AN EVALUATION OF LOCAL GOVERNMENT

REVENUE RAISING OPTIONS

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STATEMENT OF CHANGES TO THE THESIS

The thesis has been amended to correct the textual and typographical errors identified by Examiner B.

The thesis has also been amended to incorporate the requirements of Examiner B. Specifically this has been done by following the suggestion of Examiner B in adding some pages in Chapter 1 and Chapter 6.

Chapter 1 has been amended by including discussion on the differences between the three taxation schools of thought, namely optimal taxation (OT), equitable taxation (ET) and fiscal exchange (FE). I have then shown that the evaluation criteria has been drawn from each of the schools of thought although the framework of the criteria is based on the OT literature since it contains the widest set of criteria.

Chapter 6 has been amended by noting the possible use of the evaluation criteria for an analysis of policy in order to determine which of the taxation schools of thought best describes the policy choices made. A brief discussion of the literature on partial taxation reform has also be included.

D.J.A. Spearritt

AN EVALUATION OF LOCAL GOVERNMENT REVENUE RAISING OPTIONS

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ABBREVIATIONS

AAV	Assessed Annual Value (property tax)
ACIR	Advisory Council for Inter-Governmental Relation (Australian)
BCC	Brisbane City Council
BTE	Bureau of Transport Economics (Australia)
DP	Discussion Paper
IV	Improved Valuation (property tax)
LIT	Local Income Tax
LST	Local Sales Tax
LV	Land Valuation (property tax)
NAV	Net Annual Value (property tax)
OECD	Organisation for Economic and Co-operative Development
OP	Occasional Paper
UCV	Unimproved Capital Value (property tax)

ABSTRACT

An evaluation of local government revenue raising options necessarily entails an initial consideration of relevant values. Hence, this paper derives evaluation criteria from the instrumental values generally regarded as appropriate to local government finance. This contrasts with the common approach of simply adopting a set of plausible criteria without further justification. Efficiency is perhaps the most widely accepted value in questions of local government finance, and equity is accepted to a lesser degree.

The efficiency value comprises both market efficiency and local government efficiency. Market efficiency is normally assessed according to the neutrality concept. Local government efficiency requires adequate resource inputs and proper management of those resources. Resource inputs are affected by the revenue potential, its predictability and growth, collection costs (administration and compliance), and tax effectiveness (evasion, avoidance and delinquency). Management efficiency is influenced by accountability, and an efficiency model is developed from the work of Tiebout, Olson and Hirschman. This model shows that managerial efficiency is influenced by autonomy, tax visibility and intelligibility.

Criteria for the equity value include the concepts of the benefit principle and ability to pay principle. The benefit principle is reviewed in relation to public, market and merit goods. I examine the ability principle, initially rejecting sacrifice theories and then outlining vertical and horizontal equity concepts, and redistribution effects. A definition of income is developed distinguishing between ability to pay (broad definition) and capacity to pay (narrow, cash income definition). Criteria of evaluation for efficiency and equity are then applied to each of the revenue devices.

Of the land based taxes, the land ("site") value tax is favoured because of its market and local government efficiency and has a degree of equity. None of the non-property taxes seems viable for Australia, largely because of administrative and constitutional problems. The non-tax sources examined includes grants, user charges, licence fees and trading enterprises. Grants are rejected except for subsidies to cover externalities. User charges are acceptable for market and merit goods if cost-effective. Where user charges are impracticable, licence fees used as a surrogate user charges may be acceptable, for example with road pricing. Trading enterprises offer some potential, but direct involvement is rejected, except for natural monopolies, because of the risks involved. Company enterprises reduce the risk but have autonomy implications.

Overall, it seems the ideal mix of revenue sources is a land value tax for property related services, with adjustment devices to reduce visibility to a more moderate level. A range of user charges and licence fees could be used for market and merit services. Inter-Governmental grants are still required in order to adjust for externalities. Trading ventures, through a separate company to minimise the risks, could provide supplementary income, perhaps to finance the desired subsidy for merit goods. As the main problems associated with the non-property taxes (poll, income and sales) are related to administrative difficulties, local governments should be empowered to experiment with these taxes to see if these can be overcome.

CHAPTER ONE

THE PROBLEM: NATURE, SCOPE AND THE APPROACH TO RESEARCHING IT

This paper is about local government revenue raising - a topic on which there is already an enormous literature. The sheer volume of publications attests to the importance of the topic, and, little more needs to be said on that score. The justification for adding to that literature is easily stated: the circumstances in which local government operates are changing so rapidly that earlier views on revenue raising are constantly in need of re-examination. Changing roles, changing public expectations, and changing information technology all continue to contribute perspectives on how best to finance local government activities.

There is a continuing debate as to the desirability of various taxes at all levels of government. At the level of local government, the sheer visibility of property taxes (or "rates") has frequently led to an adverse community reaction and advocacy of alternative revenue devices. Administrative theorists, public finance writers, political parties, committees of inquiry and local government agencies have all proposed various revenue bases, but there is no consensus. Site value taxes have been promoted by public finance writers, Australian inquiries and one British political party. Improved value taxes are common throughout the English-speaking world, yet despite widespread dissatisfaction no substantial changes have been made. In Great Britain, a series of inquiries and reviews have recommended changes to grants, and even the introduction of a local income tax. Finally, a community charge (poll tax) is now being introduced. Moreover, many local government commentators are now advocating user charges and business enterprises (including joint ventures) as a panacea for local government revenue.

The Brisbane City Council is Australia's largest local government with a wide range of functions, albeit much narrower than many overseas counterparts. This council recently experienced widespread public reaction against its taxation system which is based on land value or "Unimproved Capital Value" (UCV). The reaction was primarily caused by a seven-year period between valuations, during which time there were substantial changes in the relativities between property assessments. The public response prompted the Lord Mayor of Brisbane to establish an Inquiry into the various revenue options for local government generally, but with the needs of the Brisbane City Council particularly in mind.

To this end the aim of this work is to enable analysis of each of the revenue devices both for the formulation of policy for the analysis of policy which has been formulated.

It is therefore pertinent to undertake as comprehensive a review of the literature which bears on the main revenue sources potentially available to local government, and particularly to the Brisbane City Council. One possible spin off from the present research is that the Lord Mayor's Committee and Inquiry will find some useful material in the following chapters.

Research Methodology

The central purpose of this study is to analyse and evaluate alternative revenue raising options for local government. But obviously this is not the first attempt to do so.

The most common approach to this problem used by writers and inquiries is to adopt a set of principles or criteria against which to evaluate the alternative revenue devices. Another approach is to examine each of the devices on the basis of the perceived positive and negative features. This involves the risk that the outcome might ultimately depend on personal prejudices. The absence of systematic evaluation could also cause important features to be overlooked as there would be no explicit benchmarks, or criteria of analysis and evaluation. A more rigorous approach then, requires the establishment of relevant criteria to be applied to each device. But this approach can also have shortcomings.

Most writers and official inquiries select, without further ado, plausible criteria - criteria that seem most important and which commonly appear in such discussions. The conclusions reached are then dependent on the chosen criteria. This seems to be an elaborate and superficially convincing way of smuggling subjective biases into the analysis. Such an approach overlooks the fact that the criteria are, or embody, terminal and/or instrumental values (Rokeach, 1973, p.8). Hence the criteria of evaluation selected must initially be justified or at least defended in the course of an axiological discussion.

According to Rokeach, values "are the multifaceted standards that guide" us "to evaluate and judge", and "are central to the study of comparison processes" (1973, p.13). Society demands certain behaviours which benefit rather than harm others, creating an "oughtness" of particular values (Rokeach, 1973, p.9). These societal demands will be greater if a value is widely shared (Rokeach, 1973, p.9). Therefore, we need to identify the commonly held values pertinent to the topic and derive our evaluation criteria from these values. This contrasts with the usual approach of simply identifying commonly used criteria, with no attempt to defend their adoption, and no attempt to explain the exclusion of others.

Prior to the 1970's the theory of equitable taxation dominated public finance theory and enjoyed a general consensus amongst economists. Since then however, theories on optimal taxation and fiscal exchange (public choice) have arisen and are in competition in the literature (Hettich and Winer, 1985, p. 423).

According to Hettich and Winer (1985, p. 424) the equitable taxation literature is derived from the values of individual liberty and horizontal equality or fairness. Optimal taxation theory is based on an integration of (vertical) equity and efficiency values. The Fiscal Exchange approach has liberty as the primary value followed by efficiency and equality as secondary values.

Sharpe (1970, p.156) claims that economic efficiency, participation and liberty are the major values expressed by local government. Brennan (1977, p.1) claims that there is a broad consensus amongst economists that the underlying goals (values) of a sub-national tax system are efficiency, equity and administrative simplicity. However, he notes that simplicity is only a means to achieve efficiency (1977, p.3).

Reference is often made in the administrative literature to the values of economy, efficiency and equity. In the traditional, public finance literature, economists generally refer to three functions (instrumental values) of government: stabilisation, allocation and distribution. We need, therefore, to examine these instrumental values in order to derive such criteria of evaluation as are applicable to local government revenue-raising methods.

Stabilisation is the use of budgetary (in our case taxation) policy to influence the economy. For example taxation policy may be varied to affect growth, prices, trade or employment (Musgrave and Musgrave, 1980, pp. 6-7). Musgrave and Musgrave argue that the stabilisation function is primarily a function of central (i.e. national) government, and many writers concur. "The use of fiscal (budget) policy for stabilisation purposes has to be at the national (central) level. Lower levels of government cannot successfully carry on stabilisation policy for a number of reasons" (1980, p. 526). Therefore we will not pursue criteria relating to economic stability.

Although the allocation function applies to all levels of government, it is usually only discussed in relation to the influence of the government on market efficiency. But since the public sector comprises a significant portion of the economy, the efficiency of the government sector is also important. Therefore we will use the term "efficiency" to embrace the market efficiency aspects of the allocation function as well as criteria relating to efficiency of the government agency administering the revenue device.

The distribution function occurs when a government agency adjusts the distribution of wealth or income to achieve a "fair" distribution of well-being in the society. This is closely related to the concept of equity. But one interpretation of equity (the benefit principle) might not contribute to a fair distribution of well-being. Therefore we shall use the term "equity" to embrace not only the distribution function but also other interpretations of equity as well.

Many writers consider that the distribution function is not appropriate to the role of sub-national levels of government (Musgrave and Musgrave, 1980, pp. 524-5). Sharpe (1970, pp.

168-9) acknowledges the widespread criticism of "the tendency of local government to create and perpetrate inequality" which central government is better placed to "lay down minimum standards and ensure equality of service...". Local government is therefore seen by many as intrinsically incapable of playing an effective distributional role. Others believe that there is a good case for distributional policies at the local government level according to the notion of helping one's neighbours (Pauly, 1973). Such policies then become a local public good under the umbrella of the allocation function. Since various local government bodies undertake some distributional policies we cannot avoid this issue. Therefore we shall review the literature relating to this form of equity, noting any difficulties at the municipal level whilst developing evaluation criteria.

Some inquiries also develop criteria based on legal or constitutional principles (Collins, 1988). But these will vary from country to country and may change significantly over time. Indeed, constitutional and legal principles are themselves founded on, and are expressions of, each country's value preferences. For the purposes of the present analysis I am, of course, preoccupied with English-speaking traditions and within that framework, Australian context (and even more specifically, the Brisbane local government context).

