates,

local government, in the main, did not have any direct financial interest in attracting local business. Nevertheless, despite this, the argument merits careful consideration in the current context: would a local sales tax be a better way of fostering the relationship between local government and business than the available alternatives, such as a revived local business rate?

1.1 To Replace Existing Local Taxes

This is probably the least attractive option for introducing a local sales tax.

- The existing local property tax, the council tax, appears to work reasonably well, raising significant local revenues at relatively low administrative cost to central and local government, and with low compliance costs to taxpayers.
- The council tax fills a well-documented gap in the UK tax system, which otherwise taxes housing much less than other categories of consumption and which, in addition, accords significant (although declining) fiscal privileges to housing investment.
- Housing is a (relatively) immobile tax base, and so taxes on housing are likely to cause little economic distortion when levied at different rates in different areas. The tax can only affect the location of new construction, a relatively small part of the total stock, and local taxes even then may well be considerably less important in determining where new construction takes place than other considerations.
- Finally, the council tax commands a reasonable degree of support from across the political spectrum, an essential attribute in establishing a durable and stable system of local government finance. After the disastrous and costly fiasco of abolishing domestic rates, only to have to reintroduce much the same tax three years later, there is likely to be little enthusiasm for abolishing any part of the local finance system which functions reasonably well; unless it is clearly broken, few will wish to start tinkering with the mechanism of existing local taxation.

1.2 To Supplement Existing Local Taxes

Whilst the current arrangements for local taxation may work reasonably well, there are reasons for profound dissatisfaction with the overall system of local government finance in which they are embedded. The council tax, the only tax levied at rates set by local authority decisions, raises only some £7 billion

of the £42 billion spent by local government. Some 83.5 per cent of local authority spending is thus financed from revenue sources for which local government is not responsible, and over the level of which it has no control.

The percentage contributed by local taxation is now substantially lower than before the 1990 reforms which introduced the community charge (poll tax) and ended local control over the business rate poundage. Immediately prior to these reforms, revenues determined by local decisions had contributed about half of total local current revenues. Abolition of local control over business rate poundages narrowed the locally-determined tax base immediately to 27 per cent, and subsequent measures (especially the political 'rescue package' for the poll tax in 1991, which substituted a 2.5 percentage point rise in national VAT for a £140 per head reduction in poll tax) have cut the locally-determined contribution still further to the current level of 16.5 per cent (Table 1.1).

TABLE 1.1

Revenue Account Income of Local Authorities in England, 1990/91 to 1993/94

£ million

	1990/91 out-turn	1991/92 out-turn	1992/93 provisional out-turn	1993/94 budgets after capping
Gross community charge / council tax income	12,165	8,543	9,521	8,912
Net amount raised from community charge / council tax	*9,705*	*5,961*	*6,753*	*7,047*
Grants for community charge / council tax benefit, transitional relief and income support	*2,460*	*2,582*	*2,768*	*1,865*
Revenue support grant	9,490	9,674	16,623	17,051
Other grants	3,683	8,725	3,929	4,617
National non-domestic rates	10,429	12,408	12,306	11,559
Gross revenue income	35,767	39,350	42,379	42,139
Proportion of revenue expenditure financed by community charge / council tax	*27.1%*	*15.1%*	*15.7%*	*16.5%*

Note: The definition of revenue expenditure used to calculate proportion of revenue expenditure financed by community charge or council tax differs slightly from gross revenue income, mainly reflecting use of balances and some minor adjustments. The proportions of gross revenue income contributed by community charge or council tax are 27.1%, 15.1%, 15.9% and 16.7% in the four years respectively.

Source: Local Government Financial Statistics, England, 1990/91–1993/94, Table 24.

The problems arising from this state of affairs are frequently misunderstood. It is necessary to distinguish clearly between the average and marginal local contribution to local spending — in other words, between the proportion of total local spending that is financed from locally-determined revenue sources (the question at issue here) and the proportion of the cost of an *extra* pound of local spending that is financed from locally-determined taxes. As far as the latter criterion is concerned, the UK system ensures that, at the margin, local spending is financed entirely by local taxes. It thus satisfies the criterion for local 'accountability' stressed in the 1986 Green Paper, *Paying for Local Government*[2] — local taxes rise when local authorities choose to spend more, by the full amount of the extra spending. The average contribution of local taxes to local spending is largely irrelevant to this issue.

Nevertheless, the average contribution is not an irrelevant feature of the system of local government finance. In the UK context, the declining contribution made by local taxes has brought with it a number of problems.

Where local taxes are required to cover all of the costs of additional local spending, but cover only 16.5 per cent of the costs of local spending overall, a given percentage increase in local spending will have a much higher percentage increase in the local tax burden; a 1 per cent increase in local spending will, for example, increase the level of local taxation by, on average, 6 per cent. This 'gearing' effect of local spending into local taxes may conceivably make it difficult for local voters to make realistic comparisons of local service levels between areas. More importantly, perhaps, it increases the significance of the formula for the allocation of grant to local government; relatively small proportionate changes (or 'errors') in the allocation of grant are geared into large proportionate changes in local taxation. By accentuating the consequences of changes in grant allocations, a system with high gearing perhaps places undue stress on the imperfect science of 'equalisation' and grant allocation, encouraging excessive lobbying pressures and undue politicisation of the grant allocation process.

Additional local tax resources would have the effect of reducing the gearing of percentage spending changes into percentage local tax changes. This might be attractive for two reasons. First, by spreading the burden of

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[2] Cmnd 9714.

paying for additional local spending across more than one tax base, it might help to make the distribution of the local tax burden fairer; a single tax base (such as the value of domestic property occupied) would no longer determine the entire distribution of the local tax burden across taxpayers. Second — and, to some extent, related to the first point — a reduction in gearing might help to reduce central influence and control over local government, by reducing the percentage increase in local taxes following any given percentage change in budget or grant.

1.3 Incentives to Attract Business

A third possible reason for introducing a local sales tax might be to increase the interdependence between local government and local business. Specifically, it would be possible to design a local sales tax in such a way that it gave local governments an incentive to attract business to the local area. What would this require, and would it be desirable?

Some of the arguments surrounding the fiscal relationship between local government and local business are discussed in Smith (1991b). It is far from clear that the current set of incentives facing local governments encourages local governments to treat business location issues with indifference. Certainly it is true that under the uniform business rate — as under the earlier system where business rate bases were fully equalised between areas — local governments that create an attractive environment for business investment, and thereby succeed in attracting businesses away from other areas, gain nothing in terms of additional tax revenues. Nevertheless, local governments may still be motivated to try to encourage new business investment, for reasons other than the fiscal gains from new businesses; for example, local governments may seek to encourage employment opportunities for local people. In these circumstances, local governments may compete actively to attract business activity from one another, and there would seem to be as much reason to believe that local governments might engage in excessive expenditures on employment promotion — in a zero-sum game with other authorities — as to believe that local governments would give inadequate attention to the interests and concerns of business.

There are, moreover, significant costs to organising the system of local finance so as to provide local authorities with a financial interest in attracting new business. For this to work, it is necessary that there should be incomplete equalisation of the local tax base between areas. If there is full resource equalisation, then a local authority that turns business away gains from the

resource equalisation mechanism as much revenue as is lost from the business tax base turned away, whilst one that succeeds in attracting more business loses as much in transfers as it gains in revenue.

There is clearly a cost in terms of inter-authority equity if the system is not to equalise tax bases fully. Areas that happen to have large tax bases (city-centre authorities, for example, with low populations and high concentrations of sales) will be able to set lower rates of tax for a given level of local services than authorities where the tax base per head of population is smaller. With a mobile tax base, highly sensitive to tax differences, the effect of incomplete equalisation of tax bases could be exacerbated by subsequent movements of the tax base. Sales might flow into areas where sales tax rates were low, increasing the initial unevenness in the distribution of tax bases between authorities.

There is a further potential cost of incomplete resource equalisation, in that it may add to the difficulty of making objective decisions about local authority boundaries and boundary reforms. Areas that benefit from a 'windfall' increase in local tax base find that they keep some of the benefit from the windfall; the process of drawing local authority boundaries assumes much greater significance (and comes under much greater political pressure) when Boundary Commissioners can hand an individual authority a tax base windfall which will reduce the local tax rates it has to levy, simply by drawing the boundaries of the authority so as to include particular resource-rich areas.

CHAPTER 2
STATE AND LOCAL SALES TAXES IN THE US

In considering the feasibility and desirability of the introduction of a local sales tax in the UK, it is useful to consider the operation of state and local sales taxes in the US.

General sales taxes are currently used by 90 per cent of the states but less than 10 per cent of the local governments in the US. Even amongst those jurisdictions that have introduced local sales taxes, they constitute a far more significant component of state revenues than of local revenues.

This chapter provides a brief description of the structure and operation of state and local sales taxes in the US, highlighting current issues.

2.1 The Structure of State Sales Taxes

All states currently administer selective state taxes, largely in the form of 'sin taxes' on commodities such as alcohol and tobacco. Forty-six of the 50 states plus the District of Columbia also operate a general sales tax. The four states that do not operate a state sales tax all have small populations, representing less than 2.5 per cent of the national population. Two of the states are sparsely populated whilst the other two cover small areas. Moreover, one of these four states, Alaska, makes extensive use of local sales taxes in lieu of a state sales tax.

State sales taxes are currently the most significant source of state own-source revenues. On average they account for more than 30 per cent of total state tax revenues in those states that have introduced a sales tax. The proportion of state tax revenue contributed by sales taxes ranges from over 50 per cent in Hawaii, Mississippi, South Dakota and Tennessee to less than 20 per cent in Massachusetts, New York, Oklahoma and West Virginia (OECD, 1988).

The state sales taxes that have been introduced differ more in degree than in kind. Whilst both tax rates and tax bases do vary between the states, state sales taxes are all single-stage *ad valorem* taxes — that is to say, they are levied at only one stage (usually the retail stage) in the chain of production and distribution, and are levied on the value of sales rather than on other attributes such as quantity purchased.

The sole exception to this general pattern is the Hawaiian tax, which applies to all sales at all stages of production and distribution (although most intermediate sales are taxed at a much lower rate). In addition, two states — Washington and West Virginia — supplement their retail sales taxes with taxes on the gross receipts generated by all types of business. The rates of gross receipts tax are relatively low compared with the relevant sales tax rates.

Coverage

The coverage of the taxes is fairly broad, with the two most important groups of exemptions being for food and for services. Some states exempt all food for domestic consumption whilst others have more selective exemptions. All states exempt at least some business services in order to minimise border problems and to prevent an excessive degree of vertical integration by firms. As a result, most states only tax a fraction of business services. At the extremes, New Mexico taxes most services, including professional services, whilst California and Nevada do not tax any services at all.

Per Capita Yields

The per capita yield generated by a 1 per cent sales tax rate varies from under $30 in Pennsylvania to over $140 in Hawaii.

The variations in the per capita yield of a 1 per cent sales tax rate between states are largely attributable to variations in the tax base, per capita income and the extent to which the tax can be 'exported' through taxed purchases by residents of other states. Thus the high per capita sales tax yield in Hawaii can be explained partly by the broad tax base and partly by the importance of tourist purchases.

Export of Sales Tax

The extent to which sales taxes can be exported is governed partly by the basis on which tax liability is defined and partly by the composition of retail trade within the state.

A majority of state sales taxes are based on the destination principle. In other words, liability is determined on the basis of point of delivery rather than vendor location (the same unless the consumer does not walk out of the store with the goods). The minority of states which use vendor location (including roughly half of the states that have authorised local sales taxes)

are able to export a higher proportion of the tax by including within the tax base purchases of goods that are delivered out of state.

States that have large inflows of tourists or businessmen may also be able to 'export' a large proportion of their sales tax burden. Research by Mutti and Morgan (1983) suggested that 16 states were net exporters of household-type taxes and hence derived a significant amount of revenue from non-residents. At the extreme, it has been estimated that up to 25 per cent of Nevada's sales tax revenue is derived from tourism.

Administration

According to research by Due and Mikesell (1983), the administration costs of state taxes vary from 0.3 per cent of revenue in Arizona to 1.68 per cent in Nevada, with a nation-wide median of 0.73 per cent. However, this does not necessarily reflect the relative efficiencies of the various state revenue services since administration costs as a percentage of revenue will generally be lower for those states with higher tax rates and fewer exemptions. The number of retailers varies between 1,200 and 3,300 per 100,000 population except in those states with very broad tax bases that include services as well as goods (Hawaii and New Mexico).

A large fraction of the burden of compliance with state sales taxes is borne by retailers. There has been some concern that many US states do not compensate businesses for collecting the tax on behalf of the state. However, in every state that has introduced retailer compensation schemes, the costs of compensation have grown to exceed the costs of sales tax administration. The issue of retailer compensation is also problematic in that no other individuals and organisations in the economy receive compensation for their tax compliance costs.

State Control over Tax Rates

Despite the relatively large territorial areas covered by many US states, tax competition appears to restrict the ability of states to increase tax rates above those prevailing in neighbouring jurisdictions. Tax competition appears far more effective in the case of sales taxes than for either income taxes or property taxes in the US, presumably because the costs to an individual of avoiding a sales tax by shopping in another state are far less significant than the costs of avoiding an income or property tax by moving residence to another state. The clustering of tax rates by region may reflect the operation

of tax competition. For example, 5 per cent rates are predominant in the East North Central region whilst 4 per cent rates predominate in the West North Central and West South Central regions.

Recent Developments

Over time, the use of sales taxes has spread to more states, and tax rates have tended to rise. However, at the same time, there has been a rise in the number of exemptions, for both consumers and producers. Since the mid-1980s, however, most of the discretionary actions by states have been concerned with the expansion of the sales tax base to include services. Proposals for broad-based service tax reform have proved highly controversial, and proposed measures have been defeated in many states, most notoriously in Florida.

2.2 The Structure of Local Sales Taxes

Coverage

Local sales taxes are far less common than state sales taxes within the US. In addition, local authority discretion over the operation of local sales taxes is typically constrained by the state authority.