From the foregoing analysis of values it is apparent that three values are dominant, namely efficiency, equity and liberty. Evaluation criteria based on equity and efficiency are well documented in the literature, but criteria derived from liberty are sparsely discussed, limited mainly to criteria such as tax visibility, and the lack of growth potential. Such criteria or their corallaries are also relevant to encourage operational efficiency of agencies. As it would be confusing to have the same criteria listed in different parts of the evaluation criteria. I will incorporate the criteria relating to liberty within the efficiency criteria. Indeed it could be argued that the absence of liberty (in other words ability to coercisively extract revenue regardless of the way funds are used) leads to inefficiency of the agency.

None of the public finance approaches incorporate all of the elements related to the primary values of equity, efficiency, and liberty. Hettich and Winer (1985, p. 423) claim that each approach offers elements which are needed in a comprehensive synthesis. Therefore I shall derive an evaluation framework from the values of efficiency and equity which comprises all of the criteria relating to these values. Since the optimal taxation literature contains the widest set of criteria (Hettich and Winer, 1985, p. 442), I shall use the optimal taxation approach as the basis for the evaluation framework supplemented by criteria from the other approaches.

The development of evaluation criteria is the crucial part of the study. This will involve a more detailed treatment than normally occurs in the literature, as we are concerned that a comprehensive set of evaluation criteria is systematically derived and defended. By contrast most writers, including some of the most respected, (e.g. Musgrave and Musgrave, 1980, p.235) give a brief outline of the criteria selected without explaining the rationale for their choice. They then immediately proceed to a detailed analysis of the revenue devices in question - primarily taxes.

I shall pursue a strategy diametically opposed to this: I shall attempt a detailed explanation and defence of the evaluation rationale, followed by a brief synthesis of the relevant literature for each of the revenue devices considered. As there is extensive discussion of local government revenue sources it is possible to develop the evaluation criteria and then apply them to the revenue devices by undertaking a literature review. The synthesis emerges inductively from that review where there is reasonable agreement among the relevant authorities. Significant disagreements will be noted when discovered. The alternative would be to simply draw logical inferences from the criteria. But since the literature is extensive in many of the relevant areas this would be akin to re-inventing the wheel. Moreover, it runs the risk of oversimplifying matters which have been subject to extensive empirical research to discover the various nuances of the revenue devices.

A literature review and synthesis of the main features consequently seems to be the most appropriate and effective approach to adopt. However, there may be revenue devices, particularly recently advocated devices, which have not been assessed according to all of the criteria. In such instances there is no alternative to making a logical deduction which may need to be tested by a future research. In short, then the research methodology will combine a series of brief inductive syntheses of the relevant literature with an extension of the literature based on logical deduction where necessary.

It would be pointless to repeat in detail matters which are extensively covered in the literature when there are other areas which warrant further attention. Therefore I shall devote more detailed treatment to aspects and revenue sources which are not well covered in the literature. The main features of issues and devices well covered in the literature will be noted, supported by appropriate citations.

Scope of the Study

In view of word length limitations imposed on this paper, the study will be confined to the major revenue sources currently in use in Brisbane and alternative sources currently being suggested. A detailed examination of the impact of adjustment devices (exemptions and so on) and the applicability of the revenue devices to the major local services would be desirable. But this is outside the scope of a paper of this length. I shall attempt, however, to assess the applicability of each device to the Brisbane City Council and its main services. My purposes here are first, to demonstrate the practical application of the findings; and second to infuse a measure of specificity into an analysis which might otherwise seem to be altogether too abstract and general in a research project of this type.

The revenue devices can be combined into three discrete groups for evaluation purposes. Initially, we shall focus on the evaluation of property taxes, grouped into unimproved land value taxes and improved value taxes. Then we shall examine non-property taxes, namely sales tax, income tax and poll tax. Finally we shall look at the non-tax sources of revenue. These will cover grants, user charges, licence fees, local government business enterprises and local government company enterprises (including joint ventures).

To facilitate comparison of the revenue devices selected for evaluation, I shall award each device a number of points for each of the evaluation criteria according to its adherence to the evaluation criteria. A summary table will then be produced in the conclusion in the form of a matrix, listing evaluation criteria along one axis and revenue devices along the other. In each of the cells, I insert the points awarded as a rough indication of the overall outcome of the (inductive) synthesis of the literature or the deductions made when these were necessary. The following code has been adopted to facilitate the tabular presentation of the outcome of the analysis.

*	negligible adherence
**	weak adherence
***	moderate adherence
****	strong adherence
*****	very strong adherence
0	not applicable

I should emphasis here that the points awarded for purposes of presenting an overview of the evaluation are subjectively based on my global assessment of the extent to which each device displays the features suggested by each criterion. At first glance, this might seem to be inconsistent with my earlier advocacy of a systematic bias-free approach to evaluation. Further consideration will show, however, that there is no inconsistency here. In studies of this kind, it is not possible to eliminate all subjective elements by "objectivity": it is essential, however, to remove the reader's reliance on the author's subjective assessments by facilitating <u>inter-subjective</u> comparisons and verification. In this case, the reader can check and verify (or dispute) the findings on the basis of the material presented.

Following the evaluation of each of the devices I shall draw some conclusions from the research. As part of this I shall suggest a suitable package of revenue sources for local government, in particular the Brisbane City Council. The impact adjustment devices (such as pension and exemptions) may have on the evaluation will be noted. As part of this, I shall suggest some tentative directions for local governments in general and Brisbane in particular to take in order to improve their revenue mix. Finally, I shall conclude by outlining the scope for any further research which needs to be undertaken.

Before proceeding, some comments are needed regarding the style adopted for this paper. Firstly, I have chosen to write the paper in the first person in order to make the arguments clearer. Although it is normally preferable to limit the use of headings, the tight application of a set of evaluation criteria means that readability and cross-referencing will be facilitated by the liberal use of headings. A hierarchy of heading styles will be used throughout the text. As Chapter Two has up to seven levels of derivation two additional heading styles (in bold) shall be inserted. It would be unwieldly to show the seven headings in the table of contents therefore this will be limited to three levels. In order to facilitate cross-referencing, however, the summary of definitions will give the page references to the relevant discussion in Chapter Two.

The Harvard method of citation is chosen so that the literature sources and dates are highlighted. In a paper reviewing and updating previous research this information clearly informs the reader of the currency of the sources cited. Footnotes will be used sparingly to add commentary which is not central to the argument but may nevertheless be of interest.

A list of each of the evaluation criteria will be repeated at the end of Chapter Two to further assist cross-referencing. Similarly, abbreviations of many of the taxes will be used to allow us to focus on the issues and implications which could otherwise be overshadowed by repetition of lengthy titles of various taxes. A list of abbreviations precedes this study.

Finally, the points awarded and the overall assessment of the adherence of the devices to each criteria will be shown in the headings. This will facilitate cross-referencing.

Let us now proceed with the task of deriving evaluation criteria from the values of efficiency and equity.

CHAPTER TWO

AN EXAMINATION OF THE CRITERIA APPLICABLE TO THE EVALUATION OF REVENUE RAISING OPTIONS

In order to evaluate the revenue options available to local government, evaluation criteria are needed. In this chapter I shall review the literature relating to relevant economic and administrative theories and values in order to distill the essential criteria applicable to the task. I then attempt to draw the criteria into an overall evaluation framework to enable any omissions to be identified. This evaluation framework will be applied in later chapters to the selected revenue options.

EFFICIENCY

The levying of a tax can influence market transactions and may, impact on the economic efficiency of the market. The tax may also have implications for the operational or managerial efficiency of the agency levying the tax.

I shall develop criteria for evaluation of the effect of a tax on both market and government efficiency. These criteria will be derived from a review of the pure theory. Pure theories are often used in economics to explain underlying economic features by adopting simplifying assumptions. In the real world these assumptions are often not valid. Since the real world does not conform to the assumptions made in the pure theories, this analysis can only lead to a "second-best" solution (Lancaster, 1973, pp. 248-9). The real world has numerous market imperfections, so implementation of changes in accordance with pure theory may actually worsen the overall economic distortions. Therefore the policy maker needs to be cautious when changing revenue devices by taking into account any existing market distortions.

Market Efficiency

Economists assert that in a perfect market economy, people compare the costs and benefits of transactions. In this way the market provides the level and type of goods for which individuals are prepared to pay (Baumol, et al, 1988, pp. 34-41). The market is said to be in equilibrium when the marginal costs of production equal the marginal benefits of consumption. Under these circumstances the allocation of resources is said to be pareto-efficient or pareto-optimal. This is named after Vilfredo Pareto who developed the theory economic efficiency, with the aim of maximizing society's welfare (Pareto, 1971).

Pareto-optimately occurs when the welfare of one person cannot increase through reallocation of resources or production methods without reducing the welfare of others (Due and Friedlander, 1977, pp. 2-3). But taxation can interfere with this market efficiency. When personal choice in the market is altered because of taxation or other government intervention a distortion is said to occur. This is because the relationship between the costs and rewards of an economic action is changed. The use of a nation's resources is not in accordance with the preferences of consumers and producers (Allan, 1971, p. 80). When individual choice is not altered by taxation the tax is said to be neutral, but when the choice is altered there is said to be an excess burden.

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(1) Footnote: The window tax is the classic example used to illustrate the concepts of the substitution effect and excess burden. It was once believed that the area of windows in a home represented wealth and was therefore used as a tax base. Before 1747, the tax was avoided by boarding up windows before the tax assessors arrived. After 1747, when strict assessments were introduced many residents substituted brick walls for windows in order to avoid the tax (James and Nobes, 1978, p. 22).

Several other economic concepts are needed to explain these notions. When a tax is levied there may be two outcomes. Firstly, the disposable income of the taxpayer is reduced. This is called the income effect. It simply results in a transfer of resources from the individual to the government which is the prime reason for taxation. However, the second outcome may not be intended. The individual could make adjustments to minimise the loss, for instance, by substituting one form of consumption for another. This is called the substitution effect and results in an excess burden (1).

Similarly it is argued that if there is a fixed amount of an item available (referred to as zero elasticity of supply) then the levying of a tax does not affect the amount produced or the sale price (James and Nobes, 1971, p. 38). It is often asserted that land comes within this category. We shall discuss this argument when reviewing examining revenue devices based on land values.

Most economists evaluate the market efficiency of a tax by using the neutrality approach. A tax which has a neutral effect on the economy is favoured because it does not distort consumer choice and produces no excess burden. In this way the economy provides the most satisfaction of consumer desires.

> The negative impact this had on the home was a cost to the resident, but of no benefit to the government. In fact the tax base was reduced. Therefore, there was an "excess burden" of taxation.

The excess burden is minimised if the tax is levied on a base which is less likely to be replaced by the taxpayer. This is measured by the "price elasticity of demand" (James and Nobes, 1971, p. 37) being the degree to which the demand for an item will vary with changes in price. Tobacco is often regarded as having a relatively low price elasticity of demand since large price changes may have only a mild effect on the demand and therefore the consumption of the product (Mansfield, 1985, pp. 37-9).

I shall use the following definition for market efficiency. A revenue device is market-efficient if it is likely to create no distortions in the economy or encourages efficient economic activity. A distortion occurs when personal choice is altered solely because of the levying of the revenue device. A revenue device produces an excess burden if consumer preferences are distorted. The ideal tax is one which has a neutral impact on the economy.

Government Efficiency

Organisational efficiency entails (in the words of Peter Drucker) "doing the right things" and "doing things right" (1974, p.45). In relation to government activities, the former refers to the effectiveness of the agency's policy, whereas the latter refers to operational efficiency (Simon, 1976, p. 180ff.). An agency must be effective in what it is attempting to achieve and it needs to be efficient in the way it operates (Wildausky, 1979, p. 131).

Whynes (1984, p. 54) claims that local government efficiency comprises: technical efficiency, cost-effectiveness, optimum production level and distributional efficiency. We shall examine distributional questions as an equity issue rather than an efficiency issue. The optimum production level is similar to effectiveness because it is essentially about producing the right amount of the right things. I shall include technical efficiency and cost-effectiveness under the umbrella of operational efficiency.

Policy Effectiveness

The policies of any government agency vary over time, supposedly in accordance with the agenda of the elected officials. Therefore we cannot create a specific measure for policy effectiveness as this necessarily varies according to the policy stance adopted by each agency.

Areas of local government policy could be affected by the revenue option selected. In some cases a tax may work against an adopted policy whereas in other cases it may assist the policy. For instance a tax on land improvements may discourage local economic development although the adopted policy stance may be to encourage economic development. (We examine this matter in further detail when evaluating property based taxes).

Effectiveness also requires us to ensure that local government is responsive to the desires of its consumer-voters and establishes its policy accordingly. This is incorporated in our analysis of resource management and accountability.

It is therefore necessary for the taxation policy-maker to consider the implications of a tax for the agency's other policies. We shall examine some of the areas where major conflict could occur. Detailed treatment of this issue is outside the scope of this study, but we shall examine some of the areas where major conflict could occur.

The term "policy effectiveness" will be defined as the alliance between common local government policy stances and the impact of the revenue device.

Operational Efficiency

An ideal tax is one that promotes local government efficiency as well as ensures service and budget levels reflect public preferences (King, 1984, p. 224).

The production process involves the translation of inputs into outputs (Whynes, 1987, p. 59). Therefore, the operational efficiency of any organisation depends on two key factors. It must have sufficient resources to operate and it must manage those resources to achieve the desired outputs (services).

Local government requires many types of resource inputs (for example trained personnel, plant, equipment and so on) most of which require funds to acquire them. The only resource input which is altered by the choice of a tax base is revenue.

Resource Inputs - Revenue Potential

A taxation package needs to raise sufficient revenue to provide the required level of services. The revenue potential of a tax depends on several factors. It needs to be predictable in order to assist planning and budgeting. Also some writers and inquiries argue that it needs to have the potential for growth. These requirements will be referred to as yield, predictability and growth, respectively.

Predictability

For budgeting and government management reasons, agencies need to predict the amount of revenue which will accrue. This is necessary to plan and prioritise its projects and services (Hepworth, 1984, p. 304).

In order to predict the revenue flows, movements in the base on which the tax is levied need to be capable of being forecast. Many tax bases are dependent on economic factors. Avoidability also affects predictability. In addition, equity and adjustment devices may be imposed by a local authority. These devices will have varying degrees of predictability.

I shall define predictability as the ability of the local government to forecast movements in the revenue base and the subsequent collections revenue. The ideal tax has revenue flows which can be easily and accurately forecast.

Growth Potential

A revenue device may be relatively fixed in its potential to raise revenue or it may grow with the economy or even expand faster than the economy. For instance, personal income taxes levied on a progressive tax scale have tended to grow at a faster rate than the economy during inflationary periods. Tax bases can be classified according to their potential to grow with the economy, called elasticity of tax yields (King, 1984, p. 213). Sometimes this is referred to as revenue buoyancy.

The elasticity of the base is however, not necessarily a virtue. Some argue that a tax system should be elastic and grow with the economy. Layfield (1976, p. 10) reports opposition by local authorities to the property tax because it lacks revenue buoyancy. This depends on how one perceives government spending. If much of public spending is considered wasteful, then the ideal tax does not grow automatically with the economy, in order to force the government to legislate visible increases in tax and take the political consequences (Jones, 1981, pp. 125-6). King (1984, p. 215) states that "in a democracy there is clearly a case for ensuring that electors are aware of tax yield changes ... there is a case for unbuoyant taxes where yields follow electors' wishes more closely". King (1984, p. 215). Bouyant taxes increase the elector's cost in obtaining information about tax yields, whereas unbouyant taxes often receive wide publicity regarding tax yields when tax rates are increased (King, 1984, p. 215). As we shall see, the additional cost of information reduces the incentive for efficiency.

Governments may prefer a growth tax in order to make revenue raising an easier task (Nieuwenhuysen, 1982, p.162: Collins, 1988, p. 154). It is conceivable that higher-income individuals prefer a tax base which is inelastic and does not grow with the economy.

I shall define the growth potential in terms of the elasticity of a tax base, namely the expansion of the tax base with growth of the economy in terms of Gross Domestic Product, G.D.P.

Potential Yield

Every list of taxation criteria places a high priority on the potential revenue yield (King, 1984, p. 209). Local government needs to be able to raise sufficient funds in order to provide a given level of services. Indeed, this is the primary role of a tax (OECD, 1983, p. 16).

A revenue device which satisfies most of the principles of taxation but which is incapable of yielding sufficient revenue would be of limited benefit to a government agency, although it may be a worthwhile supplement to the prime revenue source. But the potential yield may not be fulfilled because some potential taxpayers may avoid paying tax and some of the tax collected will be dissipated through collection costs. Therefore the eventual yield is the potential yield less the amount of tax avoided or dissipated through collection costs.

Adam Smith in his fourth maxim for an ideal tax stated that:

> Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state (Smith, 1947, p. 7).

Potential yield, collection costs and avoidability are inter-related issues. The greater the tax is, as a proportion of the tax base, the more incentive there is for taxpayers to resist or avoid paying the tax. This could result in increased collection costs to overcome the resistance and avoidance.

I shall define potential yield as the capacity of the revenue device to finance the current level of local government services in Australia.

Collection Costs ... The cost of collecting a tax is twofold. The agency incurs a cost in collecting the tax and the taxpayer may incur a cost in complying with the tax legislation. I shall call these "administrative costs" and "compliance costs" respectively. Both of these forms of collection costs are a burden on the economic activity of society for which no benefit is gained. Therefore it is desirable that they be minimised.

I shall define collection costs as the sum of administrative costs and compliance costs.

The easiest and most useful way of measuring the administrative costs is as a proportion of the revenue raised (James and Nobes, 1978, p. 39). The administrative cost may remain fairly stable regardless of the revenue yield. There may be economies of scale where the proportional administrative costs fall as the yield increases (King, 1984, p. 216). On the other hand, as we have noted, very high taxation levels may encourage tax avoidance which increases administrative costs. Therefore the policy-maker needs to consider the relative size of the yield when assessing administrative costs.

I shall <u>define</u> administrative costs as the proportion of revenue raised which is consumed by the local government in extracting the revenue. The ideal tax has a minimum of collection costs.

It is, however, extremely difficult to measure compliance costs because they are borne by taxpayers in varying ways. The costs not only include expenditure by the individual, but also the cost of lost time and possible mental anguish (King, 1984, p. 216).

James and Nobes argue that there is a relationship between administrative costs and compliance costs, because the complexity of a tax adds to both the administrative costs and the taxpayers costs of complying (1978, pp. 38-9). Compliance costs cannot be assessed by measuring administrative costs. There is an increasing trend for taxation agencies to minimise the administrative costs by passing on functions to the taxpayer. For example, many agencies such as the Australian Taxation Office are dispensing with assessment functions and requiring self-assessment by taxpayers. Although this reduces administrative costs it increases compliance costs.

For the purpose of this study we shall define "compliance cost" as the burden imposed on the taxpayer other than the payments required. This shall be assessed in qualitative terms by examining the complexity of the tax and the administrative burden imposed on taxpayers. The ideal tax imposes a minimum compliance burdens.

<u>Tax Effectiveness (Avoidability)</u> ... Revenue devices can vary in the extent to which individuals can avoid paying. There are three terms used in connection with this issue. These are evasion, avoidance and delinquency.

> Evasion is the unlawful action of a taxpayer to minimize the tax burden.
>
> Avoidance is the arrangement of a taxpayer's affairs within the strict interpretation of the law in order to minimize the tax burden.
>
> Delinquency occurs when a taxpayer fails to pay the required amount of tax by the due date. This could be due to a lack of funds or for deliberate non-payment when there are adequate funds (Herber, 1983, p. 127).

Matthews uses the term "tax effectiveness" to embrace these criteria. He defines tax effectiveness as "the extent to which the nominal or potential revenue effects of a particular tax are actually achieved" (1985, p. 12). I shall also use this definition.

Lack of tax effectiveness can have serious implications for the equity of a tax, particularly in relation to the ability to pay principle. This is particularly the case, if certain classes of taxpayer are able to avoid paying according to their ability (Matthews, 1983, p. 51). Therefore I shall also consider the implications of taxation effectiveness on the equity criteria when evaluating the revenue devices.

Resource Management - Accountability

As noted before, the production process involves the translation of inputs into outputs. The management of this translation process vitally affects the operational efficiency of an agency.

Musgrave and Samuelson have developed a pure theory of public expenditure in which there is no market-type mechanism in the public sector for efficiently allocating resources. Their reasoning is that there is no way of forcing consumers to reveal their true preferences, and there is no way of charging consumers accordingly (Break, 1980, pp. 204-5).

Charles Tiebout has challenged this belief, arguing that in local government a solution exists similar to that in the market place. His model outlines a situation where consumer-voters select the local government area which best suits their preferences by "voting with their feet" (Tiebout, 1956, p. 418). Under this model municipalities are in competition with other local communities. Tiebout argues that this mechanism leads to pressure on the local government for managerial efficiency.

> It may well be that city managers are under greater pressure to minimise costs than their private-market counterparts and firm managers. This follows from (1) the reluctance of the public to pay taxes and, what may be more important, (2) the fact that the costs of competitors - other communities - are a matter of public record and may easily be compared (Tiebout, 1956, p. 422).

A recent study shows that American cities with similar populations, densities and tax dependencies have converging tax rates, which implies that the cities are in competition with each other (Stokes, 1985).

The Tiebout model, called "voting by feet", assumes that consumer-voters are rational, mobile and well-informed (Break, 1980, p. 205). The choice of a revenue device is unlikely to affect the rationality of the consumer-voter (although some taxpayers claim that taxes drive them crazy). The visibility and intelligibility of a revenue device influence whether a consumer-voter is well-informed. "Policies that promote residential mobility and increase the knowledge of the consumer-voter will improve the allocation of government expenditures" (Tiebout, 1956, p. 423).

Mobility may be greatly reduced by taxes on land transactions and other high transaction costs, such as agent commission, legal fees and relocation expenses. Hirschman (1970) developed a model in which consumers register their disapproval over the loss of quality by either exit (shifting to a competitor) or voice (raising a storm of protest). He argued that when the exit option is difficult or closed, consumers will react to reductions in quality by direct pressure on the organisation to improve quality. If one avenue is closed consumers are likely to shift to the other option (Hirschman 1970, p. 37). Consumer-voters in a city will initially react by protesting and lobbying "city hall" for an improvement. But if this is ineffective and the benefit of moving is greater than the transaction cost, individuals will then vote with their feet (Hirschman, 1970, p. 37).

Olson (1971) demonstrates how individuals affect the provision of collective (public) goods through group actions. To put it simply, individuals only embark in pressure group activities if the expected personal benefit from improved public services exceeds the likely cost.

The Tiebout, Hirschman and Olson theories can be combined for our analysis of local government revenues. Individuals living in a municipality receive a variety of local government services and pay for these services through a number of revenue collection devices. Their perception of the amount they pay is weighed against the benefit they believe is received from the services provided. If a constituent believes there is insufficient value for the moneys paid (s)he is likely to raise protest action if the perceived benefit of this exceeds the cost. Jones (1981, p. 210) asserts that "the costs and benefits of political interest and participation will depend on the stakes and the ability to influence". If the probability of success through this mechanism is low, and other municipalities offer the required level of services and taxes, then the cost of shifting will be weighed against the likely benefits from improved services or tax levels.