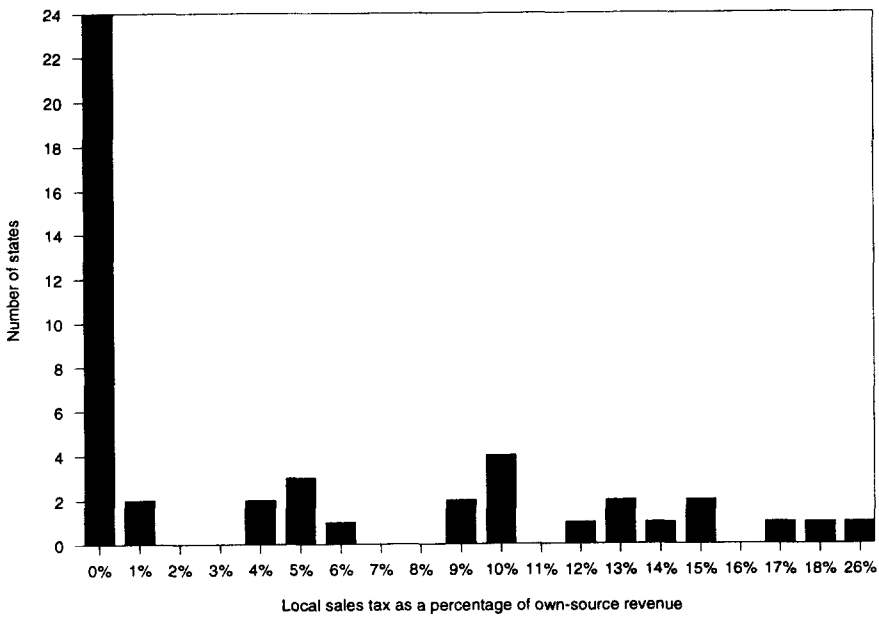
Local sales taxes currently exist in 6,438 US local governments from 31 different states plus the District of Columbia, and almost all of them are administered by the state. This figure represents less than 10 per cent of all local governments in the US. Local sales taxes are very much concentrated in certain states and regions. Whilst there are over 2,000 local taxes in Texas and Illinois, local sales taxes are relatively rare in New England and the Mid West. Local sales taxes account for 10 per cent or more of own-source revenue in 13 states (Figure 2.1).

Local governments are generally only permitted to levy sales taxes when they are specifically or implicitly authorised to do so by their state constitution or statute. In addition, a referendum of the local population is often required. In some cases, local authorities are mandated to levy local sales taxes.

The permitted range of local tax rates is generally set by the state. This minimises economic distortions and compliance costs but at the expense of reduced local autonomy. In most states, local governments have some power to vary the rate at which they levy the local sales tax, but the state of California mandates a 1.25 per cent county tax rate.

FIGURE 2.1

Local Sales Tax Revenues as a Percentage of Total Own-Source Revenues, by State



Source: Advisory Commission on Intergovernmental Relations, 1989.

Local sales taxes are a relatively more important source of revenue for large cities than for counties. Indeed, 80 per cent of all local sales taxes are levied by municipalities. Sales taxes are now a larger source of revenue than property taxes for some of these local governments.

The operation of local sales taxes is not restricted to general-purpose authorities. Eight states have authorised local transit districts to introduce local sales taxes. Some states have extended this power to school districts. In total, 158 non-general-purpose authorities, including school and transit districts, have introduced general sales taxes. Some general-purpose authorities have also earmarked the revenues from local sales taxes for particular services. For example, all local sales tax revenue in Florida is allocated to infrastructure investment.

Twenty states permit both cities and counties to levy sales taxes. This creates the potential for the taxes set by different jurisdictions to overlap. It is, for example, possible for a city resident to pay sales taxes to the state,

county, city, school district and transit district. This tax-overlapping could lead to excessively high effective tax rates in city areas. The most common response to this danger has been the restriction of county tax liability to areas outside the city border for those cities that levy their own sales tax. However, this approach is not universal. Alternative strategies adopted by some states have included assigning revenues to one type of authority and setting maximum combined local tax rates. In the latter case, counties have typically had precedence over the setting of tax rates although two states require joint negotiation.

Local Administration

Local sales taxes have tended to piggy-back onto state sales taxes by adopting the same tax base and exemptions as the relevant state tax. Where this is the case, administration costs tend to be significantly lower than elsewhere. Local sales taxes have mandatory state administration in 12 states and optional state administration in a further 10. Only two of the states that have introduced local sales taxes in the last 30 years have opted for local administration. Where local administration has been permitted, it has often led to substantial problems such as:

- wasteful duplication of effort between state and local collectors and auditors;
- high compliance costs experienced by retailers, especially where different levels of government define the sales tax base differently;
- lack of co-ordination between local governments, leading to overlapping tax rates and excessively high effective sales tax rates;
- inter-local-authority sales being taxed twice or going untaxed;
- reduced opportunities for redistributing tax revenues.

Recent Developments

The coverage of local sales taxes has tended to grow steadily in recent years, but such taxes remain largely clustered in a small number of states. This growth in the number of local sales taxes appears to have been far more problematic than the growth of state sales taxes. This has been mainly due to the creation of significant economic distortions caused by border effects, higher compliance costs for businesses, and a pattern of revenues that is typically unrelated to the fiscal needs of local jurisdictions.

2.3 The Taxation of Interstate Trade

The major impediment to enforcing compliance with state and local sales taxes in the US derives from constitutional restrictions on the taxation of interstate trade.

States are not constitutionally allowed to tax interstate trade by a firm unless the firm has a 'sufficient nexus' with the taxing state. Whilst the soliciting of business in a state via the use of salespeople constitutes a sufficient nexus, two major post-war Supreme Court decisions have severely reduced the ability of states to tax mail-order and distribution firms that operate out of the state. First, in 1954, in the case of Miller Brothers versus the State of Maryland, it was decided that deliveries of goods into the state did not constitute a sufficient nexus. Second, in 1967, in the case of National Bellas Hess versus the State of Illinois, it was judged that the use of the US mail and other common carriers to deliver goods into a state did not constitute a sufficient nexus either.

Use Taxes

The response of the states to these constitutional impediments has been the introduction of use taxes. Since the 1960s, all states that have introduced sales taxes have introduced compensating 'use' taxes on the storage, use or consumption of property that would be subject to the state sales tax but for the fact that the goods were purchased outside the taxing state. The use tax is designed to close this loophole and hence discourage a diversion of trade to out-of-state locations and mail-order firms purely for tax avoidance reasons.

There are two, equally common, bases for use tax liability. The first imposes liability on goods 'purchased' for use within the state. As a result, if an individual can prove the good was purchased for use in another state and only later brought into the state, he avoids tax liability. The second basis imposes use taxes on goods brought into the state for use, consumption or storage, and hence whether or not the goods were originally bought for use in the state is largely irrelevant. However, this second approach to liability generally makes allowance for depreciation. For example, some states exempt the consumer from tax liability if the goods are not brought into the state until 90 days or six months after purchase. Alternatively, Maryland allows a depreciation rate of 10 per cent per year.

How far use tax issues arise in a state depends on the basis on which the state defines liability to pay the sales tax -- whether according to point of

sale or place of delivery (destination). Use tax compliance is not an issue in those states for which sales tax liability is based on the point of sale. However, more than half of the states assess sales tax liability on a destination basis and hence most states do not impose sales taxes on within-state retailers who deliver goods to out-of-state consumers because of restrictions on the taxation of interstate trade.[1] Similarly, retailers who make out-of-state deliveries can escape the requirement to collect a use tax on behalf of the consumer's state if they do not have a 'sufficient nexus' with that state. If the retailer does not pay the tax, liability for use taxes passes to the consumer who has brought those taxable goods into the taxing state. Since the collection of use taxes from individual consumers is largely impossible, an estimated one-half of all interstate mail-order purchases escape any form of state sales taxation. A large proportion of goods bought in one state but delivered to another also go untaxed.

Use Tax Compliance

States collect use taxes from

- out-of-state vendors with a 'sufficient nexus' with the state;
- out-of-state vendors without a 'sufficient nexus' but who collect the tax, voluntarily;
- state residents.

As a practical matter, states are usually unable to collect use taxes from individual consumers. Indeed, most states make no effort at all to catch individuals who purchase goods out-of-state tax-free. Enforcement is largely confined to certain classes of goods such as motor vehicles which need to be registered in the home state. In an interesting experiment, Indiana now encourages individuals to voluntarily declare their use tax liability in its income tax return forms. This raises $250,000 in revenue annually for the state, a tiny percentage of estimated liabilities.

[1] Formally, no state can impose a sales tax on an exchange that involves the entity of another state.

Local sales taxation

The Avoidance of Double Taxation

In the past, most states did not give credit for sales tax paid in another state which assessed sales tax liability at the point of sale. Thus, consumers could potentially face double taxation on their out-of-state purchases. However, at present, 26 states allow sales tax paid in other states to be used as credits against use tax liability in the home state. A further 15 states allow sales tax credits subject to reciprocal agreements with other states, and only four states do not allow any such credit.

Local Use Taxes

Local use taxes follow the same rationale as state use taxes. They are not an issue in states in which sales tax liability is assessed at the point of sale. Only 12 states allow localities to collect sales taxes on the destination principle so that use taxes apply. Amongst these states, it is common to restrict use tax collections to interstate purchases, as opposed to within-state purchases.

Comments on Use Taxes

Use taxes are the weak link in state sales tax administration. If use taxes were fully enforceable, the border problem identified in the empirical literature would simply disappear.

In 1987 and 1988, a bill to authorise states to collect use taxes on interstate mail-order purchases was defeated in Congress. State representatives insisted that the legislation should also allow the collection of local use taxes, but this was fiercely resisted by mail-order companies for all states except those that impose uniform local tax rates.

In the absence of federal legislation, some states have recently adopted co-operative procedures to encourage firms to voluntarily collect sales and use taxes on interstate commerce. In 1986, New York and New Jersey became the first states to co-operate in this way by threatening firms that did not register with more severe auditing procedures. By 1988, 22 states had entered into bilateral or multistate agreements modelled on the New York–New Jersey agreement.

2.4 Mail Order

There are over $10 billion of interstate mail-order sales made in the US each year. Overall, mail-order sales account for up to 20 per cent of all retail sales

and their share is increasing rapidly. Well over half of the US population are already able to tune into a home shopping television channel. According to testimony given to Congress in 1988, interstate mail-order sales already lead to a loss of an estimated $2 billion in revenue each year. This is because such sales often escape taxation at both the point of origin and the point of delivery. Future developments in cable television, computer marketing networks and direct mail are likely to generate even larger revenue losses from this source in the future. This loophole may have particularly serious consequences for the revenues of local governments in predominantly rural areas which face low retail sales per capita. This is because mail order is likely to constitute an even higher percentage of all sales in areas a large distance from major retail centres.

It is not only small firms which have refused to collect use taxes on behalf of the states. Whilst several major mail-order firms, such as Sears, do collect sales taxes on out-of-state sales, some national firms, such as the retail chain Bloomingdales, have avoided this by setting up a separate mail-order division.

Since these tax exemptions give mail-order firms a competitive advantage against both ordinary retail firms and mail-order firms that deliver within the state, federal legislation to close this loophole has been defended on the grounds of simply 'levelling' the playing-field.

However, mail-order firms argue that with x jurisdictions setting use taxes, a national mail-order firm could have to deal with x tax rates, x sets of tax exemptions, x remittance dates and x audit dates. Research by Touche Ross suggested that compliance costs for mail-order firms could be up to six times higher than for other retail firms. However, tax compliance costs for mail-order firms could be significantly reduced if each state set a single tax base, a uniform tax rate and a single set of procedures for any local mail-order taxes operated within its jurisdiction.

Under the present structure of taxes, mail-order firms would have to charge separate prices to individuals living in different areas or else send tax bills separately from sales invoices. The former approach could greatly increase catalogue costs. If the latter approach were followed, and the consumer chose to evade the tax, firms might end up facing a choice between paying the tax themselves out of profits or losing the sale. Under such a system, it has been alleged that post-sale tax collection costs for firms could be substantially greater than the tax revenue generated.

Mail-order firms have claimed that the burden of local taxes should not be borne by firms that operate wholly outside the local authority jurisdiction and hence do not benefit from any local expenditures. However, to the extent that the ultimate incidence of the tax falls on the consumer, the location of the firm seems largely irrelevant.

The US mail-order industry contains many small firms. Since mail-order firms are likely to face high fixed costs in collecting use taxes, it may be sensible to establish a threshold firm size below which firms are not liable for the tax. Such a threshold could generate a significant improvement in state revenues whilst protecting smaller firms from a large administrative burden. However, it is not clear whether such a threshold should be defined in terms of total mail-order sales or with respect to sales to a particular state.

As yet, the debate over the taxation of mail-order sales in the US remains unresolved.

2.5 Conclusions

Drawing on its analyses of these issues, the Advisory Commission on Intergovernmental Relations (ACIR) has made a number of proposals to improve the operation of local sales taxes in the US:

- local taxes should have the same tax base as the relevant state tax to minimise compliance costs for business;
- local taxes should be administered at the state level to avoid wasteful duplication of effort;
- states should encourage local autonomy by specifying a range of tax rates that general-purpose local governments may set;
- states should encourage universal coverage of local taxes by setting minimum tax rates since this reduces the significance of the border problem;
- local taxes should use the point of sale rule for determining liability;
- states should minimise fiscal inequalities between local jurisdictions via the use of state revenue-sharing formulas.

It is clear that many of these recommendations could be applicable to any future local sales tax system that were to operate within the UK. However, there are also important differences between the UK and US cases.

One is the existence in the UK of a substantial national sales tax in the form of VAT. This raises the question of whether a local sales tax could be

designed to co-ordinate well with national VAT, and how far, therefore, high compliance costs and duplication of effort can be avoided.

A second difference is the generally smaller geographic size of the jurisdictions compared with US states (in this context, UK jurisdictions are closer in size to municipalities and counties in the US). A third is the generally greater density of populations. A fourth is the absence of any equivalent constitutional impediment to that in the US on the taxation of interstate trade. On the other hand, the UK, as a member of the European Union, is in some respects more constrained than the US, by decisions of the EU regarding sales taxation.

CHAPTER 3
POSSIBLE DESIGN AND ADMINISTRATION OF A LOCAL SALES TAX IN THE UK

3.1 Types of Sales Tax

Sales taxes take a number of different forms, with different requirements for administration and different economic effects.[1] One initial distinction is between

- *general sales taxes*, which are broad-based taxes levied on all or most goods and services; European Union countries all levy a general sales tax in the form of VAT;
- *selective sales taxes*, which are sales taxes levied only on a limited number of goods and services; in EU countries, the principal selective sales taxes are the excise duties levied on alcoholic drinks, tobacco products and mineral oils.