There are several taxation matters which are relevant under this model. Where a local government has limited autonomy with regard to a tax, the taxpayer is faced with increased expense in lobbying for improved tax levels because no single agency can resolve the problem. The level of dissatisfaction required before action is likely, is increased. This reduces the pressure on the organisation to operate efficiently.

Lack of taxation visibility increases the difficulty for individuals to weigh services against the benefits received and makes it more likely that the consumer will underestimate the cost (Jones, 1981, p. 226). Therefore the level of dissatisfaction required for pressure actions is increased. Similarly, if a tax is difficult to understand the taxpayer faces additional information costs. Information can be time consuming to obtain without giving the taxpayers any results (Jones, 1981, p. 211).

All of these taxation attributes (lack of autonomy, invisibility and unintelligibility) interfere with the efficiency mechanism. The threshold at which community reaction is likely, through either exit or voice, is increased. This threshold level can become an in-built level of organisation slack. Therefore, autonomy, visibility and intelligibility are attributes of a revenue device which will encourage the managerial efficiency and accountability of an agency.

The Tiebout hypothesis has been subject to much debate and scrutiny in the literature. A number of writers contend that their research either proves or disproves various aspects and some extend the model (Oates, 1969; Buchanan and Goetz, 1972; Wheaton, 1975; Hamilton, 1975; Wooders, 1980). However, none dispute the link between a well-informed public in relation to taxes and the efficiency of the government agency.

Autonomy

Local accountability overcomes the inefficiencies of central decision-making, but requires local control of local matters (Norton, 1985, p. 39). The right of local government to levy taxes increases its capacity to allow local choice (Stewart, 1983, p.15-6). Limitations to municipal autonomy diminish the effect a tax may otherwise have on agency efficiency. If responsibility is dispersed, taxpayer understanding is reduced and accountability becomes unclear. Pressures for managerial efficiency are thereby diffused. The recent centralisation of power in Britain is said to have reduced accountability and efficiency (Duncan and Goodwin, 1988, pp. 123-4). Models developed by Tiebout and others (Oates, 1969) stress the importance of autonomy in enhancing public sector efficiency (Auld, 1986, p. 2). My model supports this notion.

Certain revenue devices impose limits on the independence of the local authority. If a local authority derives a significant proportion of its revenue from tied grants from higher levels of government, its autonomy will be reduced. The Layfield Committee (1) on local government finance argued that dependence on central grants make municipalities agents of central government (1976, p. 74.). Local government cannot achieve autonomy if it is dependent on a higher level of government for its funds (Jones, 1981, p. 176). Rate controls in the form of rate capping in the United Kingdom are also said to destroy financial accountability in local government (Jackman, 1984, p. 170: Duncan and Goodwin, 1988, pp. 168-78). The shared control and power which exists in British intergovernment relations causes a state of "ambiguous confusion" (Rhodes, 1981, pp.125-6).

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(1) Although the term "Inquiry" is normally used for official studies the term "Enquiry" was used by the Layfield Committee and will therefore be used when referring to the Layfield study.

Local government is dependent to varying degrees on higher levels of government, with many of the local taxes. For instance, with a local income tax "piggybacked" onto the central income tax the municipality is dependent, to an extent, on central government actions. In the Federal Republic of Germany a series of Federal tax law and grant changes from 1978 to 1984 led to a fiscal crisis in local government, forcing massive cutbacks (Banner, 1985).

I shall define autonomy as the ability of a local government to control the raising of funds without reference to a higher level of government.

Visibility

Our efficiency model requires well informed consumer-voters. If a consumer-voter is unaware of the amount paid for local government services an inefficient level of services will be provided in the budget (King, 1984, p. 229; Wade, 1983, p. 78). The visibility of taxes varies greatly and is partly related to the simplicity of the tax. Buchanan (1967, p. 183) reviewed the studies relating to public awareness of taxes paid and found that tax awareness is generally low. But the degree of tax awareness varies with different types of taxes. Direct taxes are more visible than indirect taxes (Buchannan, 1967, p. 183).

A visible tax is one that the payer is extremely conscious of paying. If a tax is paid personally by the individual it is highly visible, whereas a tax hidden in a price or paid by another is invisible. Local government rates are often held to be highly visible whereas P.A.Y.E. income taxes, sales taxes and excise taxes are examples of invisible taxes.

When an individual has to pay a visible tax it is usually more painful because it is knowlingly paid from savings. The painfulness of the payment of tax encourages the taxpayer to question the efficiency of the taxing authority and the value of the services provided. It is much more difficult to do this with an invisible tax because the payer does not know how much tax has been paid in total.

Jones claims that local government should attempt to minimize the cost of services and ensure that the right services are provided rather than search for a "utopian" tax which eliminates ratepayer resistance to its rates. He claims that ratepayer resistence is healthy for local democracy (1981, p. 136). This suggestion also conforms with my model of agency efficiency.

Thomson claims that a disparity in the tax visibility between levels of government results in a distortion in the nation's tax mix and in the levels of activity by each level (1987, P. 36). I shall define visibility as the taxpayers awareness of the amount of tax paid.

Intelligibility

Public awareness of taxation liabilities is partly dependent on the extent to which the tax is intelligible. If the revenue device is complex, it not only adds to administrative and compliance costs and encourages avoidance, it also reduces the understandibility of the tax. The term comprehensibility is used in the Layfield Committee's report. Under this criteria non-experts should be able to understand the tax (Hepworth, 1984, p. 185) for it to be classed as comprehensible.

I shall define intelligibility as the perceived simplicity of the revenue device, as exemplified, for instance in how easily it can be explained so that a taxpayer readily understands how it is calculated.

Equity

At first glance, equity seems to be one of those simple, elementary notions "so distinct and so clear that no doubt remains to it with regard to that which we comprehend" (Descartes ****, p. ***). That equity, or distributive justice, is neither simple nor clear has been convincingly demonstrated by Rawls (1972, *passim*).

In the context of taxation theory, two different notions of what is equitable compete for our allegiance. According to the benefit principle it is equitable for individuals to be taxed in accordance with the benefits they receive. With the ability-to-pay conception a tax should be levied according to each individual's capacity to pay, regardless of the level of benefits received.

Adam Smith made a heroic attempt to reconcile these conflicting principles when he in effect defined ability to pay in terms of overall benefit, maintaining that

> the subjects of every state ought to contribute toward the support of government, as nearly as possible, in proportion to their respective abilities; that is in proportion to the revenue which they respectively enjoy under the protection of the state (Smith, 1947, p. 6).

According to Musgrave and Musgrave, however, the benefit referred to by Smith was protection by the state and therefore the benefit was related to the ability to pay. With the welfare state and large-scale redistribution of wealth and income, this linkage between the ability-to-pay and benefit no longer holds true (1980, p. 238). Today there is considerable tension between these two conceptions of equity.

The Benefit Principle

If "equity" is interpreted in accordance with the benefit principle, it is equitable for people to pay for government services in line with the benefits they receive (Musgrave and Musgrave, 1980, p. 238). The concept is also similar to the economic efficiency concepts of pareto- optimality and neutrality outlined previously. Pareto-optimality occurs when the price mechanism efficiently rations goods and services. The benefit principle copies the price mechanism. Therefore, interpreting equity in terms of the benefit principle produces the advantage that equity and efficiency goals can be achieved simultaneously (Break, 1980, p. 239).

Such a reductionist approach - that is, of resolving problems of equity into problems of economic efficiency - is so conceptually neat and attractive that it is difficult to resist. Regrettably it cannot cope with the complexities of the real world: the welfare and redistributional programmes of modern western countries which are undertaken in puruit of equity, make the benefit principle quite inadequate at the sole interpretation of equity. There must be some other, more persuasive way, of imparting the meaning of equity. The benefit principle does not consider ability to pay tax, only willingness to pay. It therefore requires an assumption that there is already an equitable distribution of wealth and income (Musgrave and Musgrave, 1980, p. 238).

Due to mobility, central government is the most appropriate level for attempting redistributional policies (Jones, 1981, p. 126-9). Therefore the inability to handle redistributional objectives in accordance with the benefit principle is arguably not an appropriate problem local government, since the national government has a redistributional programme. It could then be assumed that a "proper" state of distribution exists. (OECD, 1983, p. 19; Auerbach and Feldstein 1985, p. 13).

Public Goods

Individual benefits of government expenditures need to be known in order to apply the benefit principle (Musgrave and Musgrave, 1980, p. 238). But the benefit principle cannot be readily applied to public goods. The price mechanism can only be approximated by financing services from a tax on those sections of the community most likely to benefit from the service.

Some benefits are able to be enjoyed by particular individuals whereas others are able to be enjoyed by the public at large. Economists distinguish between these two forms of benefits according to the notions of exclusion and indivisibility. If individuals can be excluded from enjoying a benefit it is deemed to be a private good. Services which cannot be allocated exclusively to individuals are deemed to be public goods. Put another way, public goods are those which are available to everyone once they are allocated (Due and Friedlander, 1977, p. 22).

Wicksell noticed that governments cannot vary the supply of public goods and services to individuals in accordance to the price each individual is prepared to pay because individuals can enjoy the services without purchasing any (Olson, 1971, p. 89). Therefore there is no market mechanism tempering demand towards an equilibrium point. Without the price mechanism, demand becomes virtually unlimited and the amount individuals are prepared to pay becomes minimal. This is a manifestation of the "free rider" problem (Prest and Barr, p. 28). An example of the free rider problem is for a taxpayer to vote for increased services whilst striving to minimize taxation payments (Olson, 1971, p. 87). The individual has no incentive to pay anything so coercion is necessary (Olson, 1971, p. 91).

The classic example of a public good or service is that of defence, because every individual enjoys the benefit and cannot be excluded. An example of a private good or service is the supply of electricity which is provided to individual properties and therefore individuals can be excluded.

The benefit principle cannot be readily applied to public goods. The price mechanism can only be approximated by funding expenditure by a tax on those sections of the community which are likely to benefit most from the service.

I shall define the benefit relationship for public goods as the correlation between tax burdens of community groupings in accordance with the enjoyment of public goods financed by the tax.

Private or Market Goods

As noted before, according to economic theory, pricing allows market forces to adjust the demand and supply of a private good to an optimal point (Due and Friedlander, 1977, p. 25) referred to as the equilibrium point. The demand for private goods and services is determined by the price each consumer is prepared to pay. The underlying principle here is called the "invisible hand of the market". Private services supplied by a government body can be provided at a price to the individual in line with the marginal cost of providing the service. This is often referred to as the "user-pays" principle. This principle utilises market forces to ensure that an individual's demand for a service is governed by the price each is prepared to pay.

I shall define the benefit relationship for private goods as the correlation between the price charged to consumers and the marginal cost of the service.

Merit Goods

With pure public goods, everyone can enjoy the benefits and there are no individual benefits and disbenefits. The opposite is true of pure private goods whereby individuals enjoy the benefits and there are no benefits or disbenefits to the community. In reality, however, public and private goods are the two ends of a continuim. Many goods and services have a mixture of private and public benefits and disbenefits. Economists discuss this problem using the concept of externalities (Musgrave, 1985, pp. 11-2). An externality occurs when there is a spillover of the benefits or disbenefits from individuals to the wider community. For example, education of individuals is essentially a private benefit. However, the community also benefits from public education through increased economic growth, communication and so on. Disbenefits can spill over, for instance, in a land development which may benefit the land owner but cause increased traffic congestion. Benefits can also spill over from one municipality to another.