Within the category of general sales taxes, there are a range of possibilities for the stage in the chain of production and distribution at which the tax is levied. General sales taxes may be levied either at a single stage in this chain or at all (or multiple) stages. If levied at a single stage, there are three main possibilities:

- *retail sales taxes*, levied on sales from retailer to consumer;
- *wholesale sales taxes*, levied on sales from wholesaler to retailer (the UK's earlier purchase tax was of this form);
- *manufacturer sales taxes*, levied on sales by manufacturers.

Within the category of multi-stage sales taxes, there are, in principle, two basic options. One is simply to levy tax on all transactions, without differentiating between intermediate transactions and the final sale of goods and services. Such a tax, usually referred to as a *cascade tax*, would generally be levied at low rates, since the amount of tax cumulates in the price of a product that passes through many transactions during production and

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[1] The range of possible sales tax systems and their merits and defects are described in Tait (1988).

distribution. Prior to the introduction of VAT, many of the European Community countries operated cascade taxes.

The second option for a multi-stage tax is a *value added tax*, which is designed so as to prevent the cumulation of taxes on goods that pass through many successive intermediate transactions. This can be achieved in one of two general ways. One is to operate the tax directly on value added; in other words, what is taxed is not the value of sales of a business enterprise, but the value of net sales (i.e. sales minus purchases of inputs). The second, and more common, way, employed in EU countries' VAT systems, is to allow tax paid on business purchases to be offset against tax paid on business outputs; in other words, tax paid at the previous stage can be deducted in computing the tax payable at the next stage. Either mechanism avoids cumulation, and in a system where a single tax rate is applied to all transactions, their effect on the tax burden is equivalent; there are, however, differences in administration and certain differences in the burden of tax on different products in systems of multiple rates of VAT.

3.2 Options for Local Sales Taxes

Within this overall categorisation of sales tax systems, there would appear to be a number of options which might, in principle, be considered as a source of finance for local government in the UK, and which are discussed in the following sections. These could include general sales taxes, taking the form of either a new single-stage tax administered separately from national sales taxation, or a local component attached to the existing national VAT. They could also take the form of selective taxes applied to certain goods and services, such as, perhaps, a local utilities tax.

With each of the possible taxes, there are issues about the scope for administrative integration with existing sales taxes — VAT and excise duties. One aspect of this is the question of whether the tax should be run on behalf of local government by the national sales tax administration, HM Customs and Excise. Similar administrative integration of national and local taxes has formed part of many of the schemes proposed for local income tax.

Even a formally-independent single-stage sales tax operated at the local level might be able to draw on information or assessments generated in the course of operation of national VAT; this could involve exchanges of information between national and local tax administrations, but some gains could arise even if such exchanges were ruled out. Similar issues arose in earlier IFS work (Kay and Smith, 1988) to identify feasible schemes for local

income tax; even if parallel systems of administration are operated without information exchange, the local system may be able to benefit from substantial savings in administration, enforcement and compliance costs by maximising the compatibility of information and procedures within the two systems.

There are also important issues about the scale at which administration of a local sales tax should operate. This may be partly independent of the question of the level of government that should control the tax or benefit from the revenues; many aspects of administration need not be carried out by the authorities concerned, but through joint boards or private companies, which can gain economies of scale even if the tax is assigned to the smallest units of local government.[2]

The issue of administrative integration interacts with the amount of local autonomy that could be envisaged over the structure of the tax. Whilst it would certainly be possible to envisage a system offering local authorities full control over all aspects of the structure, level and administration of, and revenues from, local sales taxation, such a system would forgo most of the potential gains from administrative co-ordination and the cost savings that could come from using information already collected for the national VAT system. Allowing local governments to determine the design and structure of the local tax system would certainly mark a clear departure from existing UK practice; under domestic rates, the community charge and the current council tax, local governments have operated a uniform system of taxation, and have control only over the rate at which the tax is levied. This is probably the most appropriate model for a local sales tax: the system should be fully specified by national legislation, and the administrative arrangements co-ordinated so as to make the most effective use of whatever information and procedures can be shared with the national sales tax, whilst local governments should have the power to determine only the rate of tax to be levied.

With sales taxes, of course, it is possible to apply different rates of tax to different goods and services. Whilst the UK VAT system operates with a single rate (with the exception of the 8 per cent VAT rate on domestic energy and the zero rate), it would be possible to envisage a different approach being

[2] Information about the extent of economies of scale in tax administration is relatively sparse, although some evidence is presented in Netzer (1974).

adopted for the local sales tax, with different rates applying to different categories of goods and services. There would be a significant administrative cost to this. Moreover, since there are clear differences in philosophy between the major political parties in the UK regarding the desirability of indirect taxation (sales taxes) in general, and regarding the taxation of necessities in particular, it would be expected that considerable differences in the pattern of taxation on goods and services would emerge if local authorities were given a free choice of the relative tax rates to be applied to different sales. Whether this outcome would be desirable is perhaps debatable, but it would clearly complicate the range of effects of local sales taxes. In the remainder of this report, we confine our attention either to systems where a uniform rate must be applied to all goods and services sold within a local area, or to a restricted-base tax where central government legislation specifies a more limited list of goods and services to which local tax should apply.

3.3 General Sales Taxes

Three different types of general sales taxes might be operated as local sales taxes.

General Sales Tax on All Turnover

First, a local sales tax could be levied on all turnover. This option has one clear advantage over alternative schemes, and one equally clear, and probably decisive, drawback.

The advantage is that the tax could be operated so as to make maximum use of existing administrative processes and information, in such a way that the additional administrative requirements were very limited. It would be comparatively easy to adapt the VAT system so that it generated the necessary information to levy a local turnover tax of this sort; basically, all that would be required from each firm would be the information on its total sales value, as provided to the VAT authorities. The VAT system could be relied upon to provide effective verification of this information.

The VAT authorities, HM Customs and Excise, could thus levy the local sales tax on behalf of local authorities, using a list of appropriate tax rates supplied by the local authorities at the start of each budget year, or could communicate the information on aggregate sales for each firm to a separate agency or agencies responsible for operating the local sales tax system. In

either case, the information flows and computations would be straightforward and could be largely computerised.

To maximise the use that the system would make of existing information, it would be necessary to accept that businesses should be taxed for the local sales tax at the same level as for the existing VAT system. In businesses with a number of local factories, branches or outlets, this would normally mean that the turnover of these separate units was aggregated for tax purposes; each separate site could not, therefore, be taxed separately under the local sales tax. Large firms would thus be taxed on the basis of the location of their head office, at the rate appropriate for that area, and the revenues would accrue to the local authority in which the head office is located. This would create rather greater unevenness in the pattern of revenues across local authorities than if each local unit could be taxed separately, and would consequently give rise to a more urgent need for resource equalisation across authorities. Whilst it would be possible to avoid this and to tax local units separately by requiring businesses to report separately the sales made in each local unit, this would require additional information and additional enforcement over and above that required within the current VAT system. It would thus tend to undermine the initial attraction of this system, that it requires negligible information beyond that already collected and hence only small additional administrative costs.

The disadvantage of this simple scheme is that, if all sales were taxed, without the possibility for recovering the tax paid on business inputs, then the tax would take the form of a cascade tax. The amount of tax paid on a good would depend on the number of times it changed hands during the process of production — in other words, on the degree of vertical integration in production. A completely vertically-integrated producer of textiles and clothing would pay the tax only once, on the sale of the finished article. A clothing firm that bought the cloth from a separate textiles company would pay tax twice on the value of the cloth — once when it was sold by the textiles firm and once when the finished garments were sold.

A cascade tax thus tends to discourage intermediate transactions and confers a benefit on vertically-integrated firms. This distortion is undesirable, and would be a function of the level of the local sales tax, not simply of the size of the differences in local sales tax rates. It would tend to mean that local sales taxes could not contribute substantial local revenues. This would therefore be a significant drawback to sales taxes of this type.

The introduction of value added tax throughout the EC was partly motivated by the desire to abolish the cascade taxes that had previously existed in a number of member states. Quite apart from the distortionary impact of these taxes on industrial structure, they gave rise to problems in making tax adjustments for goods crossing national frontiers. Operating national sales taxes so that the tax treatment of goods conformed to the destination principle required EC member states to refund earlier indirect taxes paid on goods being exported to other member states; with a cascade tax, the amount of tax paid during the course of manufacture depends on the number of intermediate transactions, and this cannot be known. An average, and hence arbitrary, adjustment had to be made, and there was concern that this could be manipulated to favour domestic producers in intra-EC trade. Abolition of cascade taxes has, rightly, been seen as a significant step towards removing government barriers to the EC internal market; for this reason, new cascade taxes would be undesirable.

Multi-Stage Sales Tax (Local VAT)

Cascading can be avoided, as at the national level, by a value added tax — in other words, by allowing the tax paid on business inputs to be deducted from the amount of tax due on sales. A local VAT could be operated in parallel with the national system of VAT.[3] Businesses would be required to levy VAT at different rates (or at the national rate plus a supplementary local rate) in different areas.

As with the previous option, the tax could draw on the information generated by the national VAT base regarding business turnover. Additional information would again be required to allocate business sales to local authority areas, in circumstances where existing VAT accounting covered sales in more than one locality.

However, even if all aspects of the base and legislation for the local VAT were designed to match the national VAT, it would still involve considerable additional complication, arising from the fact that different VAT rates would

[3] A conceivable alternative to augmenting the national VAT system to include a locally-variable VAT supplement would be to have a local VAT operating on the basis of accounts data. This could operate on the origin basis, with no adjustments to the taxation of goods traded between local areas, and would be equivalent to a local tax on payroll-plus-profits. However, a local VAT in this form would require wholly-new administrative apparatus, and is not considered further in this report.

be applied in different areas. Because of this, the amount of VAT paid on business inputs would vary depending on where they were purchased; calculating the correct amount of 'input' VAT to be offset against the VAT liability of a business on its sales would thus be complex, and would require extensive detail not required in operating the national VAT system. As a result, a local VAT with locally-varying tax rates would have a significant additional administrative cost.

This issue arises in the operation of VAT within the European Union, since different member states apply different rates of VAT. In the past, the national VAT systems of member states have been kept totally separate, by refunding (through export 'zero-rating') all national VAT on goods that are exported from one member state to another. The effect of this has been to ensure that business purchasing decisions are not distorted by tax factors; ultimately, the VAT that is reflected in the price of goods sold to final consumers is the VAT rate of the country where the goods are sold, and not of the country of manufacture. This system also has the effect that all VAT revenue accrues to the country of final sale rather than to the country or countries of manufacture.

With the abolition of border controls on goods moving between member states, which has occurred as part of the '1992' programme to complete the internal market in the EC, the administrative issues involved in operating the Community VAT system have moved closer to those that would arise in designing a locally-varying VAT. Without border controls, it is not possible to have a physical verification of movements of goods between traders in different areas. As a result, the zero-rating mechanism for adjusting the VAT on goods traded between member states is open to a greater risk of abuse, since it is not possible to use the border documentation to ensure that export has taken place rather than diversion of the untaxed goods to the 'shadow economy' in the domestic market.

The implications of this change for the Community VAT system have been extensively discussed, and remain unresolved. Currently, a 'transitional' system is in operation, whereby intra-Community exports continue to be zero-rated, and documentation supplied by traders is used to verify that export has taken place. There is concern that this involves a more bureaucratic system of VAT for trades between member states than for internal trades within a member state, and that it may also provide opportunities for considerable evasion.

For the future, the EC is considering an alternative system for intra-EC trade, in which goods would be exported bearing the VAT rate of the country

of export, for which appropriate credit would then be given by the VAT authorities of the importing member state. This preserves the desirable 'neutrality' of the VAT system, in the sense that different national VAT rates would still be irrelevant in business purchasing decisions, but it does alter the allocation of VAT revenues between countries (since the country of final sale would refund the exporting country, whilst the exporting country would no longer zero-rate exports).

The EC experience suggests a number of possibilities for making a tax adjustment on goods traded across local authority boundaries in the local VAT system:

- a local VAT rate of zero would apply to trades between VAT-registered traders in different local areas; this would be offset by a correspondingly higher VAT liability on subsequent sales (at the 'importing' area's rate);
- the 'exporting' area's VAT rate would apply to sales, and the 'importing' trader would then receive full credit for this at the next stage;
- trades between VAT-registered traders in different areas would take place at some agreed uniform VAT rate, and the 'importing' trader would receive credit at this rate.

In general, these adjustments would apply to a considerably greater proportion of transactions than in the EC case, since most transactions between VAT-registered traders probably take place across local authority boundaries. A difference, compared with the EC case, is that the adjustments would only need to apply to the local component of the tax, rather than to the total VAT burden. Thus, whilst a local version of the 'export zero-rating' approach to adjustment would mean that a high proportion of sales between businesses took place at a local VAT rate of zero, this would not seriously undermine the 'self-enforcing' properties of VAT, except where the local component of VAT were large relative to the uniform, national, component.

Any of the three suggested arrangements for operating a local VAT would involve considerable administrative complexity. Both traders and the revenue authorities would need to know details of the geographical origin or destination of goods traded between VAT-registered traders, and would also need to distinguish between, on the one hand, transactions between VAT-registered traders (to which these adjustment mechanisms would apply) and, on the other hand, sales to final consumers (to which these mechanisms would not apply). Information on geographical origin and destination within the UK is wholly irrelevant to the operation of the existing VAT system, and

is unlikely to be cheaply available as a by-product of information already collected by traders for normal commercial purposes.

Consideration of the third adjustment option, however, suggests an alternative approach, which might prove more practicable. This would retain uniform national tax rates on all transactions, up until the retail stage, and would thus avoid the need for any adjustments on the VAT traded between VAT-registered traders in different local authority areas. Retail transactions would then be taxed at different local rates. Effectively, the system would be one which adds a local retail sales tax at the last stage of the national VAT system.

General Single-Stage Tax on Retail Sales

To levy a single-stage sales tax on retail sales only would avoid cascading, in that on any commodity the tax would be paid only once. The economic effects of a single-stage tax on retail sales would be generally identical to the economic effects of a VAT at the same rate; the principal differences concern the administration and enforcement of the tax. With a VAT, the tax is collected gradually, over successive stages of the chain of production and consumption; with a retail sales tax, the tax is collected all at once, at the final sale. VAT thus has a greater administrative burden, since many more stages must be taxed, but is conventionally regarded as being less exposed to evasion, since the gain from evasion at any stage under a VAT is reduced by the fact that evaders forgo the opportunity to reclaim the tax paid on inputs. This advantage of a VAT over a retail sales tax is probably much less important where a local retail sales tax at a modest level is being added to a national tax system that already includes a larger VAT, since the national VAT will provide a substantial incentive for compliance which will be little altered by having the local tax take the form of a retail sales tax rather than a VAT.