According to Pigouvian theory subsidies to the creator of the benefit and taxes on the creator of disbenefits are required to ensure efficient allocation of resources (Baumol, 1972, p. 307). Where private goods have large external benefits economists generally argue that the market does not allocate efficiently since consumers are only prepared to pay for the private benefits. In such cases, governments may offer the goods or services at a price below the cost. The loss is subsidised by the community as a price paid for the external benefits to the community (Wildavsky, 1987, pp. 156-81). Wildavsky has eloquently summarized the issue of merit goods:

> Social wants, which would reflect real preferences if a market were available, give way to merit wants, which are good ... precisely because peoples' preferences are not preferable (Wildavsky, 1987, p. 176).

I shall define the benefit relationship for merit goods as the correlation between the price charged to individuals and the level of personal enjoyment of the service.

The Ability-to-Pay Principle

The other conception of equity discussed in the literature relates to an individual's ability to pay the tax or charge. If we set aside the early formulation of Adam Smith to which we previously referred, the ability-to-pay principle dates back to John Stuart Mill who attacked the notion of the benefit principle (Mill 1947, p. 8). His argument was that equity occurred when the payment of tax caused an equal sacrifice from all members of the community (Musgrave and Musgrave, 1980, p. 250).

Sacrifice Principles

The early debate on the ability-to-pay principle focussed on refining the notion of sacrifice and the concepts of equal absolute sacrifice, equal proportional sacrifice and least aggregrate (marginal) sacrifice were derived. These were expounded by Dalton in 1933 (Dalton, 1947, p. 10). Each of these sacrifice approaches presumes a progressive rate of taxation, whereby the rate of taxation increases as the base on which it is levied increases.

These arguments for progressive taxation are based on certain assumptions relating to utility theory (namely the diminishing marginal utility of incomes) which assumes that marginal utility decreases with increased incomes. In other words, an extra dollar is of less benefit to a rich person than to a poorer person. There are serious objections to this assumption in the literature. (Musgrave, 1985, p. 20). Since these approaches do not give a ready evaluation basis and possibly have serious defects, sacrifice concepts will not be used to define the term ability to pay.

Instead, it is often argued that progressive rates of taxation intrinsically adhere to the ability-to-pay principle (Due and Friedlander, 1977, p. 207).

Vertical Equity

Equity is commonly classified in terms of the impact on various sections of the community, rather than the above sacrifice approaches. Vertical equity is the treatment of taxpayers according to their circumstances (James and Nobes, 1978, p. 75). It is normally assessed in terms of the tax rate applying to different socio-economic groups. A regressive tax is one which levies a proportionally greater tax on lower socio-economic groups than on high socio-economic groups. A progressive tax has the opposite effect, having the greatest level of tax falling on the higher socio-economic groups. A proportional tax structure is one which is levied equally at all levels. This is normally determined by comparing the tax incidences with the taxpayer's cash income.

Matthews highlights the "mythology" that vertical equity can occur only with a progressive income tax scale (Matthews, 1984, p. 3). He asserts that ability-to-pay cannot be satisfactorily measured by income. The regressivity of taxes has received considerable attention in the literature in some instances almost to the exclusion of other criteria. Some writers dismiss certain local government revenue devices solely on the basis of regression

(Nieuwenhuysen, 1982, p.190). Kitchen questions the logic of assessing local taxes on the basis of regression (1984, p. 206).

For simplicity, income is normally used to determine the regressivity of a tax. But this requires every tax to resemble the income tax and therefore makes every other tax appear to be inferior. It is obvious that the income tax will best adhere to a criterion based on income (Kitchen, 1984, p. 206).

Determination of vertical equity is normally based on an assessment of which income groups eventually pay the tax, called the incidence of the tax (Mieszkowski, 1967). Kitchen demonstrates how the incidence calculations are dependent on assumptions made, and are therefore tautological. He shows how the property tax appears to change from regressive to progressive by changing the assumptions. Therefore incidence calculations are fraught with danger (1984, pp. 200-10).

Even if it can be clearly demonstrated that the local government payments are regressive against income, it would still be valid to question why this should matter (Prest and Barr, 1979, p. 530). The important question is the redistributive effect of the <u>total tax mix</u> in the economy instead of the regressivity of each tax (Howard, 1985, p. 236). Local government taxes, (for example - rates), are only a very small proportion of all taxes, which minimizes the impact of any regressivity (Howard, 1985, p. 236).

Redistribution of income is related to the concept of vertical equity, but it also considers the distribution of benefits between the socio-economic groups. Income redistribution refers to the transfer of resources from higher socio-economic groups to lower socio-economic groups.

Horizontal Equity

A corollary to vertical equity is horizontal equity. This notion requires that people in similar circumstances should be treated equally.

Income Definitions

On the surface these ability classifications appear simple. However we need a means of determining the basis on which such judgements can be made. Although income is the most often used as the basis for determining ability-to-pay, there is considerable debate in the literature as to the appropriate base. The three bases advocated are income, consumption and wealth.

Due and Friedlander claim that "in a broad sense, income consists of any economic gain a person has experienced during the period" (1977, p. 223). Similarly, Musgrave and Musgrave (1980, p. 243) argue that the income base should include money income, imputed income and the appreciation in the value of assets. Imputed income is income not actually received but available, such as rent from owner-occupied dwellings. This is a broad definition of ability to pay, based on the idea that an individual's ability to pay is not limited to money income received but also includes other means of obtaining funds which are available, even if not actually utilised (Musgrave, 1985, p. 22). The appreciation in the value of assets is often called the "unearned increment" because the property owner's wealth is increased without personal effort or exertion (Musgrave, 1985, p. 24).

A broad definition of income contrasts significantly with the vernacular use of the term and the definitions embodied in most taxation law. A narrow definition of income is often used, measuring only cash or accrued income for the period, and excluding capital gains not yet realised. A significant proportion of local government expenditure is in the provision of services which enhance property values, which increases the property owner's income over a lifetime. Therefore, we will use a broad definition of income, which includes the appreciation in the value of assets.

Musgrave and Musgrave (1980, p. 246) argue that consumption is a fairer basis for determining the ability-to-pay. If a broad definition of consumption is used, it would also include the appreciation of assets and imputed income. The only difference would be that consumption would exclude the amount an individual saves.

It seems clear that there is no objective way of measuring individual abilities (Break, 1980, p. 238) nevertheless a definition is required. We shall define ability to pay as the correlation between an individual's total income, (including imputed income and asset appreciation) with the tax level.

When using a wide definition of income, which includes wealth, there will be instances where an individual has ample wealth but limited cash income. The term "income rich, cash poor" is sometimes applied for such circumstances. In order to take this factor into account I shall define ability to pay using the broad income definition above, which includes wealth and define capacity to pay as the correlation between the tax level and an individual's current cash income.

Conclusion

I have derived a framework of evaluation criteria from the fundamental instrumental values of efficiency and equity - a framework which can be applied to each revenue option. Policy effectiveness and accountability aspects of revenue devices tend to be understated in literature. But some work in this area has been done, such as Layfield's Enquiry's focus on accountability and Netzer and Gaffney's work on policy effectiveness of property-based taxes.

It is not, however, possible to find a revenue device which will satisfy all of the criteria, since we have identified several conflicting criteria (Brennan, 1977, P.4). The criteria derived on the ability-to-pay principle tend to be in most conflict with other criteria, especially those of economic efficiency (Break, 1980, p. 239). Other criteria will tend to be complementary.

For example, a petrol tax may satisfy the benefit relationship criterion (if such funds are used for costs imposed by motorists), have low collection costs, be relatively unavoidable, have high revenue potential and may reduce distortion in the market, but might not be related to an individual's ability-to-pay. (We shall examine this form of revenue in the section on licence fees.)

The purpose of this study is to analyse and evaluate the alternative revenue raising options for local government. This requires an outline of each of the revenue options, as evidenced by the application of our evaluation criteria. I shall not assign any weights to the evaluation criteria but leave this to policy-makers who will then be able to choose the revenue options which best satisfy their preferred set of principles.

For the purpose of assessing each device in the context of the Brisbane City Council I shall not assume any particular preference by the elected officials for any of the criteria. Rather, I shall assess each device in the light of Brisbane's economic and institutional circumstances.

The following is a summary of the evaluation criteria and our definitions which will be used in the evaluation.

Summary of Criteria Definitions

EFFICIENCY

Market Efficiency (pp. 14-16)

A revenue device will be market-efficient if it is not likely to create distortions in the economy or it encourages efficient economic activity. A distortion occurs when personal choice is altered solely because of the levying of the revenue device. A revenue device will have an excess burden if consumer preferences are distorted. The ideal tax is one which has a neutral impact on the economy.

Policy Effectiveness (pp.16-17)

The alliance between common local government policy stances and the impact of the revenue device.

Revenue Predictability (p. 18-19)

The ability of the local government to forecast movements in the revenue base and the subsequent collections. The ideal tax is one that can be easily and accurately forecast.

Growth Potential (p. 19-20)

The expansion of the tax base with growth of the economy (in terms of Gross Domestic Product, G.D.P.).

Potential Yield (p. 20-21)

The capacity of the revenue device to finance the current level of local government services in Australia.

Collection Costs (p. 21-22)

The sum of administrative costs and compliance costs.

Administrative Costs (p. 21-22)

The proportion of the revenue raised which is consumed by local government expenditure in extracting the revenue. The ideal tax has a minimum of collection costs.

Compliance Costs (p. 22)

The burden imposed on the taxpayer other than the payment required. This will be assessed in qualitative terms by examining the complexity of the tax and the administrative burden imposed on taxpayers. The ideal tax imposes minimum compliance burdens.

Tax Effectiveness (p. 22-23)

The extent to which the nominal or potential revenue effects of a particular tax is likely to be achieved.

Autonomy (p. 23-28)

The ability of a local government to control the raising of funds without reference to a higher level of government.

Visibility (p. 28-29)

The taxpayer awareness of the amount of tax paid.

Intelligibility (p. 29-30)

The simplicity of the revenue device, as examplified, for instance, in how easily it can be examined easily explained so that a taxpayer readily understands how it is calculated.

EQUITY

Benefit Relationship (pp. 31-32)

- Public Goods (pp. 32-33)

  The correlation between tax burdens of community grouping in accordance with their enjoyment of public goods financed by the tax.

- Private Goods (pp. 33-34)

  The correlation between the price charged to consumers and the marginal cost of the services.

- Merit Goods (pp. 34-35)

  The correlation between the price charged to individuals and the level of personal enjoyment of the service.

Ability to Pay (pp. 35-39)

The correlation between the tax level and an individual's total income including imputed income and asset appreciation.

Capacity to Pay (pp. 35-39)

The correlations between the tax levels and an individual's current cash income.

CHAPTER FOUR

AN ASSESSMENT OF NON-PROPERTY TAXES ACCORDING TO THE EVALUATION CRITERIA

The unpopularity of property taxes often results in an examination of alternative taxation devices. There are several forms of non-property tax utilised in the western world. These are income tax, sales tax, and the poll tax. We shall first turn our attention to the income tax and sales tax. In Australia, local government has no power to levy any of these taxes and constitutionally sales taxes are the perogative of federal government. Nevertheless, these devices are often considered by inquiries (Self, 1985; Else-Mitchell, 1967).

Local income and sales taxes are either administered directly by the local government, or attached to the tax system of a higher level of government. The former is referred to as a local tax whereas the latter is often called a piggy-backed tax. The sales and income taxes have many similar qualities and will be discussed together. However the features vary greatly depending on whether the tax is administered locally or piggy-backed. Therefore we will analyse the piggy-backed taxes followed by the local taxes. Our objective is to obtain an understanding of these taxes in terms of the evaluation criteria and to determine whether any of the taxes are more suitable to the Brisbane situation than a land value property tax, or suitable as a supplementary source of revenue for Brisbane.

Income and Sales Taxes - Piggy-backed

As the name implies piggy-backed taxes are attached to existing central taxes. Local government receives a predetermined share of the central tax. It may share a percentage of tax collections or central government may impose an additional percentage of tax, earmarked for local government. The revenue may be distributed to the local governments according to the location of the revenue source, but often the revenue is distributed as an unconditional grant with some horizontal equalisation.

Market Efficiency (** weak)

Many economists have studied the effects of income tax and sales tax on the economy (Harriss, 1985b). Many conclude that these taxes cause distortions in the economy, especially when exemptions and different tax rates are established (Harriss, 1985b; Lissner, 1985). The work incentive is generally believed to be reduced by income taxes (Jones, 1981, p. 124). However, these taxes are a fact of life in western economies. Some argue that a piggy-backed tax for local government creates no additional distortion in the economy since the form of tax is unchanged (Kitchen, 1982a, p. 783), the only alteration being that the piggy-backed tax increases the tax rate. The additional impost is therefore argued to be relatively neutral in the economy, even though the central tax it is attached to may be distortionary. But the historically high levels of income tax reduce tax effectiveness and increase collection costs. Thus the distortionary effect of these taxes is likely to increase when tax rates are already high (Harriss, 1985b).

Visibility (* negligible)

Accountability of local government is not promoted by piggy-backed taxes. Monies distributed to local governments are invisible to taxpayers because the taxes are paid to central government. Highlighting the local government portion of each transaction is administratively expensive and therefore is often avoided by municipalities. When the distribution of the tax revenue is modified by horizontal equity considerations the link between collections and a local government's revenue is broken. It is then difficult to establish any form of tax visibility.

Sales tax is less visible than the income tax. With income tax, an annual return highlights the total amount paid. No similar feature exists with sales tax. Some countries display the pre-tax prices in shops and the tax is added at the point of sale. In these cases, sales tax is more visible, but the total amount paid by a taxpayer in a year is not readily known. Pressures for efficiency are reduced because the taxpayer is faced with additional information costs in order to assess municipal efficiency.

Intelligiblity (** weak)

Piggy-backed tax imposes an additional complexity to the primary tax which make it less intelligible. Taxpayers may be confused or wrongly believe that a certain government agency is responsible for the tax. This further weakens the accountability and efficiency pressures for the use of those funds.

Autonomy (* negligible)

With piggy-backed taxes, local governments become more dependent on central government. Groenewegen noted that a proposal with similar features "would completely eliminate the financial independence of local government" (1976, p. 50). The autonomy of local government is reduced, which further weakens accountability.

The degree of municipal dependence varies according to the reliance on this revenue source. Local governments have an incentive to blame central government for their problems, citing lack of funding or inequitable distribution.

Revenue Potential (** weak)

The potential of this form of tax to raise sufficient revenue is limited by several factors. Income tax has been demonstrated to be a growth tax because of the impact of inflation when progressive tax rates are applied. But the degree of growth varies with inflation rates, unemployment and economic activity making this form of tax less predictable. (Maxwell and Aronson, 1977, p. 113).

Sales tax has a relatively stable growth pattern, but it is still affected by the level of economic activity, which lessens predictability.

Tax Effectiveness/Collection Costs (** weak)

Potential yield is limited by the already historically high tax rates, especially for income tax. As the average income tax proportion increases, taxpayers tend to seek ways of avoiding or evading tax. The effect of this is to increase administrative costs associated with closing loopholes. In order to contain administrative costs, agencies may attempt to pass more functions on to taxpayers, which increases compliance costs. It would therefore seem that there is little potential for a piggy-backed income tax to raise sufficient revenues for all local government functions.

There may however be limited scope for sales tax as a supplementary revenue source. Sales tax in Australia is not utilised to the same extent as in many other western countries or to the extent of income tax usage. A broad-based consumption tax has been proposed on many occasions recently in taxation policy debates, but is subject to a generally negative press and public reaction. Therefore government agencies and political parties have shied away from greater utilisation of this tax. It would seem unlikely then, that central governments can be encouraged to increase the use of sales tax on behalf of local government. Nevertheless, piggy-backed sales taxes could provide an additional source of revenue for local government with little impact on the collection costs, and without greatly increasing avoidability.

Benefit Relationship (* negligible)

There is no direct correlation between the incomes or sales and the benefit received from municipal activities. Therefore, these taxes do not generally adhere to the benefit principle. When used as a supplementary source of revenue and without horizontal equalisation, the piggy-backed sales tax will approximate a tax on commuters since retail stores are mainly in central cities. Hence it could be used to apply a benefit tax on commuters.

Ability to Pay (*** moderate)

Income taxes are often regarded in the literature as the most equitable form of tax from an ability to pay perspective. Writers who argue this tend to define ability to pay in a narrow sense relating to cash income flows. Thus when progressive tax scales are applied, the tax is seen by those writers to achieve horizontal and vertical equity, and to be redistributive in nature. But if ability to pay is defined in a broad sense, income tax is only equitable when it is part of a package of taxes which treats all elements of ability equally. The reliance on income tax as the primary source of tax revenue in Australia makes income tax less equitable. An additional piggy-backed income tax would increase this inequity.

Sales taxes are generally believed to be regressive since they extract most revenue from products used in the greatest proportions by low income groups (Maxwell and Aronson, 1988, p. 106). The exemption of essential commodities such as food and medicine reduces regressivity, but adds to collection costs, evasion and avoidance. Sales taxes, with exemptions for items such as food and clothing, are sometimes argued to have proportional or even progressive incidence (Secreatry of State for the Environment, 1981, p. 37), although other writers contend that sales taxes remain regressive even with exemptions (Kitchen, 1984, p. 400).

Summary

In Australia there is mounting pressure to reduce marginal income tax rates in line with company tax levels in order to minimize the incentives for tax avoidance. There seems little scope for any additional surcharge on behalf of local government. On the contrary, the previous allocation of two percent of income tax collection to local government has been abandoned and replaced by reduced grant levels. Federal policy is towards more fiscal self-reliance by each level of government.

The piggy-backed income tax poorly reflects most of our criteria, particularly in relation to market efficiency, accountability and benefit relationship. The main virtues of this tax are the potential growth factor and relationship to capacity to pay. Therefore it does not seem a viable option for Brisbane.

In contrast to income tax, sales tax is utilised in Australia to a much lesser extent. But the federal government's inability to gain acceptance for a broad-based consumption tax as a trade-off for reduced income tax levels indicates that there would be little likelihood of it adopting a sales tax surcharge on behalf of another level of government. As with the income tax counterpart the piggybacked sales tax is not a strong alternative to the existing property-based tax.

Inadequate accountability and equity associated with these taxes make them undesirable primary revenue sources for Brisbane. In any event, it seems to be an option which would be difficult to achieve even in the absence of these deficiencies.

Sales and Income Taxes - Locally Administered

Local sales tax (LST) and local income tax (LIT) are common additional revenue sources, especially in large cities in the United States. An LIT is the main local tax in Sweden and was recommended by the Layfield Enquiry as the best form of tax to replace property rates, but this was never implemented. As we shall see, the use of LST and LIT overcomes many of the problems of the piggy-backed counterparts, whilst introducing new problems.

Market Efficiency (** weak)

Local income and sales taxes distort the economy if the local government has autonomy and independently administer the tax. For example, prior to 1965, the New York City's local sales tax of 4 percent was the only local sales tax in the area. One study shows that this caused a diversion of 25 percent of the city's retail sales for house furnishings to suburban areas (Netzer, 1970, p. 201). Thus these local taxes encourage businesses and people to locate or shop where the tax is lowest. Because tax rates may vary between local government areas, there is an incentive to restructure or relocate business to minimize or avoid the tax (King, 1984, p. 220).

There may be cases where this form of distortion offsets another distortion. For instance, these local taxes are sometimes introduced by city governments to recoup funds from commuters who use the city's facilities but do not pay property taxes to the city. This diminishes the incentive for mobile high income, residents to relocate to outer areas (Stocker, 1976, p. 315). But the LIT is often taxed at source (place of business) for administrative reasons, which defeats the commuter tax concept. The movement of businesses to outer areas is thereby accelerated, and exacerbates rather than improves the commuter problem.

These distortions, or incentives to relocate, are removed if standard tax rates are applied by each local government (Auld, 1981, p. 27). Then these forms of tax become similar to the piggy-backed sales and income taxes outlined previously.

Another form of distortion is introduced because of the local nature of these taxes. For pragmatic administrative reasons, non-labour sources of income are often excluded from LIT. This is distortionary since it encourages people to earn their income from non-labour sources. As we shall see, this also weakens the equity of the tax. The LST also tends to focus on a range of goods, but does not cover all forms of consumption. Therefore, consumer preferences will be distorted towards those goods and services not subject to local sales tax.

<u>Policy Effectiveness</u> (** weak)

The effectiveness of central government may be weakened since income tax is a tool utilised in stabilisation policy. Central government may have less control over economic stabilisation policy if numerous local governments are utilising local income taxes (Auld, 1981, p. 28).

Many adjustments to local income and sales taxes occur for administrative reasons. Local government is in a policy dilemma as it attempts to resolve conflicting policy objectives. On the one hand it may be trying to tax commuters to address unfunded demand for its services, whilst on the other hand it may be attempting to improve administrative efficiency. The dilemma is often resolved in favour of administrative efficiency at the expense of policy effectiveness.

ACCOUNTABILITY

Tiebout theory demonstrates that these taxes encourage operational efficiency of local government. The mobility of residents and businesses to minimize the tax can be a positive factor which leads to pressures for more efficient local government service delivery. The Layfield Committee (1976, p. 191) recommended an LIT, partly for accountability reasons.

Visibility (**** strong)

The LIT is a visible tax, whereas LST is less visible. But in the United States, it is a common practice to highlight the local sales taxes at the point of sale, often in the form of a price mark-up. In this situation, LST is also visible.

Intelligibility (** weak)

The mushrooming of miscellaneous local taxes, for example in the United States of America reduces intelligibility of the tax system (Stocker, 1976, p. 312). There is no obvious connection between taxation imposts and services, even when used as a commuter tax. This reduces the intelligibility of these local taxes.

Autonomy (*** moderate)

Local sales and income taxes require municipal autonomy to levy these taxes. However, to improve administrative efficiency and reduce economic distortions autonomy is often sacrificed. Standard procedures and tax rates overcome many of the administrative and distortionary problems, but reduce the autonomy of the municipality. For example the N.S.W. tax review recommended an increase in cigarette tax levels (tobacco franchise) subject to Queensland introduction of the tax (Collins, 1988, p. xxii).

Standardisation tax rates also weaken the Tiebout efficiency effect. Otherwise, if autonomy is protected and a single clearly visible LST or LIT established local government efficiency is enhanced.

Revenue Potential (*** moderate)

Revenue potential is one reason some local governments adopt such local taxes. The Layfield Enquiry considered LIT to have sufficient potential to fund local government in lieu of property rates. These taxes, especially LIT, are often regarded as potential growth taxes (Kitchen, 1982a, p. 781). This attribute is similar with the piggy-backed versions outlined previously. Revenue potential is variable, as with piggy-backed taxes, which makes revenue predictability more difficult.

The potential yield from local taxes varies greatly between municipalities. The main revenue yield accrues in the cities but is partly dependent on the assessment location. If an LIT is levied according to the place of residence the potential yield is more equal than if the tax is levied according to place of employment. The Layfield Enquiry recommended place of residence as the assessment location.