A distinction must be made for the purposes of the local retail sales tax between retail and intermediate transactions, so that the retail sales tax can be levied on the former category only. This distinction is not required within the existing national VAT system, and the local tax system could not, therefore, be operated using only existing data. Requiring traders to report the proportion of their sales that constituted sales to final consumers, and to be taxed only on the value of these sales, would require them to collect considerable new information.

Implementing the distinction between intermediate transactions and final consumers is difficult. It cannot be done with any precision on the basis of the nature of the goods — increasingly, certain categories of goods (computers, furniture, restaurant meals) are purchased both as business inputs and by final consumers. Nevertheless, some rules are required that define the characteristics of the transactions that are to be taxed; these rules have to be applied by individual businesses, and their application has to be enforced by the tax authorities. Problems arise where businesses make sales to different types of customer (for example, where office equipment shops sell both to private customers and to businesses). In these situations, there are a number of options, which may be applied generally or applied in particular sectors:

- Businesses may be required to identify the nature of each customer and tax them accordingly, with a correspondingly high burden of compliance and administrative enforcement costs.
- In some sectors which sell predominantly to retail customers, businesses might be required (or allowed) to treat all customers as retail customers, thus avoiding the costs of trying to distinguish between retail and intermediate sales. Trade customers that are, wrongly, required to pay tax might then be permitted to reclaim the tax at a later stage.
- In some sectors, a uniform treatment might be applied to all customers, without possibility of final adjustment. Thus, for example, sectors that make few sales to final consumers might be permitted to treat all customers as trade customers, and to levy no retail sales tax. Some imprecision and inaccuracy (taking the form either of double taxation or non-taxation of some transactions) would then be accepted in the tax system.

Nevertheless, it is clear that each approach has some drawbacks, and will be unsuitable for general adoption. The first two options potentially involve a significant compliance and administrative workload, whilst the third will rarely be a satisfactory long-term option since it will give considerable incentive for businesses to arrange their affairs so as to maximise their potential untaxed transactions.

3.4 Restricted-Base Sales Taxes

As an alternative to a general sales tax, it would be possible to consider forms of local taxation of sales which operate on a restricted, but easily-taxed, base. One, which we include in the schemes assessed in this report, would be a local

utilities sales tax. This could be levied on sales by electricity, gas, water and telecommunications utilities to retail customers.

The attractions of a local tax of this sort include both practical advantages and avoidance of the problem of the diversion of sales from high-tax to low-tax jurisdictions. The practical advantages are that sales to retail customers can usually be easily distinguished from sales to business customers; most of the utilities concerned already do this for commercial purposes. Computing and levying the appropriate local taxes could easily be achieved through straightforward amendments to utilities' computer billing procedures. Diversion of sales to other jurisdictions is ruled out since the location of supply (for which an address is always known) can be used to determine the appropriate tax rate and cannot be changed.

3.5 Legal and Economic Constraints in the Single European Market

In writing this study, we have chosen not to make assumptions about the views of the UK government or of the EU on the desirability or acceptability of local sales taxes. This study merely aims to identify possible schemes for implementing local sales taxes, if a decision were taken that a local sales tax should be introduced, and to work through the economic implications of introducing sales taxes at the local level. The argument that local sales taxes are politically unrealistic in the present situation is perhaps persuasive, but is not assessed in this report.

Nevertheless, there are more fundamental constraints to the implementation of sales taxes at the local level which reflect both economic constraints within the Single European Market and legal constraints arising from the basic treaty obligations of the UK as a member of the EU.[4] These require serious consideration.

They include both restrictions on the relative taxation of different goods and services (to ensure non-discriminatory treatment of goods imported from other member states) and restrictions on the means used to enforce sales taxes within member states (to ensure that the recently-abolished fiscal controls at intra-Community borders are not replaced by administrative procedures with an equivalent effect on the costs of trading between member states). Both of these requirements are basic to the current legal framework governing the

[4] A review of sales tax law at both EC and national level is provided by Terra (1988).

operation of the Single European Market. The forms of local sales tax discussed in this report would not appear likely to conflict with either of these requirements. A general sales tax, levied at a standard rate on all sales, could not be used to favour goods produced by domestic producers, and either a local VAT or a local retail sales tax places UK-produced goods and imported goods on a level playing-field (this would not, of course, be the case with a local tax that involved cascading). Similarly, the local utilities sales tax, levied on utilities sales to local residents, raises no obvious issues of intra-EC distortion of trade.

In addition to the basic requirements of the treaty relating to the Community's internal market, there are rather less fundamental Community rules, in the form of the various agreements reached on harmonisation of member states' existing sales taxes, which would currently inhibit introduction of new sales taxes at a local level. Thus, for example, some of the Directives governing the gradual process of convergence towards a common system of indirect taxation in member states place limits on the type of sales taxes that member states can operate, which may effectively rule out some of the options for local sales taxes. The main elements and requirements of the common VAT structure in the EU are governed by the Sixth Directive (Commission of the European Communities, 1977), and introduction of non-VAT systems of indirect taxation is constrained by Article 33 of the Sixth Directive.

3.6 Implementation

The experience of the UK in introducing VAT at the start of the 1970s, and international experience of sales tax systems more generally, suggest that there are a number of important transitional issues that require attention in contemplating the introduction of new systems of sales taxes. These include both 'technical' transitional issues and issues concerning the economic and social aspects of transition to the new system.

The technical issues include:

- the design of procedures to deal with the incentives for anticipatory stockbuilding;
- the need for methods for apportioning accounting information to periods before and after the introduction of the tax.

Local sales taxation

The main economic and social policy transition issue arising from the introduction of new sales taxes is probably the impact on retail prices.

The impact on the retail price index could be minimised if, at the same time that the local tax was introduced, a corresponding downward adjustment were made in the rate of value added tax. Then, the impact of the tax would mainly be that it would introduce variation between areas in the rate of sales taxation, rather than increase the average overall level of sales taxes. In areas with a higher-than-average local sales tax rate, prices might then rise (although the extent that the higher taxes might be passed on in prices could be limited by competitive pressure from neighbouring lower-tax authorities), whilst in areas with a below-average local sales tax rate, there might be a corresponding tendency for prices to fall. Overall, if the price increases in authorities where the combined national plus local tax rate was higher than before were exactly balanced by price reductions in authorities where the combined burden of local and national taxes was reduced, the impact of the local sales tax on the retail price index would be zero. Indeed, if there were some diversion of retail sales towards lower-tax areas, then the impact of the tax on the retail price index would be negative (although the tax would also, in this case, raise less revenue than had been forgone by the reduction in the national VAT rate).

If the local sales tax were introduced without a corresponding reduction in national VAT, then the higher level of indirect taxation could feed through into higher prices, adding to measured inflation in the period when the tax was introduced. The impact of the higher prices on individual living standards might be offset by the adjustments made elsewhere in the fiscal system, as a result of the reduced need either for national tax revenues (if the local sales tax allowed central grants to local authorities to be reduced) or for other local tax revenues. However, these offsetting gains may be unevenly distributed across households — reductions in national income taxes would, for example, accrue predominantly to higher-income households. This may raise issues about the distributional impact of the increase in prices, requiring consideration of the adequacy of indexation of benefit levels, and, perhaps, other compensatory policy measures.

CHAPTER 4
LOCATIONAL DISTORTIONS

In this chapter we discuss a major potential problem with using sales taxes at the level of local government, which is that they may divert the pattern of retail sales towards areas where tax rates are lower. This would have undesirable consequences of three sorts.

First, it would tend to introduce increasing divergence in the resources available to different local authorities. Those authorities that have sufficient resources to be able to set low sales tax rates would attract more sales, and hence more tax revenues — allowing them to make further reductions in the rate of tax. Although there are obviously limits to this process, it could lead to a considerable concentration of sales tax revenues in the hands of a few authorities.

Second, the diversion of retail sales to areas where tax rates are low would have economic costs, in terms of the resources (both time costs and travel costs) expended by consumers in travelling to the low-tax centres. Although such 'cross-border shopping' is worthwhile for individual consumers, resources used merely to save tax constitute a dead-weight loss from the point of view of the economy as a whole; this economic loss may be substantial.

Third, the pressure of 'tax competition' when consumer spending is likely to be diverted to other areas may influence local governments' decisions about the level of local spending and local taxes. Local authorities whose geographical position makes them particularly exposed to revenue losses from diversion of sales might enjoy little autonomous power over local tax and spending decisions, but might be forced to choose spending levels that would keep their tax rates down to the level in neighbouring authorities.

This chapter considers the quantitative significance of these issues, drawing, first, on a simple illustrative model of the factors involved and, second, on studies of the impact of sales tax differentials between jurisdictions in three real-world applications — US state sales tax differentials, US local sales tax differentials and the sales tax differential between the Irish Republic and Northern Ireland. Although there are large differences in scale, distance and other factors between the situations studied in the empirical literature and the likely situation if a local sales tax were introduced in the UK, they none the less provide important evidence on the size of sales tax differences at the local level that would give rise to

unacceptable diversion in sales patterns, and on the extent to which these problems could be reduced if local variation in sales tax levels were confined to a higher-tier (say, regional) level rather than district or county level.

4.1 An Illustrative Example

A rough quantification of the likely relationship between jurisdiction size and the extent of cross-border shopping can be produced as follows. Assume that the travel costs (including time costs, inconvenience or possible enjoyment from making cross-frontier trips etc.) of undertaking cross-border shopping are a linear function of the distance of the household from the edge of the neighbouring jurisdiction d, with a constant cost per mile f. Then for a given purchase size V and sales tax rate differential t in favour of the neighbouring jurisdiction, an individual will be just indifferent between purchasing across the border and purchasing locally where the cost of the cross-border journey equals the tax saving, i.e. where $df = Vt$. Cross-border shopping will therefore be worthwhile for all residents living less than d^* miles from the border, where $d^* = Vt/f$, and residents living further than this from the border would shop locally.

The proportion of the population for whom cross-border shopping for a purchase of value V will be worthwhile will depend on the distribution of the population across the area of the jurisdiction, and the shape of the jurisdiction. If we assume, for simplicity, that the population is evenly distributed across a circular[1] jurisdiction of radius r, then the proportion of the population that lies less than a given distance d^* from the border of the jurisdiction is given by

$$L = \frac{2d^*}{r} - \frac{(d^*)^2}{r^2}.$$

Substituting in this expression for d^*, we can derive an expression for the proportion of the population for whom cross-border purchases will be profitable, as a function of the tax differential t, the value of a single purchase V, the travel cost per mile f and the size of the jurisdiction r:

[1] The results are exactly the same for an evenly-populated square jurisdiction.

$$L = \frac{2Vt}{fr} - \frac{(Vt)^2}{(fr)^2}.$$

Assuming that all of the population for whom cross-border shopping is worthwhile actually do it, and that the value of each unit purchase is the same for all of the population, L also measures the proportion of the jurisdiction's tax revenue lost through cross-border shopping. Table 4.1 shows how this proportion varies with different values of V, t, f and r.

The table suggests quite substantial potential losses from cross-border shopping for even modest tax rate differentials; a one percentage point tax differential in a jurisdiction of 7 miles radius (approximately 160 square miles in area, about the size of a typical non-metropolitan district council) would put at risk about one-seventh of the tax revenue from £50 purchases if consumers assessed the costs of cross-border shopping at £1 per mile. A 5 percentage point tax differential in these circumstances would result in a revenue loss of some 59 per cent.

The proportion of revenue at risk falls with increasing jurisdiction size: a jurisdiction of 20 miles radius (approximately 1,200 square miles in area, about the size of a typical non-metropolitan county) would lose only one-third of the revenue of the district-sized jurisdiction. Even so, a tax differential of 5 percentage points puts at risk more than 20 per cent of revenues if

TABLE 4.1

Illustrative Calculations of Revenue Loss from Cross-Border Shopping for Various Values of Tax Differential, Purchase Value, Travel Cost and Jurisdiction Size

Tax differential between jurisdictions	Value of a single shopping trip	Travel cost of cross-border shopping per mile	Maximum distance travelled to shop across border	Size of jurisdiction (radius)	Percentage of revenue lost through cross-border shopping
t	V	f	$d^* = Vt/f$	r	L
0.01	£50	£1.00	0.5 mile	7 miles	14%
0.05	£50	£1.00	2.5 miles	7 miles	59%
0.01	£50	£0.50	1.0 mile	7 miles	27%
0.01	£50	£1.00	0.5 mile	20 miles	5%
0.05	£50	£1.00	2.5 miles	20 miles	23%
0.01	£50	£0.50	1.0 mile	20 miles	10%

cross-border purchasers make purchases of £50 per trip and assess the costs of trips at £1 per mile.

How plausible are the various assumptions used to derive these results? There are four aspects that should be considered:

(a) *Cost per mile.* The estimate of £1 per mile is high in relation to the purely monetary costs of travel, but should be seen as incorporating estimates of the value of time and other *psychological* costs (net of any benefits, in the form of entertainment etc.). The estimates of Fitzgerald, Quinn, Whelan and Williams (1988) for Ireland in 1987 of a cost per mile of £IR0.42 might suggest a mileage cost of somewhat less than £1, even allowing for some upward adjustment to reflect subsequent changes in the price level and a higher time cost reflecting the UK's higher average real income. Lower costs per mile increase the revenue loss; for example, at a cost of 50 pence per mile, about a quarter of revenue from £50 purchases would be lost in a district-sized jurisdiction with a tax differential of only 1 percentage point, compared with one-seventh with costs at £1 per mile.

(b) *Purchase size.* The analysis assumes a given purchase size, of, for example, £50 per cross-border shopping trip. This is clearly a gross simplification of the complex pattern of household purchasing, which will involve a range of small and large purchases; some of the small purchases can be made simultaneously (e.g. the purchase of many items in one supermarket visit), whilst others cannot (e.g. purchase of daily newspapers). Evidence on the *existing* structure of household purchases is only partly helpful in suggesting what proportion of household spending can be made on single cross-border shopping expeditions, since the size of purchases is likely to be a function of the extent to which there is any point in making purchases on a small number of large shopping expeditions, rather than more frequently. If there were substantial tax savings from cross-border shopping, it is to be expected that households would tend to concentrate their shopping more than at present into a small number of occasions, rather than more continuous purchases of smaller amounts.[2]

[2] Significant local sales taxes could thus influence the development of the retail sector towards large shopping centres located in low-tax areas, orientated to large shopping expeditions, at the expense of smaller neighbourhood shops in which more frequent, smaller-value purchases are made.