The United States experience has demonstrated that potential yield is often sacrificed for the sake of administrative efficiency. Administrative problems often lead to a narrowing of the tax base to sales items or income types which are easier to assess.

Collection Costs (** weak)

High administration and collection costs associated with these taxes reduce the resultant revenue yield and lead to pressures to modify the tax. It is asserted that local sales taxes create administration and collection costs disproportionate to the revenue raised (Maxwell and Aronson, 1988, p. 123). These administrative costs are likely to be higher than with property taxes or piggy-backed taxes. Overlapping tax bases further add to the administrative complexities and requires devices such as credits to other local governments to avoid double taxation of the same sales or income (Kitchen, 1982a, p. 784).

Self-assessment of the tax reduces municipal collection costs, but increases taxpayer compliance costs. American industries are lobbying for increased reimubursement of sales tax compliance costs as it is regarded as one of the most expensive taxes to administer (Lissner, 1985, p. 54). Self-assessment also enables greater avoidance and evasion. The Layfield Enquiry (1976, pp. 198, 494) reports that the administrative and compliance costs are extremely high.

Tax Effectiveness (** weak)

Evasion and avoidance of income taxes is extensive throughout the world. It is likely that LIT suffers similar, if not greater, avoidance and evasion problems (Hirsch, 1980, p. 87). The LST is more difficult to avoid or evade, but relocation of businesses and the distortion of consumer preferences is a form of avoidance which reduces the potential yield.

Benefit Relationship (** weak)

Since incomes and sales bear no relationship to local government services, these taxes do not normally reflect the benefit principle. But, when used as a commuter tax these taxes are shifted closer to the benefit principle. This is especially so if used to finance transport infrastructure services and other local government services utilised by commuters but otherwise unfunded. The free-rider problem is thereby tackled to some extent. However, administrative factors often lead to taxing of residents and non-residents at the same rate which negates this benefit relationship (Kitchen, 1982a, p. 783).

Another form of the free-rider problem arises if these taxes are used as the sole form of local government revenue. People and businesses who do not pay tax will do not contribute to the local government services they enjoy.

Ability to Pay (*** moderate)

As we noted when examining piggy-backed taxes, income tax reflects the ability concept if cash income is used to define ability. This is less equitable if a broad definition of income is used which includes wealth.

The common exemption of non-labour income from LIT, and other adjustments for administrative reasons increases inequities (Kitchen, 1982a, p. 783). Exemption of non-labour income was also recommended by Layfield Enquiry. These local taxes often result in horizontal inequity. Non-labour income, for example investment income, is often the result of greater wealth. Therefore the exclusion of non-labour income is inequitable from our definition of ability. Similarly, LST is regressive since it is often applied to only a limited range of goods which may not be biased towards luxury goods and other forms of consumptions are not taxed.

These taxes also result in uneven revenue capacities for local governments, which is sometimes regarded as inequitable (Stocker, 1976, p. 319). A local business income tax and local retail sales tax results in great revenue disparities between municipalities. Such a disparity however, may not necessarily be inequitable since the expenditure patterns could be similarly biased (Quirk, 1986, p. 4) notes that the highest LIT tax levels in Sweden occur in the poorest areas, which encourages emigration of high-income residents.

Summary

LIT and LST promote local government efficiency but distort the market. They offer potential revenue to fund local government with limited predictability and growth. Administrative problems are extensive and are often resolved at the expense of positive features, such as autonomy and revenue potential.

Brisbane, like many other capital cities has a commuter problem (Heintz, 1987, p.10). Therefore these devices are worthy of consideration. In their favour, the visibility, autonomy and revenue potential criteria would be met if it were not for the significant administrative difficulties associated with these taxes.

Either of these local taxes could be introduced to supplement Brisbane's revenue sources in order to fund the additional level of services required for commuters. But the city would face the same administrative difficulties experienced in other countries. This in turn could lead to tradeoffs, thereby affecting market efficiency, policy effectiveness, autonomy, revenue potential and equity considerations. Consequently these local taxes do not seem to offer Brisbane the potential to tackle the commuter problem; nor would they serve as alternative revenue options for the city. A more direct means of tackling the commuter problem will be examined with licence fees.

Poll Tax and Community Charge

A poll tax is a flat charge levied on every person on a roll, for example an electoral roll (poll). It is levied in Newfoundland, Canada (Kitchen, 1984, p. 250) and is being introduced in Great Britain as a "community charge" to replace domestic property rates (NAV). There it will apply to all residents over 18 years of age. There will be a rebate scheme applied for the poor, but the rebate will be given according to the national average poll tax rather than the tax liability of an individual. Businesses will still pay property taxes (NAV), set centrally and distributed according to the population on the poll tax roll.

The Else-Mitchell Inquiry (1967) recommendation of the poll tax is supported by the ACIR (1981b, pp. 22, 37). It is therefore appropriate to include the poll tax in our study of revenue options.

Market Efficiency (**** strong)

A poll tax has no impact on land use or other market decisions (Baumol, et al, 1988, p. 640). Therefore it does not reduce market efficiency or create any disincentive to land development activities. A poll tax in its pure form is not likely to generate any excess burden provided costs are in proportion to the population (King, 1984, pp. 219-22). As a result it should satisfy our market efficiency criterion.

Distortion of locational decisions in the residential market has been addressed in the British scheme by basing rebates for low income earners on the national average. Also, occupants of properties which were exempt from property rates are now liable for the community charge. But the transfer of non-domestic rates to central government and the visibility of the community charge is likely to distort local government services towards the residential sector and away from the business sector (Jackman, 1986a, p. 55).

Otherwise the poll tax would seem to encourage economic efficiency for both the market and local government sectors.

Policy Effectiveness (**** strong)

The poll tax achieves policy effectiveness if the policy of a local government is to eliminate development disincentives. The tax has a neutral impact on the policies of a local government.

The community charge is being established to achieve local government efficiency as described in Tiebout theory (Quirk, 1986, p. 9). It is not surprising, then that the poll tax tends to encourage local government accountability and thereby efficiency. Visibility and intelligibility of the tax are high. Auld has developed an efficiency criterion based on a benefit tax concept which shows that a per capita fee is the most efficient local government tax (Auld, 1986, p. 2).

Visibility (***** very strong)

The proposed British scheme provides for clear visibility of the comparative community charges for all municipalities. Perceptibility is the main criterion of the British government (Quirk, 1986, p. 6). Residents are able to compare the local community charge with the services provided by each local government and make locational decisions which suit their preferences. But in the United Kingdom, most (80 percent) of the local government revenue will be in the form of grants or allocated non-domestic rates and this weakens accountability (Jones, Stewart and Travers, 1987, p. 62). This leads to a gearing effect where, for example, a five percent increase in expenditure requires a 20 percent increase in the community charge (Bramley, 1987, p. 72). Extreme visibility of the poll tax is likely to distort the tax mix between central and local governments (Jones, Stewart and Travers, 1987, p. 61). Municipalities may become victims of an unpopular tax and reduced fiscal autonomy (Stewart, 1986, pp. 9-10).

Intelligibility (*** moderate)

The intelligibility of the British system is reduced by numerous adjustments to the charge for equity and administrative reasons. The accountability concept underlying the United Kingdom version of the poll tax is based on marginal costs rather than full costs, even though the electorate will judge Council on all services and not just that portion of services funded through the community charge (Jones, Stewart and Travers, 1987). The link between the tax bill and changes in expenditure and service levels will be distorted because of the gearing effect (Weston, 1986, p. 7). In contrast services provided from central funds will appear to be comparatively more cost-effective (Whynes, 1987, p. 60).

Autonomy (*** moderate)

Autonomy and therefore accountability is also reduced in the United Kingdom by complex central controls ostensibly designed to improve accountability but which actually reduce autonomy and therefore weaken accountability (Duncan and Goodwin, 1988, pp. 246-248). Gibson (1987, pp. 167-174) argues that the extreme regressivity of the poll tax will lead to an increased reliance in grant funding and a reduction in reliance on local tax revenues. Autonomy is further reduced by the centralisation of the non-domestic rates (Boyne, 1987, p. 11). By itself however, the poll tax enhances autonomy.

Revenue Potential (*** moderate)

There does not seem to be a strong potential yield from the community charge as it is expected to raise only approximately 20 percent of local government revenue (Jones, Stewart and Travers (1987, p. 62).

The possible yield from the tax varies only by population changes, rebates and the tax level imposed by each local government. The high visibility of the tax is intended to encourage restraint by local government. Therefore the revenue potential is limited by the unpopularity of the tax. There is absolutely no growth potential with the poll tax, requiring visible increases even to cater for inflation (Hale, 1987, p. 8).

In addition some of the factors associated with revenue potential have difficulties which are a cause for concern. The potential yield is determined by the adult population of an area. Local governments with a high numbers of children (for which schools, parks, child care and other social service facilities and services are provided by local government in the United Kingdom) would have fiscal problems. These services impose disproportionate costs on some councils. This fiscal shortage is assisted by central grants since these are also based on the adult population. These problems could be rectified by amending the grant formula to account for these disparities.

Collection Costs (* negligible)

By far the greatest problems are administrative and these have major revenue implications. Else-Mitchell (1967, p. 159) recommended that municipalities be empowered to experiment with poll taxes to explore ways of reducing these administrative problems.

Mobility of the population, particularly tenants, is another problem. An annual survey is necessary to maintain the roll and this imposes additional administrative costs (Longden, 1986, p. 11). It injects a "big Brother" surveillance element that is likely to produce a negative community response.

The relative collection costs are much greater than with property rates because there are many more taxpayers required to pay. With property rates, only one payment per property is required. Land is not mobile but people are. Administrative difficulties need to be resolved for assessment location questions. For example, holiday homes, multiple homes and so on increase the administrative problems. The complex equity (rebate) scheme and central controls in the United Kingdom scheme also increase the administrative complexity and consequently collections costs are greater. Property rates are still required for non-domestic properties; therefore two revenue systems need to be established and maintained, further adding to costs.

<u>Tax Effectiveness</u> (* negligible)

The poll tax is also much easier to evade than property taxes, and this reduces revenue potential and increases administrative costs.

Delinquency of payment is another problem since the tax is not related to capacity to pay. The British rebate scheme addresses this to some extent, but the standardised rebate based on the national average poll tax limits the rebate in many cases, so that some delinquency problems remain. The debt cannot be attached to the land and therefore it is much more difficult to collect even in the long term. Local governments have to collect the charge immediately otherwise it is extremely difficult to follow up bad debts (Fox, 1987, p. 12). Using the television licence fee as a basis it is estimated that delinquency could be as high as 10 percent (Weston, 1986, p. 7).

The poll tax introduces many administrative problems which limit the revenue potential. We shall now look at equity considerations, which is a cause of major debate in the United Kingdom.

Benefit Relationship (**** strong)

The poll tax is based on the benefit principle, on the assumption that all residents are equally entitled to services from their local government (Jackman, 1986a, p. 52). This is more appropriate in Britain where local government mainly provides social services than in Australia where local government services are still predominantly related to property (Weston, 1986, p. 7).

The rebate scheme, however, shifts the tax away from a benefit tax towards an ability tax. A disparity between benefits and the tax occurs where a local government provides services to partially or fully exempt groups. For instance, children are exempt and many welfare recipients are partially exempt. Therefore local governments providing many welfare or children services (including schools) are unable to apply a benefit tax.

Ability-to-Pay (** weak)

The poll tax is often regarded in the literature as being a very regressive form of tax, because it imposes the same contribution regardless of individual's ability-to-pay (Duncan and Goodwin, 1988, pp. 246-248). Prisoners, visiting forces, international headquarters and defence organisations, severely mentally handicapped, children, students, hospital patients and Royal residents are exempt from the community charge (Davis-Coleman, 1988, p. 126). The exemptions and rebates mitigate the ability problem to some extent, but otherwise this tax is regressive and not related to ability to pay. Unlike land value taxes, the poll tax does not recoup any unearned increment or asset appreciation.