(c) *Location of shopping centres.* The calculations assume no travel cost for 'local' shopping, and travel costs given by the cost of travel to the nearest border for cross-border shopping. In practice, most shopping involves some travel, even to shop within the jurisdiction, whilst cross-border shopping is unlikely to be simply a matter of travelling to the nearest border; shopping centres may be located some distance beyond the border, requiring longer journeys. These qualifications point in opposite directions for the analysis, and may broadly cancel out, except where a local sales tax regime leads to the establishment of large shopping facilities located at jurisdictional boundaries; in this case, the revenue at risk may be higher than estimated, since the costs of travel for within-jurisdiction shopping can be subtracted from the costs of travel for cross-border shopping (what matters is the *extra* cost of the latter).

(d) *Jurisdiction shape and density.* Local authorities are clearly not as regular in shape, nor as evenly populated, as these illustrative calculations assume. Thus the estimates are a simplification, and in the case of the former assumption, it is clear that this may bias the estimates of cross-border shopping downwards: irregularly-shaped authorities would generally have a higher proportion of their total area located near to their perimeter. The assumption of a uniformly-distributed population is less serious; it is not clear that there is any reason to believe that the assumption of uniform population density biases the estimates of the proportion of revenue at risk in a systematic upward or downward direction.

4.2 Evidence on the Impact of State Sales Tax Differentials in the US

Evidence on interstate cross-border shopping in the US is likely to be of only limited use in predicting the likely extent of cross-border shopping that would result from a local sales tax in the UK, since US states are, in the main, substantially larger than counties and districts in the UK; US states are probably closer in size to UK regions than to existing UK local government units. Nevertheless, the evidence on the impact of state sales tax differentials can give an indication of the processes involved, if not a good guide to the likely scale of cross-border shopping. Evidence on cross-border shopping between US states includes results from both cross-section and time-series studies of the pattern of retail sales, and survey evidence on cross-border shopping.

Local sales taxation

Cross-Sectional Evidence

Mikesell (1971) analysed the impact of state sales tax differentials on retail sales by comparing the level of per capita retail sales of various classes of goods in the border counties of the relatively highly-taxed state of Illinois with sales in interior counties. He found that tax differentials of between 1 and 2 percentage points between Illinois and neighbouring states reduced retail sales by between $23 and $188 per capita in border counties as compared with the interior counties.

Whilst both total sales and sales of durable goods were significantly lower in border counties, there were certain classes of goods, including motor vehicles and convenience goods, for which cross-border shopping did not seem important. In the case of motor vehicles, the reason for the low level of cross-border shopping was probably that use taxes are relatively hard to avoid since motor vehicles must be registered in the home state, and consequently a tax gain cannot be made by cross-border shopping.

Time-Series Evidence

Fox (1986) analysed the response of retail sales in three metropolitan areas along the Tennessee border — Chattanooga, Clarksville/Hopkinsville and Tri Cities — to a rise in the border sales tax differential. Each of these metropolitan areas borders a different state. This approach allowed Fox to investigate the *shifting* of retail sales in response to a border sales tax *differential* rather than just the response of sales on one side of the border to changes in a sales tax *rate*. This simultaneous testing is more sensitive to any cross-border shopping present, since home state sales should fall as sales in the neighbouring state rise.

Using data on aggregate sales, Fox concluded that a 1 percentage point rise in the tax differential leads to a reduction in sales within the border city of between 0.5 per cent and 3.7 per cent, although this effect was only statistically significant in two of the three border cities. The use of more disaggregated expenditure data generated similar results, but also indicated that cross-border shopping was more important for particular classes of goods, such as furniture and clothing, reflecting the high average unit price of these items.

When Fox compared the impact of local sales taxes with that of other local taxes, he found that consumers were more likely to change their behaviour in response to changes in sales tax rates (which are relatively easy to observe)

than in response to changes in other local taxes which may indirectly raise business costs. However, sales tax differentials did not appear to have any significant impact on relative employment trends on either side of the border.

Walsh and Jones (1988) analysed the impact of a two-stage reduction in sales tax rates in West Virginia on per capita grocery sales in 46 counties over a five-year period from 1979 through to 1984. Significantly, only one neighbouring state taxed grocery sales over this period. As the West Virginian sales tax was phased out, retail sales growth was significantly more rapid in border counties.

Walsh and Jones found that sales tax differentials were significant in explaining changes in per capita sales for border counties but not for interior counties. In the 26 border counties, a 1 percentage point increase in the state sales tax differential was found to reduce retail sales by 5.9 per cent. In the 20 interior counties, where the opportunity costs of cross-border shopping (in terms of transport costs and journey time) are presumably greater, tax differentials did not significantly affect retail sales.

Survey Evidence

McAllister (1961) studied the extent of cross-border shopping in Washington state at a time when Washington's tax rate was 3.5 per cent whilst that of neighbouring Oregon was zero. The responses to a telephone survey of 100 residents in each of three border cities — Pullman, Vancouver and Walla Walla — were compared with the pattern of responses from cities with similar economic characteristics located in the interior of the state.

McAllister focused on cross-border shopping for three particular goods — refrigerators, groceries and women's clothing. Respondents felt both that 'tax reasons' were the major reason why they themselves had bought these goods in Oregon and that this might be true of the population in general. Whilst this evidence is interesting anecdotally, the small sample size did not allow any quantification of the importance of cross-border shopping.

4.3 Evidence on the Impact of Local Sales Tax Differentials in the US

Empirical work in the US on the extent of cross-border shopping resulting from *local* sales tax differentials has estimated changes in the tax base of the whole jurisdiction since a comparison of data on border and interior areas is not generally possible. The sensitivity of sales to tax differentials is found to depend on both the categories of goods covered by the tax and the

characteristics of the border between neighbouring jurisdictions. These studies may be informative as to the likely extent of cross-border shopping in the UK that might result from county- or district-level sales tax differentials.

Cross-Sectional Evidence

Mikesell (1970) analysed a cross-section of sales data from 173 standard metropolitan statistical areas (SMSAs) in the US. Within these areas, 37 cities were found to have favourable or unfavourable tax differentials compared with the neighbouring suburban areas. He estimated that a 1 percentage point rise in the tax differential between the central city and its suburbs could lead to an average fall in per capita sales of between 0.2 per cent and 11 per cent. Based on this rather imprecise estimate, Mikesell concluded that the introduction of sales taxes in cities within metropolitan areas may be problematic due to the existence of a competing market and the non-tax disadvantages that many central cities already possess.

Mikesell controlled for per capita income and population in each area as well as the city area. He found that a 10 per cent increase in per capita income generated a 6 per cent rise in per capita sales, suggesting that a sales tax constitutes a moderately buoyant but also cyclical revenue source. He also used city population as a proxy for transport costs and found that the city area was negatively related to city sales per capita. This supports the notion that travel to central city shopping districts is more costly in larger cities.

Time-Series Evidence

Levin (1966) investigated the impact of the New York city sales tax on a time series of total clothing and house furnishings sales data for both the city and the surrounding areas. He concluded that higher tax rates tended to shift sales from those establishments selling taxed goods towards those selling non-taxed goods within the city rather than from city stores to ring area stores. Indeed, much of the sales loss of taxed goods he identified was mirrored by increased sales of non-taxed goods.

Fisher (1980) studied the impact on retail sales of changes in sales tax differentials between Washington DC and the neighbouring suburban areas of Maryland and Virginia over the period from 1962 until 1976. He found that food sales declined by 7 per cent, whilst there was no significant impact on sales of clothing or aggregate retail sales.

Fisher argued that the impact of tax differentials was more important for some groups of commodities than for others. Sales are likely to be most responsive to tax differentials in the case of commodities that can be bought in bulk, such as food, since this will reduce the extent to which transport costs deter cross-border shopping, especially since the sales tax differentials were significantly larger for food than for other goods because food was zero-rated in the neighbouring states. This may provide some evidence that non-linearities are present — the extent of cross-border shopping may increase more than proportionally with the sales tax differential.

Mikesell and Zorn (1986) studied the impact of the introduction of a temporary sales tax of 0.5 per cent on retail sales in the small town of Bay St Louis in Mississippi. They concluded that a 1 percentage point rise in sales tax differentials lowered sales in the town by 3 per cent. This resulted from lower sales per vendor rather than a reduction in the number of vendors. This study differed from other studies to the extent that it concerned the situation of a small town rather than a major city, and in the reason for the introduction of the tax. The sales tax was a temporary measure, introduced to pay a compensation claim awarded against the town; the State insisted it was terminated once the claim was paid.

For the duration of this temporary tax, the city's share of county sales dropped significantly below the estimated time trend. However, the tax was found to have no significant impact on the number of retailers. These results may be attributable to the temporary nature of the tax since a temporary tax is unlikely to affect the long-run attractiveness of the town for business location. This lack of impact on retail location may help explain why the estimated coefficients are somewhat lower in this case-study than elsewhere.

Hamovitch (1966) demonstrated that the elasticities of sales tax bases to changes in sales tax rates might differ for different tiers of government. He compared tax base elasticities for both the state of Alabama and New York city between 1948 and 1965. Whilst New York city was bordered by counties without sales taxes, Alabama was bordered by states that had all introduced their own sales taxes. Moreover, whilst New York residents had relatively easy access to alternative retail centres, Alabama does not have any large population clusters close to the borders of other states. Having controlled for changes in disposable income, Hamovitch concluded that a 1 percentage point rise in the tax rate differential would lead to a 6 per cent fall in the tax base in New York city but would have no significant impact on the tax base in Alabama state.

4.4 Cross-Border Shopping between Northern Ireland and the Republic of Ireland

Fitzgerald et al. (1988) estimated the extent of cross-border shopping in Northern Ireland by citizens of the Irish Republic that has resulted from indirect tax differentials between the North and the Republic. They used both survey evidence and time-series data on national sales of certain goods subject to excise duties (alcohol, televisions and petrol).

The survey results suggested that even though 89 per cent of all trips to the North were 'solely' or 'mainly' for shopping reasons, the border problem was far more severe for some groups of goods than for others. At one extreme, two-thirds of the petrol consumed by the 46 per cent of respondents in border counties who had been to the North over the survey period, and almost all of the alcohol for home consumption, had been bought in the North. Whilst the volume of cross-border trade may account for approximately 2 per cent of personal consumers' expenditure in Eire in 1986, this figure rose to 10 per cent in border counties.

Two-thirds of the price differential between Northern Ireland and the Republic has been attributed to tax differentials, with an 8 percentage point VAT differential. In addition, excise taxes were significantly higher South of the border. Most of the rest of the price differential appears to result from the slow adjustment of prices to fluctuations in the exchange rate.

Fitzgerald et al. commissioned separate surveys of cross-border shopping by residents of the Republic and Northern Ireland. These suggested that almost all cross-border shopping took place North of the border by residents of the Republic. A more detailed study of the shopping patterns of those respondents who lived in the border counties of the Republic was also undertaken. These surveys present a 'snapshot' of the magnitude and motivation for cross-border shopping at one point in time.

The time and travel costs associated with cross-border shopping seem to be important. It was found that 46 per cent of respondents in the six border counties had been to the North in the last six months, compared with only 8 per cent of respondents in Eire as a whole. Thirty-six per cent of the variation in the number of trips made is explained by distance from the border and by a dummy for household car ownership. However, income and socio-economic status, which are also likely to reflect the opportunity cost of journey times, were found to be insignificant. Average expenditure per trip was found to be positively related to distance from the border, income (linearly) and the number of children in the household.

The average saving necessary to make a trip worthwhile increased with income and distance from the border. It was significantly higher for those households that do not possess a car. These factors are likely to capture the higher opportunity costs of cross-border shopping for certain categories of household.

Unfortunately, since the survey evidence was a cross-section of responses from one point in time, it could not be used to examine the sensitivity of cross-border shopping to tax-induced price differentials between the two jurisdictions. To tackle this issue, Fitzgerald et al. complemented their survey analysis with some time-series work.

The time-series sales data were only available at a national level rather than a regional level, and hence were restricted to those classes of goods for which cross-border shopping was likely to make up a large proportion of national sales: spirits and, to a lesser extent, television sets and petrol.

For petrol and televisions, data on cross-border trade were not available so data on sales in the Irish Republic alone were used. Petrol sales within 15 miles of the border were found to have fallen by two-thirds from 1980 to 1985 as tax differentials increased. Television sales in the Republic were found to decrease significantly when the after-tax price differential moved adversely. However, the limited nature of the data prevents any quantification of the sensitivity of sales to changes in tax differentials.

Whilst the extent of tax-induced cross-border shopping between Northern Ireland and the Republic is clearly significant, these results may not be a good guide to the likely impact of a local sales tax in the UK, for a number of reasons. First, the differential in tax rates (up to 10 percentage points) was much larger than we would expect to observe between neighbouring local authorities within the UK, and second, the largest tax rate differentials between Northern Ireland and the Republic were in the form of specific taxes on alcohol, petrol etc., which would be unlikely to come under local authority control in the UK. These differences might suggest that the Irish evidence would tend to overstate the extent of cross-border shopping. On the other hand, the amount of individual cross-border purchasing between Northern Ireland and the Republic might have been depressed by currency exchange costs, and by the fear of terrorism, below the levels that would arise if a similar tax differential were to exist within the UK. Also, Eire imposed certain restrictions and quotas on cross-border trade for most of the period studied; such measures to limit cross-border shopping would not be open to UK local authorities.

4.5 Conclusions

The diversity of the methodologies described above makes it very difficult to quantify the extent of cross-border shopping that might be induced by local sales tax differentials within the UK. However, the evidence allows us to draw some tentative conclusions as to which type of arrangements might ameliorate this problem.

- Since cross-border shopping is a more significant problem for local sales taxes than for state sales taxes, a sales tax at county or regional level would be far less problematic than one at district level.
- In addition, since metropolitan areas typically have both relatively high population densities close to jurisdictional boundaries and alternative retail centres available, a district-based tax would be particularly inappropriate for authorities in London and the metropolitan areas. The use of counties or standard regions rather than districts as the tax-setting unit might be particularly important in these areas.
- Since cross-border shopping may increase more than proportionally with local tax differentials, it is important that excessive differences in tax rates should, where possible, be avoided. A system of resource equalisation grants would help to avoid differences in tax rates arising from differences in tax bases, and would be consistent with past practice in UK local government finance. Resource base differences are one factor giving rise to tax rate differences in the US.
- Since the inclusion of food in US sales taxes appears to have a significant impact on the incentives for cross-border shopping, particularly in the case of weekly grocery shopping, where large purchases are made in a single trip, a local sales tax should share the same tax base as national VAT, and should therefore not tax most grocery items.
- Whilst consumers may still respond to temporary tax differentials, habit persistence may reduce the elasticity of response in the short run. In addition, businesses are unlikely to relocate solely to take advantage of a tax differential that was expected to be temporary. Hence, tax competition might not prevent local authorities from exercising considerable freedom to choose higher expenditure in particular years.

CHAPTER 5
ASSESSMENT: SUITABILITY AS A SOURCE OF FINANCE FOR LOCAL GOVERNMENT

What would be the impact of assigning some form of sales tax to local government on the budgetary position and functioning of local government? In this chapter we discuss four issues. First, we consider the impact of a local sales tax on the level and distribution of local authorities' financial resources, and the extent to which the tax might therefore require some form of resource equalisation to ensure that it did not introduce unacceptable inequalities in the financial position of different authorities. Second, we consider the impact of a local sales tax on the issue of 'accountability' in local decision-making. Third, we discuss the level of local government that should be given control over the rate of the local sales tax, and the implications of different degrees of local responsibility and constraints on local choice. Fourth, we discuss the issue of revenue instability under a local sales tax.

5.1 Impact on Local Authority Resources

Most possible schemes for local sales taxes would have an uneven (initial) impact on the financial resources available to different local authorities, reflecting the uneven distribution of per capita sales. Authorities with city-centre retail premises, or a cluster of out-of-town hypermarkets, would generally seem likely to derive considerably more additional revenue per capita of population from a local sales tax than would most suburban or rural authorities.

The extent of any resource equalisation arrangements necessitated by a particular local tax clearly depends on the nature of the distribution of the tax base per capita between local authorities. At one extreme, the community charge or poll tax, a tax per head of population, required no equalisation at all. In contrast, the 1980s' system of local non-domestic rates involved extensive, and complex, resource equalisation, because of the uneven distribution of tax base between areas. A system requiring significant resource equalisation has a number of drawbacks — it may be poorly understood, and therefore open to political manipulation, it may be perceived as unfair by authorities that do not benefit from the arrangement, it may not be able to achieve full equalisation without negative grant payments for some

authorities, and it may pose problems for public expenditure management since full equalisation can be incompatible with a cash-limited grant total. Thus, the extent to which a given system of local taxation would require resource equalisation is an important issue for policy.

In assessing how far resource equalisation would be required with a local sales tax, it is necessary to construct an estimate of the tax base in each area. Data do not exist on the level of sales in each local authority area, and it is therefore necessary to try to infer this from other available information. Using data on the pattern of retail floorspace across authorities, we have attempted to assess the likely extent to which the sales tax base (and, at a given tax rate, revenues) per head of population would differ between local authorities, and the implications that this unevenness, if uncompensated, would have for the level at which the sales tax (and/or other local taxes) would have to be set in different areas.

Table 5.1 shows the distribution of retail floorspace per head of population across local authority areas in the UK in 1985 (the most recent year for which data are available). It shows greater variation in retail floorspace per head between districts than between counties (counting each group of metropolitan districts, and Greater London, as counties). All the counties have 1–2 square metres of retail floorspace per head of population, whilst nearly 30 per cent of districts have less than 1 sq. m. per capita, and 12 per cent have 2–5 sq. m. per capita. Two districts have more than 10 sq. m. of retail floorspace per head of population.

In consequence, the resource transfers that would be needed to equalise per capita taxable resources between local authorities would be significantly lower with a local sales tax at the county level than with a tax at district level. In effect, counties equalise out some of the resource inequalities of their

TABLE 5.1

Distribution of Retail Floorspace Per Capita across Counties and Districts, England, 1985

	Number of counties	Number of districts
Under 1 sq. m. per capita	0	103
1–2 sq. m. per capita	46	216
2–5 sq. m. per capita	0	44
5–10 sq. m. per capita	0	0
Over 10 sq. m. per capita	0	2

Source: Block Grant Indicators 1989/90.

TABLE 5.2

Distribution of Estimated Per Capita Local General Sales Tax Base across Counties, England, 1985/86[a]

	Number of counties, 'Basis A'	Number of counties, 'Basis B'
Under £3,000 per capita	0	16
£3,000–£4,000 per capita	17	19
£4,000–£5,000 per capita	26	5
£5,000–£6,000 per capita	3	4
Over £6,000 per capita	0	2

[a] 1985/86 is the most recent year for which data are available.

Note: Sales tax bases estimated on assumptions as described in text. Basis A assumes equal taxable sales per unit of retail floorspace nation-wide. Basis B assumes that taxable sales per unit of retail floorspace differ systematically with the population density of the county.

constituent districts. Hence, a county-based sales tax would be preferable to a district-based tax for both equalisation and cross-border shopping reasons.

Table 5.2 attempts to translate this into estimates of the distribution of sales tax base (under a general sales tax) across counties. The estimates in Table 5.2 are based on two different assumptions.

'Basis A' assumes that taxable retail sales in different areas are simply proportional to retail floorspace. On this assumption, no counties have a tax base less than £3,000 per capita; three counties have a sales tax base in excess of £5,000 per capita. Basis A should perhaps not be taken seriously; it implies a uniform level of taxable sales per unit of floorspace nation-wide such that sales per square metre are the same in a city-centre store, where the cost of premises is high, and in a rural shop, where premises costs are low. Nevertheless, Basis A provides a useful yardstick by which to assess the implications of alternative assumptions.

'Basis B' assumes that taxable sales per unit of floorspace are higher in areas of greater population density. We adjust per capita floorspace by the population density of the local area, so that estimated sales per capita are shown as higher, compared with the initial basis, in densely-populated areas, and lower, compared with the initial basis, in less densely-populated areas.[1]

[1] Each local authority's percentage share of the national sales tax base is assumed to be equal to its share of national 'adjusted floorspace', given by the assumed relationship $S = F \times D^{0.3}$, where S is the estimated

This serves to increase our estimated tax base in densely populated localities such as London and the metropolitan areas, and reduces the per capita sales tax base in thinly-populated rural areas. The range of per capita tax bases under Basis B widens compared with Basis A, suggesting that areas with large concentrations of retail businesses may also generate higher levels of sales per unit of floorspace.

On Basis B, 16 counties have a sales tax base of less than £3,000 per capita, and six have a tax base in excess of £5,000 per capita. Compared with Basis A estimates, there is a significantly wider range of tax bases across local areas, which suggests that a sales tax levied at the county level would require appreciable equalisation of resources between authorities.

There are three main strategies that could be considered for reducing the problems for local finances caused by differences in per capita sales tax bases between authorities:

- Resource equalisation — the use of a compensating 'notional tax base', or lump-sum grants inversely related to the local sales tax base, to provide local authorities that have a low potential revenue from sales taxation with higher transfers from central government in compensation.
- Restricting local sales taxation to a group of goods and services that would provide reasonably uniform per capita revenues across local areas. For example, it is possible that restricting the scope of a local sales tax to a surcharge on household utilities bills would tend to reduce the scale of the differences in revenue-raising power between authorities. Lack of appropriate data prevents us from quantifying this effect.
- Assignment to broader geographical areas. Our estimates suggest that the variation between authorities in potential sales tax revenues is greater in the case of sales taxes assigned to small geographical areas (districts, for example) than in the case of those assigned to large areas such as counties.

Table 5.3 shows the impact of resource equalisation arrangements for the distribution of county sales tax rates, given the current pattern of local authority spending. The table assumes that the local sales tax bears the full burden of discretionary local spending, rather than sharing the burden with other local taxes; this assumption maximises the variation in tax rates likely

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sales tax base, F is the local floorspace and D is population density.

TABLE 5.3

Range of Local Tax Rates for Local General Sales Tax, with and without Resource Equalisation, England, 1994/95

	Full equalisation: number of counties	No equalisation: number of counties
Under 4 per cent	2	4
4–5 per cent	39	10
5–6 per cent	5	12
6–7 per cent	0	11
7–8 per cent	0	2
8–9 per cent	0	3
Over 9 per cent	0	4

Note: Calculations based on replacing the council tax with a local sales tax. Full resource equalisation is assumed (as opposed to the SSA-only equalisation inherent in the present local government finance system). Local sales tax is assumed to be levied at a uniform (but locally-varying) percentage on all goods and services subject to VAT, raising aggregate revenues of £9.24 billion.

to be encountered. The first column shows the distribution of tax rates under full resource equalisation, the second the pattern of rates in the absence of any resource equalisation arrangements.

The full equalisation scheme implies that any two local authorities that attempt to raise the same amount of revenue per head from a given tax should be able to set the same tax rate, independently of the relative size of their tax bases.[2] In other words, for a local sales tax, full equalisation is taken to imply that a household should not face a higher local sales tax rate simply because it lives (or chooses to shop) in a county that has a small retail base; likewise, tax rates should not be lower, simply because an area is endowed with a large retail base. A system similar to this operated in the UK during the 1980s. This differs from the present local finance system under the council tax, which only equalises the resource bases of local authorities at a centrally-determined assessment of spending need (standard spending assessment, SSA) but not at other spending levels.

It is clear from Table 5.3 that in the absence of equalisation arrangements, a much wider range of tax rates might exist across counties than if resources

[2] Grants to individual local authorities are adjusted so that there are no aggregate grant implications (positive or negative) of the various equalisation schemes.

were fully equalised. It is unlikely that a local sales tax would be acceptable if resource differences were to give rise to tax rate differentials on the scale shown in the second column of Table 5.3. The quantitative analysis in the remainder of this report therefore concentrates on the case where a local sales tax was employed with full resource equalisation. In this case, differences in local per capita spending (in relation to the centrally-determined measure of spending need, SSA) give rise to differences in tax rates, but differences between authorities in taxable sales per capita do not affect the rate of tax that has to be charged for any chosen level of spending.[3]

If we assume that a local sales tax would be implemented with full resource equalisation, so that differences in local tax rates arose from differences in local spending choices only, then the tax differentials between neighbouring authorities would be likely to be very small. Table 5.4 illustrates the

TABLE 5.4

Largest 'Outflow' and 'Inflow' Tax Differentials with Adjacent Authorities, for Local General Sales Tax, with Full Resource Equalisation, England, 1994/95

	Number of counties
'Outflow' differential	
More than 1 percentage point	0
0.5–1 percentage point	9
0–0.5 percentage point	37
Authorities with 'inflow' differentials only	
0–0.5 percentage point	5
0.5–1 percentage point	2
More than 1 percentage point	0

Note: Tax rates as in full resource equalisation case in Table 5.3. The 'outflow' differential shows the largest incentive for outflow of cross-border shopping in geographically contiguous authorities (i.e. the maximum by which the authority's tax rate exceeds that in any neighbouring jurisdiction). The 'inflow' differential considers only those authorities that set a lower tax rate than any neighbouring jurisdiction. It shows the largest incentive for inflow of cross-border shopping from geographically contiguous authorities (i.e. the maximum by which the authority's tax rate is lower than that in any neighbouring jurisdiction).

[3] This is, of course, more extensive resource equalisation than in the current council tax system, which secures full equalisation of resources only when local spending equals SSA. With this rather more limited form of resource equalisation, the large differences in the per capita sales tax base between authorities could give rise to appreciable differences in local sales tax rates in resource-rich and resource-poor areas.

distribution of 'cross-border differentials' that would arise, given the pattern of local sales tax rates shown in Table 5.3. No authority would face a neighbouring jurisdiction with a tax rate more than 1 percentage point lower than its own, and only nine authorities would face a neighbouring jurisdiction with a tax rate more than half a point lower. These estimates, of course, assume that the existing pattern of local spending decisions would be unaffected by the choice of a new local tax base; whilst this may not be entirely accurate, it none the less reflects the range of discretionary spending decisions that arise in the UK local government system. The typically very low differentials that would occur at most county borders suggest that the problem of cross-border shopping identified in the US empirical literature might not be too severe in the UK. The key difference, of course, would be in the other aspects of the local government finance system — the estimates for the UK assume that a local sales tax would be introduced with full equalisation of spending needs on the basis of standard spending assessments, and with full resource equalisation.

5.2 Accountability Issues

Local sales taxation would have potential implications for a number of dimensions of local accountability.

In the 1986 Green Paper, *Paying for Local Government*,[4] accountability in local government was seen as an issue concerning the identity of the provider of financial resources to finance increases in local spending. The changes to local government finance implemented following the 1986 Green Paper were intended to ensure that local domestic taxpayers (and, consequently, the local electorate) paid for local spending at the margin. Local control over non-domestic rates was abolished, to eliminate the local business contribution at the margin. Similarly, 100 per cent local tax rebates were ended, and a system of individual rather than household taxation introduced (in the form of the poll tax to replace domestic rates) to ensure that all of the electorate faced at least some marginal tax contribution to local spending changes. In this sense of accountability, local sales taxes would have some significant effects; the burden of paying for local government would be less evenly spread across households than with any existing or previous local

[4] Cmnd 9714.

household taxation in the UK, and the sales taxes paid on the spending of non-residents of an area might make quite a significant contribution to local revenues.

These effects can be summarised in terms of the distribution of 'tax prices' (i.e. the increase in tax paid for a given unit increase in local spending) between households.[5] A rough indication of the extent to which the tax price of local spending to local taxpayers would be changed by the introduction of local sales taxes can be inferred from the distributional analysis in the next chapter. Broadly, it shows that if tax bills before rebate are considered, tax prices would rise amongst high-income consumers (for the top quintile, by some 56 per cent compared with a poll tax and by some 27 per cent compared with a fully-equalised council tax) and would fall for low-income consumers (for the bottom quintile, by some 42 per cent compared with a poll tax and by 39 per cent compared with council tax). Comparing tax prices under a local sales tax with bills net of rebate under poll tax and council tax, the differences are much smaller. As can be inferred from Figure 6.2, tax prices for high-income households are marginally higher under a sales tax than under the council tax, whilst tax prices for poor households would be significantly higher under an unrebated local sales tax than under the council tax, when council tax rebates paid through the benefit system are taken into account.

The literature on local government finance has stressed that other dimensions of local accountability are also important, besides the 'marginal' accountability emphasised in the 1986 Green Paper.[6] In particular, a local sales tax would hold out the prospect of a significant reduction in local government's dependence on grant from central government. The implications for local government finance of operating in an environment where grant forms a much lower proportion of local revenues have been extensively discussed[7] in the context of other reforms with a similar effect (such as a local income tax); there are few respects in which there is a particular sales tax dimension to the issues.

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[5] See, for example, the estimates in Smith (1991a).

[6] See the discussion in Hughes and Smith (1991).

[7] For example, see Giles and Ridge (1993).

5.3 Sales Tax and the Level of Local Government

As Chapter 4 has discussed, local sales taxes would be prone to divert the pattern of sales and economic activity towards localities with low tax rates. This has economic costs, in the sense that tax-induced distortions of economic activity are inefficient. It also tends to erode the tax base of local authorities setting higher tax rates, thus requiring that resource equalisation play an increasing role, or, if resource equalisation is incomplete, having the effect that the resources of high-tax areas are eroded and local authorities face an incentive to compete for tax base by lowering tax rates.

The scale of cross-authority diversion of sales depends on the size of the authorities to which local sales taxes are assigned. If different local tax rates were levied by local authority districts, then many more local residents would find themselves within easy reach of neighbouring areas, setting different tax rates, and able to take advantage of any tax difference that exists. If sales tax rates were set at county level, the proportion of sales likely to be diverted by a given tax differential would be lower, since a smaller proportion of residents would live close to the boundary of neighbouring jurisdictions. With a sales tax levied at the regional level, the amount of distortion of sales would be smaller still.

This suggests that a local sales tax would incur lower distortionary costs, and would be a more sustainable basis for local government finance, if levied at a higher level such as counties or regions than if levied at district level. Where, as in the case of the current non-metropolitan counties, the higher level has significant expenditures of its own which the local sales tax could finance, this would be relatively unproblematic; counties would finance their spending in whole or in part from the local sales tax, whilst other local taxes would finance the districts' spending. Problems arise in determining the role of a local sales tax where it is suggested that the tax should be operated at a level of government that has no expenditure functions of its own. Without the institution of a wholly-new level of government, with significant policy functions of its own, this is what would be involved if a local sales tax were to be levied at the county level in metropolitan areas, or at regional level.

Essentially, the problem is that some mechanism would need to be established to determine the uniform rate of local sales tax to be levied across the area covered by a set of lower-tier authorities, each with its own spending decisions and revenue needs. Two issues arise.

The first concerns the mechanism by which the rate of tax to be levied should be determined. 'Upwards' precepting, whereby lower-tier

jurisdictions obtain revenues through a higher-tier jurisdiction, required to set a single tax rate, raises complications that do not arise in the case of conventional 'downwards' precepting arrangements, where the different revenue requirements of districts and the uniform revenue requirements of a county can be combined into different tax rates across different districts. Presumably, some new institutional arrangement — in the form of joint boards, regional 'senates' or other new bodies — would be required to articulate the different priorities and revenue needs of the lower-tier jurisdictions and to reach a single decision regarding the rate of sales tax.

The second issue concerns the value to the lower-tier jurisdictions of a revenue source where the rate is not directly under their control. Under such arrangements, lower-tier authorities would receive a given proportion of the VAT revenues collected from businesses in the county or region, whilst having only a limited influence over the rate of tax. The consequences of assigning some part of revenues in this way to the lower tier of government might be quite limited; depending on how other parts of the local finance system, including equalisation arrangements, are adjusted, the assignment might not even change the level of financial resources available to local governments, or their evolution over time.

An alternative approach which might help to limit the problems of cross-authority diversion of sales would be for central government to impose limits on the rates of local sales tax that could be chosen. Rather than having a fully-free choice as to the rate at which the tax would be applied, local governments might be required to set the tax rate at least above a specified minimum threshold (to minimise tax competition designed to attract sales — and hence tax receipts — at the expense of neighbouring areas).

5.4 Local Budgetary Stability

A further important consideration in assessing the suitability of sales taxes in local government finance is the impact of sales tax revenues on the stability and predictability of local government finances. There are four separate issues.

First, there is the question of the long-term trend in tax revenues under a local sales tax. If the tax rate is maintained constant, revenues will rise in line with the tax base, and will thus tend to grow gradually in real terms, although probably somewhat less rapidly than GDP.[8] The buoyancy of the tax base contrasts with the lack of buoyancy of other taxes that have been given to local government in the UK — rates, the community charge and the council

tax. Under each of these taxes, revenues at a constant tax rate would remain broadly constant in nominal terms, and would therefore decline in real terms. Much has been made of the lack of buoyancy of these existing local taxes, but it has little practical significance. Long-term growth in the local tax base could easily be offset by changes in the amount of central government grant allocated to local authorities. Perhaps the main practical consequence of a tax with a constant nominal yield is that the rate of the local tax must be raised regularly in order to keep real revenues constant; it is conceivable that raising the tax rate in this way might be more uncomfortable for local politicians than if they were to operate with a tax that maintained a constant or increasing real yield with an unchanged tax rate.

A second issue is the impact of cyclical factors on local sales tax receipts within the financial year. At the start of the budgetary process, it is necessary to make an initial estimate of the likely tax base, in order to set a tax rate to reach the required revenue. Where the tax base is difficult to predict, revenues will prove uncertain; local authorities may find themselves with excess or insufficient revenues compared with planned expenditures in the budget year. With the three taxes that have, to date, been employed as local taxes in the UK, the within-year predictability of revenues is generally high; the main uncertainties have been collection rates (unpredictable with the community charge, but otherwise quite stable) and (since rates are lower or zero on empty premises) building occupancy rates. With a local sales tax, there would be rather greater within-year instability, mainly generated by the unpredictability of the economic cycle. This could, perhaps, be accommodated through arrangements that permitted local authorities to borrow against within-year revenue shortfalls (subject to the initial estimates not being based on wildly-unrealistic assumptions).

A third issue is the cyclicality of the local tax base. If local tax rates were not to vary counter-cyclically, it would be necessary to allow local authorities to borrow to offset below-trend revenues in recession years. This would involve a departure from existing rules relating to local authority budgeting, and would raise serious issues concerning local fiscal responsibility and the long-term sustainability of local borrowing.

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[8] See Mikesell (1970).

A fourth issue is the instability that a local sales tax would inject into local government finance, if the tax can only be set in discrete steps. For example, if local authorities are only able to adjust the sales tax rate in steps of half a percentage point (i.e. rates of 4 per cent, 4.5 per cent, 5 per cent, 5.5 per cent etc.), each half-point adjustment would be equivalent to an extra £30 or so per head of population — quite a large jump in the tax burden and in revenues. How finely the local sales tax can be set is largely a matter of the compliance burden on business; business computations of the tax due will generally be more complex when the tax rates involve decimal places rather than whole numbers. If the tax rate cannot be adjusted sufficiently finely to raise exactly the amount of revenue sought, then local tax revenues will have to either exceed or fall short of revenue needs, or else another local tax would be required to provide greater flexibility in total revenues.

CHAPTER 6
DISTRIBUTIONAL IMPACT

The distributional incidence of local taxes between different groups in the population has been a prominent and controversial issue in public discussion of recent reforms to local government finance. Distributional issues have been prominent too in debates over the appropriate level and structure of indirect taxation (such as, for example, the switch from income tax to VAT in 1979, and the abolition of VAT zero-rating on domestic energy introduced in the 1993 Budget).

In this chapter we consider the distributional incidence of a local sales tax. Would the burden of a local sales tax be distributed more or less equitably between households at different levels of income than other possible systems of local taxation?

6.1 The Basis of the Distributional Analysis

Our estimates of the distributional incidence of a local sales tax are produced in two stages. First, we calculate the pattern of local sales tax rates, and the rates of other possible local taxes, in each local authority area. The second stage of the calculation applies the calculated local sales tax rates to the purchases made by a representative sample of UK households — the roughly 7,000 households included in the 1992 Family Expenditure Survey.[1] Similarly, household payments of the other local taxes are estimated by applying the calculated tax rate to the appropriate tax base for each household. The distributional implications of the tax rates for various local taxes that are generated by the model are then assessed by looking at households at different income levels and, for each group of households, by looking at local tax payments as a share of total household spending.

In calculating local sales tax rates, the methods, and the estimates, are those discussed in Section 5.1. We assume that the local income tax would be levied at county level, and that there would be full resource equalisation.

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[1] Whilst the 1992 Family Expenditure Survey does not identify the precise local authority area in which each household is located, we are able to randomly allocate households to local authorities with similar characteristics.

We also take as the basis for the estimates the existing pattern of local spending; in other words, we assume that local spending decisions would not be affected by the choice of a different local tax.[2]

The estimates also assume that the local sales tax would replace the existing source of revenues, council tax. Whilst in practice there are perhaps stronger arguments for introducing a local sales tax in parallel with council tax, rather than as a replacement, there are a number of practical advantages in using the replacement scenario as the basis for the distributional analysis. One is that specifying a two-tax system would require a series of critical assumptions to be made about the relationship between the local sales tax and the other elements of the system; the choice of assumptions would have to be quite arbitrary, but could have a major effect on the calculated outcomes. A second advantage is that it avoids the need to discuss the distributional implications of the offsetting reduction in national taxes that could take place if local sales tax enabled central government grant to be reduced; again, the choice of which taxes to reduce in the national simulation would be arbitrary, but would have a major effect on the net distributional impact. Indeed, more of the distributional effect could be governed by the choice of which national tax to reduce, than by the distributional impact of the local sales tax itself. A third reason for looking at the case of replacement is that the replacement scenario generally maximises the variation in local sales tax rates that would be encountered; combined tax systems involve some 'damping' of sales tax differences, because they spread the burden of paying for the 'discretionary' element of local spending across more than one tax base.

We compare the distributional implications of a local sales tax with those of several other feasible local taxes. As far as the local sales tax is concerned, we are assuming that the tax takes the form of either a value added tax or a single-stage retail sales tax; we assume that the base of the tax would be all goods and services subject to non-zero rates of national VAT, as of April 1995.

The alternative local taxes, which we compare with the local sales tax, are the following:

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[2] Our base budget data were obtained from *Finance and General Statistics 1994/5* (CIPFA).

- A local value added tax on utility bills. This 'utility tax' includes electricity, gas, telephone and domestic fuel bills. Since we do not have access to data on the aggregated size of these bills by local authority area, we assume that the yield per capita is nationally uniform.[3]
- A community charge or 'poll tax' on each adult living in a local authority area. We consider the burden of both 'gross' tax bills and 'net tax bills' assuming an identical rebate system to that which operated in the UK between 1990/91 and 1992/93. To make the comparison a fair one, we scale up the tax rates for the 'net-of-rebate' tax so that it generates the same amount of revenue as the other local taxes.[4]
- The current council tax. Again, we consider both 'gross' and 'net' tax bills, with rebates determined on the same basis as the 1994/95 arrangements for the council tax. As for the community charge, tax rates are scaled up for the 'net' tax to make the comparison with other local taxes a fair one in terms of revenue-raising potential.[5]
- A single-rate local income tax levied on households' taxable income.[6]

6.2 The Burden of Local Taxation

Table 6.1 compares the average tax rates that would occur under a range of alternative local taxes (sales tax, poll tax, council tax and income tax) if the existing council tax were replaced by a fully equalised new tax and local authorities did not alter their expenditure behaviour from the 1994/95 base.[7]

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[3] Utility bills information was obtained from the 1992 Family Expenditure Survey. The national revenue from a utilities tax is determined as the share of utility expenditure as a percentage of total VATable expenditure multiplied by national VAT revenues. This tax base is shared out between local authorities on a per capita basis.

[4] Data on adult populations by local authority area were obtained from *Finance and General Statistics 1994/5* (CIPFA).

[5] Council tax bands for households in the 1992 Family Expenditure Survey are estimated following the method of Davies and Rajah (1992).

[6] Data on household taxable incomes were obtained from the 1992 Family Expenditure Survey. Data on county taxable income levels were obtained from *Inland Revenue Statistics 1992*.

[7] At present, differences in the council tax base between local authorities are only equalised at standard spending assessment (SSA). Under our proposals, full resource equalisation would occur. As a result, the average tax rates resulting from our proposed council tax differ slightly from the actual 1994/95 council tax rates.

TABLE 6.1

Average Local Tax Rates, and Range of Local Tax Rates, to Raise Gross Revenues of £9.24 Billion, for Four Local Taxes: Council Tax, Poll Tax, Local Income Tax and Local General Sales Tax, England, 1994/95

	Council tax (Band D rate, £ per annum)	Poll tax (£ per annum)	Local income tax (per cent)	Local sales tax (per cent)
Average local tax rate	£492	£259	4.8%	4.5%
Standard deviation	39.64	20.00	0.39	0.36
Average of five lowest local tax rates	£440	£232	4.4%	4.0%
Average of five highest local tax rates	£568	£299	5.6%	5.1%

Note: Calculations based on pattern of local authority expenditures in 1992, with appropriate full resource equalisation in each case. This differs from the SSA-only basis of present equalisation arrangements. Local income tax is assumed to be levied at a uniform (but locally-varying) percentage on all income taxable for national income tax. Local sales tax is assumed to be levied at a uniform (but locally-varying) percentage on all goods and services subject to VAT.

Table 6.2 presents our estimates of average local tax payments in pounds per year, before taking into account any entitlement to local tax rebates, and shows how payments of the four different local taxes would be distributed across households at different levels of income.

In classifying households by income, we have divided households into groups (quintiles or deciles) depending on their 'equivalised' incomes — in other words, household income adjusted for the number of household members.[8] This approach attempts to reflect household standard of living rather than simple income, and is thus intended to allow us to more accurately capture the 'burden' that a given local tax would impose on households. Hence, a single person with a given income is assumed to be relatively better off than an individual with the same income but who has a partner and several children to support.

Table 6.2 classifies households into equivalised income quintiles. Average household tax payments under a local sales tax would rise from £224 for the poorest 20 per cent of the population, to £736 for the richest 20 per cent, compared with an average of £472 across all households in the sample. This

[8] The equivalence scales are those used by the Department of Social Security.

TABLE 6.2

Average Tax Bills before Rebates, under Council Tax, Poll Tax, Local Income Tax and Local General Sales Tax, by Quintile Group of Equivalised Total Household Income, England, 1994/95

Pounds per annum

	Council tax	Poll tax	Local income tax	Local sales tax
Bottom quintile (poorest 20%)	£369	£385	£6	£224
2nd quintile	£425	£467	£90	£324
3rd quintile	£473	£520	£337	£484
4th quintile	£512	£515	£624	£591
Top quintile (richest 20%)	£581	£472	£1,301	£736
All households	*£472*	*£472*	*£472*	*£472*

Note: Local tax rates as for Table 6.1. Equal-revenue comparison based on gross tax revenues (i.e. before rebates) of £9.24 billion.

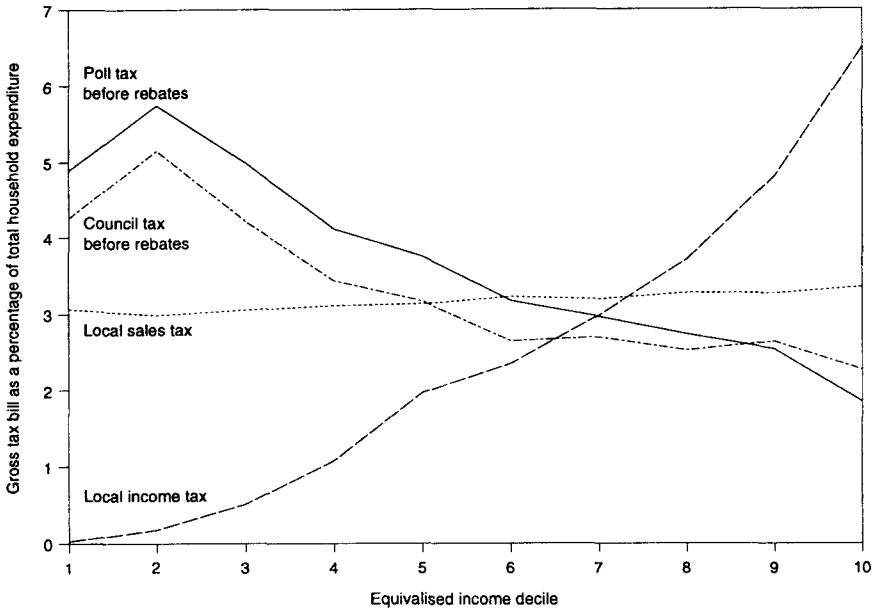
compares with average gross council tax bills (under the full-equalisation assumptions we are making) of £369 for the poorest quintile and £581 for the richest quintile. Across the four possible local taxes, local tax bills rise more steeply with household equivalised income under the local sales tax than under either the council tax or a poll tax, and much less steeply under sales tax than under a local income tax.

In Figure 6.1, tax burdens are expressed as a percentage of annual household expenditure for each of ten deciles of household equivalised income.[9] Taking the relationship between budget shares and equivalised household income as the measure of progressivity or regressivity in the local tax burden, it is clear from Figure 6.1 that a local sales tax would be far less regressive than gross local tax bills under either the council tax or a poll tax. This might be sufficient to avoid the need for a system of local sales tax rebates which could be highly complex to administer, particularly if they reflected local variations in tax burdens.

[9] We choose household expenditure rather than household income as the denominator of the tax burden calculation since it may give a more accurate indication of the long-run or 'permanent' income that the household expects to receive. Household income in a particular period may underestimate the impact of regressive taxes on households that have temporarily low incomes, such as students or the self-employed, whilst the spending of these groups may partly 'smooth out' the temporary fluctuations in income.

FIGURE 6.1

Distributional Incidence (before Rebates) of Council Tax, Poll Tax, Local Income Tax and Local General Sales Tax, by Decile Group of Equivalised Total Household Income, England, 1994/95

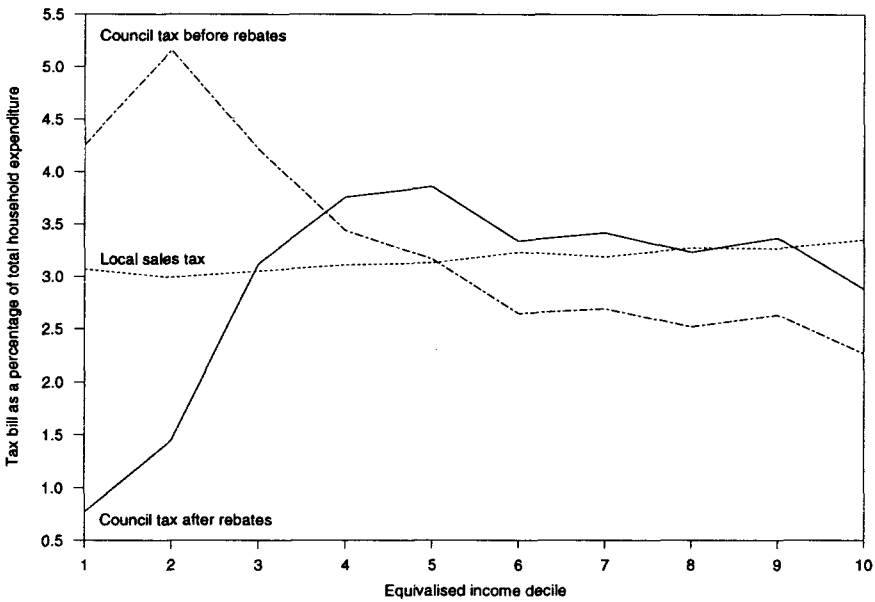


Note: Equal-revenue comparison based on gross tax revenues (i.e. before rebates) of £9.24 billion.

How much difference is made to the distributional comparison if account is taken of the means-tested rebates that are paid in respect of household council tax bills? These rebates reduce quite sharply the amount of council tax paid by households at low incomes, and are a stable and well-established part of the UK system. Given that rebates exist for the council tax, perhaps the most appropriate basis for comparing the distributional incidence of a sales tax and council tax would be to compare the distribution of the burden of a local sales tax with the distribution of the burden of raising the same net revenue (i.e. revenue minus rebate expenditure) through the council tax. Figure 6.2 compares the distributional incidence of a local sales tax with household payments of council tax in gross terms (i.e. before rebates) and in net terms (i.e. after rebates). The council tax rates have been scaled up for the council tax net of rebates so that an equivalent amount of revenue is generated. As can be seen, the net council tax is far less regressive than the gross council tax, with the tax burden sharply lower in the bottom three deciles. Comparing

FIGURE 6.2

Distributional Incidence of Council Tax before and after Rebates, and of Local General Sales Tax (without Rebate), by Decile Group of Equivalised Total Household Income, England, 1994/95



Note: Equal-revenue comparison based on gross tax revenues (i.e. before rebates) of £9.24 billion.

net council tax and the local sales tax, the distributional effects would be more complex than in Figure 6.1. Whilst the burden of the local sales tax would be broadly proportional to income, the percentage burden of the net council tax first rises with income, and then falls. For households in the bottom two deciles, and for the households in the top decile, the tax burden would be higher under the local sales tax than under the net council tax, whilst for households in the fourth and fifth deciles, the tax burden under the net council tax would be higher than under the local sales tax.

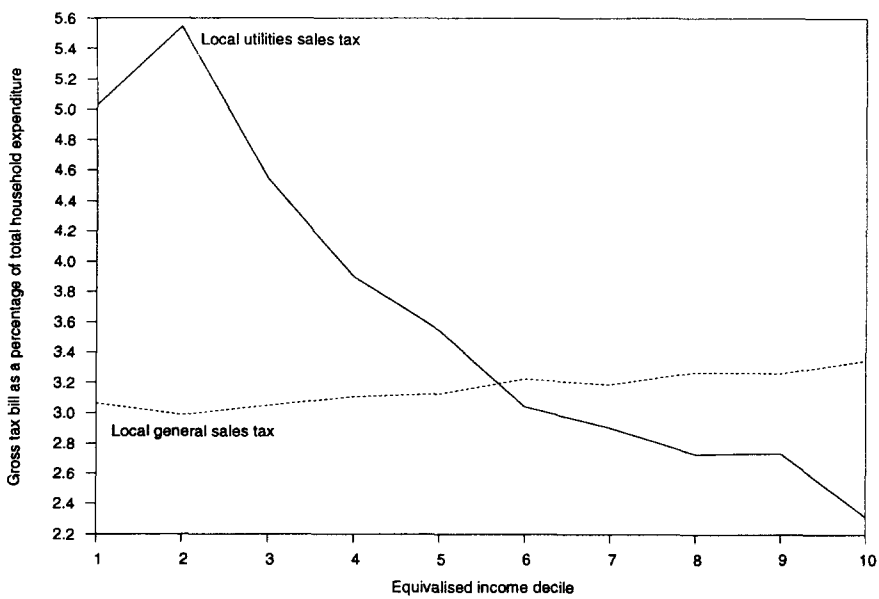
An alternative to a local sales tax which would have the merit of administrative simplicity, and which would eliminate the scope for distortions through cross-border purchasing, would be the local utilities sales tax suggested in Section 3.4. This would tax only a subset of household purchases — energy, water and, possibly, telecommunications. The distributional incidence of such a tax would differ from the case of the general local sales tax applied to all goods and services to the extent that utilities bills form a

higher or lower proportion of households' budgets at different levels of income.

Figure 6.3 compares the distributional incidence of a general local sales tax with that of one that restricted the tax base to household utility bills. Whilst this would be administratively simple, would eliminate the problem of cross-border shopping and would probably reduce the extent of any equalisation arrangements that were required, it is clear that a local utilities sales tax would be much more regressive than a local general sales tax. As we have seen in the debate over the two-stage extension of VAT to domestic fuel, a tax of this sort would probably meet substantial opposition on distributional grounds, and there might be much more pressure for a system of local sales tax rebates than under the general sales tax option. On the other hand, given the administrative simplicity of the tax, it would also be more feasible to design a workable system of tax rebates for the utilities sales tax than for the general sales tax.

FIGURE 6.3

Distributional Incidence of Local Sales Taxes: Comparison of a General Tax on All Retail Sales and a Local Utilities Sales Tax, by Decile Group of Equivalised Total Household Income, England, 1994/95



Note: Equal-revenue comparison based on gross tax revenues (i.e. before rebates) of £9.24 billion.

CHAPTER 7
CONCLUSIONS

In this report we have considered whether a local sales tax could play a useful role in the UK system of local government finance. The context in which we have considered the issue is one in which the local sales tax might be introduced to supplement existing local tax revenues, rather than as a replacement for the council tax. A local sales tax might be one of the ways in which local government could be given tax revenue sources sufficient to cover a much larger proportion of spending than at present, reducing the problems that arise because of the high 'gearing' of spending changes into council tax changes under the present system. A local sales tax levied on retail sales at an average rate of about 4.4 per cent would raise some £9¼ billion, and would thereby double the proportion of local revenues under local authority control.

The major issues raised by a local sales tax concern

- design;
- cross-border shopping;
- equity or 'fairness'.

These three groups of issues, and possible solutions, interact.

As far as the design of the local sales tax system is concerned, there are strong economic efficiency reasons to seek to limit the burden of the tax to sales to final consumers, either by levying the tax on retail sales only or by allowing business purchasers to reclaim the tax through a VAT-type mechanism. Indirect taxes paid on industrial inputs will generally result in production inefficiency.

Amongst the possibilities for indirect taxes confined to sales to final consumers, we do not believe that a local VAT, levied at locally-varying rates, would be a practical possibility. This would require fiscal adjustments to be made on goods traded between businesses in different local areas, similar to those required on transactions between EC member states, and this would involve a substantial administrative workload and considerable risk of fraud and evasion. We suggest, however, that two main candidates exist for practical consideration as local sales tax systems.

One would be a local tax on retail sales, drawing for its operation and enforcement on information on turnover that businesses routinely collect and provide to the VAT authorities. These data would need to be supplemented by additional information on the proportion of sales that each business made to retail customers, in order to distinguish retail sales from sales to other businesses. This information is not required in the current operation of the VAT system, and a local sales tax of this sort would therefore impose some additional compliance burdens on business. It would also be necessary for the tax authorities to verify the information provided on the retail component of total turnover, generating an additional administrative cost.

The second candidate is a 'local utilities sales tax', levied only on the sales of utilities (gas, water, electricity and telecommunications) to private households. In most cases, utilities already distinguish private households from business customers for their own purposes. It would also be straightforward to identify the relevant local authority, since the supply address is known. Most importantly, there is no opportunity for the geographical location of sales to be distorted by the tax. Thus a local utilities tax would avoid the problems of cross-border shopping, which otherwise are one of the major potential problem areas with a local sales tax.

How large might cross-border shopping be with a local sales tax? Our rough calculations of when individuals might find cross-border shopping worthwhile, in the sense of saving more on tax than the travel costs incurred (£0.50 per mile), suggest that, with a local sales tax at district level and a 1 percentage point sales tax differential between areas, about a quarter of sales worth £50 or more could be diverted to neighbouring areas. A similar differential with a tax levied at county level might divert only 10 per cent of such sales. However, the evidence on cross-border shopping from US states and local authorities suggests that small tax differentials might divert rather small proportions of total sales. Overall, we suggest that the cross-border shopping problem might well be a good reason to avoid a local sales tax at district level, but that such a tax could well be operated at county level without excessive distortion of sales or excessive erosion of receipts through cross-border shopping and tax competition between areas.

With a general local sales tax, levied at a flat rate on all goods currently subject to standard-rate VAT, the distribution of the local sales tax burden across households would be substantially more progressive than the distribution of the council tax before rebate. The poorest quintile would pay £224 per annum on average in local sales tax, compared with a gross council

tax of £369. The richest quintile, on the other hand, would pay about one-quarter more in local sales tax than if an equivalent amount were raised through council tax. Rebates, of course, sharply reduce the regressivity of council tax, but would be impracticable with a local sales tax. Any compensation for the additional tax burden to poorer households would have to be based on the average spending patterns of low-income households, and this may exceed or fall short of the actual additional burden in individual cases.

Distributional considerations are probably the main obstacle to a local utilities tax. Such a tax would, as already noted, be straightforward to administer and would raise no problems of cross-authority distortion of sales. However, a local utilities tax would bear particularly heavily on poorer households, reflecting the importance of energy and water bills in the spending of poor households. Rebating would be more practicable than under a general local sales tax, but the political difficulties in levying VAT on domestic energy are probably an indicator of the obstacles that a proposal to introduce a local tax on utilities sales would face.

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