Compared to the current distribution of income, the poll tax partially reverses the existing distribution from the more affluent to poorer individuals. This partial reversal is regressive, as it would benefit the affluent and cost the poorer more.

Summary

We can conclude then, that the poll tax is excellent for promoting market and local government efficiency but administrative and equity problems are considerable, which makes this a difficult tax to apply. It is more appropriate for municipalities which predominantly supply social services and have a stable population.

As the main source of municipal revenue it seems less relevant to Brisbane's situation since the BCC mainly provides property and transportation services. The aggregate of the 1988/89 Budget allocation for recreation, sport, health and community programmes is less then ten percent of the total budget. There is a trend however towards increases in non-property/roads services such as recreation and health. Many Australian local governments have taken on welfare responsibilities, encouraged by the Federal Government (Jones, 1981, p. 145).

The poll tax could be applied as a supplement to a property tax so as to finance these personal and community services. This would take advantage of the positive attributes such as market efficiency, policy effectiveness, visibility, and benefit relationship. But the collection costs, particularly in the maintenance of a register, would be high compared with the level of revenue. It would therefore seem necessary for community and personal services to represent a much greater proportion of the total budget before the poll tax would be viable for Brisbane. Nevertheless the Else-Mitchell Inquiry, over two decades ago, recommended local governments be allowed to experiment with this tax so as to explore possible ways of simplifying the administrative problems. This recommendation is just as relevant today. Local governments therefore, should be granted the power to impose a poll tax. This would permit every council to impose the tax experimentally if it wished.

Summary of Non-Property Taxes in relation to the Criteria

The various forms of sales and income tax have considerable efficiency disadvantages. The local taxes tend to cause market distortion, whereas the piggy-backed taxes do not encourage government efficiency. The poll and local sales and income taxes have serious administrative problems which make them difficult to implement. None of the taxes are equitable from the ability-to-pay perspective when their effect on the national tax mix is considered. The income taxes especially exacerbate the existing bias towards taxing productive efforts. Sales and income taxes are equitable from the benefit perspective when used to finance services for commuters and the poll tax similarly equitable when used to finance social or personal services. Otherwise these taxes are inequitable. Each of these taxes however, has positive features. The local taxes (sales, income, poll) are visible which encourages accountability. The piggy-backed taxes can enhance policy effectiveness.

At this point in time, none of these taxes seem to offer Brisbane a viable alternative to the land value tax. The local taxes have some scope as a supplementary tax provided the administrative difficulties can be overcome. Experimentation may help to achieve this.

CHAPTER FIVE

AN EVALUATION OF NON TAX SOURCES OF REVENUE ACCORDING TO THE EVALUATION CRITERIA

As no-one ever likes paying taxes, there is a continual search in the literature and by municipalities for other forms of revenue raising which do not suffer from the odium of taxes. In addition to levying taxes, local governments can utilise some non-tax sources of revenue. These include intergovernment grants, user charges, licence fees, and entrepreneurial activities (business ventures).

Intergovernment grants include all forms of revenue provided by a higher level of government. Most local governments receive some form of grant. User charges may be used for a range of municipal services, especially trading activities, such as water, sewerage, cleansing and buses. Sometimes user charges replace taxes for these services. For example, water pricing based on metered water consumption is now replacing water rates in Brisbane (BCC, 1988).

Licence fees range from being similar to sales taxes, through surrogate user charges, to direct user charges if based on the administrative cost of enforcing licence conditions. We shall examine licence fees as surrogate user charges. In order to assess the practical applicability of these fees we shall also examine their potential for financing road services.

Finally, many municipalities are turning to entrepreneurial activities in order to supplement their revenues. We shall assess two kinds of entrepreneurial activity: direct involvement in enterprises and separate company ventures. Each of these enterprises may be wholly owned or be a joint venture with the private sector.

There are two common forms of non-tax revenue which we shall not evaluate: borrowing and interest from investments. Debt financing is really a timing adjustment. All funds borrowed have to be repaid, with interest, from amongst the other revenue devices. The main impact on the community occurs as the interest is paid and when the debt matures, but this is financed from municipality's other revenue sources. Interest from investments is really a corollary to debt financing. Funds invested are funds that need not be borrowed. It can safely be assumed that agencies invest temporary surplus funds and seek to maximize this income. If this is not the case it may be that the municipality is inefficient because its main revenues do not encourage accountability to consumer-voters. Little more needs to be said on this subject.

Again the objective is to gain an insight into the revenue devices by assessing them according to the evaluation criteria, and to determine whether any of them are suitable for Brisbane either as a primary or supplementary revenue source.

Inter-Government Grants

There are two main forms of grants commonly used. These are general-purpose and specific-purpose grants. Local governments may utilise general-purpose grants for any municipal function, whereas specific-purpose grants can be utilised only for approved purposes, often as outlined in grant applications by the local government and in accordance with the central government guidelines.

Many local governments favor intergovernment grants because they avoid or reduce difficulties associated with taxing constituents. But there are some major disadvantages for local governments and the public generally which may not be well recognised.

Market Efficiency (** weak)

Studies have shown that grants tend to cause an increase in spending and a reduction in direct local government revenue raising (Spahn, 1979, p. 28). Specific-purpose grants also tend to redirect local government expenditure (Maxwell and Aronson, 1977, p. 64). Often specific-purpose grants require a contribution from the local government. Therefore, grants tend to distort local government expenditure decisions (Hirsch, 1970, p. 129). Consumer choice will be distorted if grants are utilised to subsidise private services or goods supplied to individuals. Matching grants alter local priorities away from local preferences (Scott, 1979, p. 88).

Conditional grants can sometimes be viewed as subsidies for external benefits, to give external beneficiaries some input into the level of service supplied (Gardner, 1978, p. 409). Often though, general-purpose grants are subject to some form of horizontal equalisation to assist poorer local governments. This is a form of protectionism which restrains market forces from having the full impact on regional or urban economies. In the long run, this insulation from market forces may lead to a high degree of inefficiency and uncompetitiveness, as is the case where industries have been are protected by import tariffs for long periods of time (Blakely and Bowman, 1986, p. 9). General-purpose grants can violate the notion of (horizontal) neutrality, distorting migration between communities (Gardner, 1978, p. 415). General-purpose grants are often "effort-neutral". Thus there is no encouragement for efficient local government operations.

Policy Effectiveness (** weak)

Policy effectiveness may also be affected by grants. Specific-purpose grants tend to direct resources away from the policy objectives of local government, towards those of central government. If the objectives are the same at both government levels, policy effectiveness is enhanced. But general-purpose grants may improve the policy effectiveness of a local government as more funds are available from which to fund the desired programmes.

Visibility (* negligible)

Local government accountability is greatly weakened where municipalities are reliant on grant revenue (Jones, 1981, p. 193). Because grant funding of local government is not visible, municipalities have reduced accountability to their electorates for the funds raised. For this reason, the Layfield Enquiry strongly argued against intergovernment grants (1976, p. 186).

Intelligibility (* negligible)

Lack of visibility also makes the funding of services almost unintelligible to consumer-voters. The inclusion of equalisation factors in general-purpose grants breaks the linkage between costs imposed on consumer-voters (rate bills) and local government spending (Jackman, 1984, p. 168), which further weakens intelligibility and accountability.

Autonomy (** weak)

Grants greatly influence autonomy. With the absence of accountability to the electorate for the funds utilised, central governments tend to require accountability to themselves for the utilisation of grant funds (Stewart, 1983, p. 203). This is especially the case for specific-purpose grants, but general-purpose grant applications and grant utilisation may also be subject to close scrutiny by central government agencies in many cases.

Standards and restrictions incorporated in central grants limit local government decision-making authority (OECD, 198a, p. 12). Dependence on grants has increased worldwide since the 1970's and there is a common concern in most countries regarding local autonomy and grants (Auld, 1986 p. 13; Wirt, 1985).

The strongest argument against grants is that they reduce autonomy of local government (Jones, 1981, p. 193). As shown in our model of local government efficiency, this reduces the pressure and incentive for local government efficiency. This may become a vicious circle, as in Great Britain. As local government inefficiency increases, central controls may be introduced further eroding municipal autonomy and efficiency (Duncan and Goodwin, 1988, p. 168-78). However, Gardner (1978, p. 419) argues that conditional grants only alter the circumstances influencing decisions rather than eliminate local autonomy.

Revenue Potential (** weak)

There are additional efficiency problems associated with the revenue potential of intergovernment grants. Grants are an unpredictable form of revenue for local government (Jones, 1981, p. 196). The municipality is at the mercy of central government, unless the governments concerned enter into some form of funding contract to provide assurance of funds for a specific number of years. Large swings in grant funding have been experienced by local governments throughout the world. As accountability and funding constraints impact on central governments there is a tendency for grant funding to decrease.

Large and sudden reductions in grant funding may jeopardise some local government programmes and even threaten the financial viability of a local government (Jones, 1981, pp. 196-7). Capital-only grants and "seeding grants" can leave a local government with a major on-going liability which it has to finance from its existing revenue sources. It has been noted that this can often lead to inadequate maintenance of infrastructure (OECD, 1987a, p. 26).

There is only a limited potential for grant revenue, although some local governments (for example in Great Britain) receive much more grant funding than from their own sources. Grants are not likely to be a growth area for local government. Pressures for taxation restraint and expenditure reduction are easier to accommodate by reductions in grants to other agencies rather than reductions to an agency's own services or the introduction of efficiencies.

Collection Costs (*** moderate)

Revenue potential is also limited by the administrative costs involved. Communications between government agencies over grant funding tends to occur at very high levels in agencies and significant effort by each agency can be expended in preparations and negotiations. In addition to the direct cost, leaders are diverted away from administering their agencies in order to achieve favourable grant outcomes.

Administrative and compliance costs increase as central controls increase. Therefore, specific-purpose grants have greater administrative and compliance costs than general-purpose grants.

Benefit Relationship (*** moderate)

In some instances the rationale of grants will approximate the benefit principle. This could occur if the level of grant reflects the benefit of a subsidised service to the general community (externality). It could also occur where local governments are compensated for costs imposed by other areas, or other forms of externality. Otherwise there is no benefit relationship. The benefit principle is not adhered to when grants are distributed on an equalisation basis.

Ability to Pay (*** moderate)

General purpose grants are often designed to achieve horizontal equity between local governments. Some redistribution is involved since general purpose grants are mainly funded by progressive taxes and the funds are directed towards poorer local governments. Thus, grants often relate to the ability to pay concept of equity. But to the extent to which the grant incorporates a subsidy for externalities, the ability principle is not adhered to.

Summary

From an efficiency perspective, we have seen that there can be serious limitations to the use of intergovernmental grants for funding local government except when grants are used to adjust for externalities. When utilised to fund externalities grants satisfy most of our efficiency criteria and reflect the benefit principle. However, other types of grants are a poor form of revenue from an economic efficiency point of view, but may be structured to achieve some kind of equity according to either the ability or benefit principle.

Brisbane, being a capital city, could be expected to produce significant external benefits which would not be funded by the beneficiaries without grants. This situation is exacerbated by the exemption from local rates enjoyed by federal and state agencies as well as the headquarters of religious and charitable organisations. These organisations provide services well outside the city boundaries whilst the rate exemption is provided by the city's inhabitants.

It would therefore seem desirable from an efficiency and equity (benefit) perspective for Brisbane to continue to receive grant funding, especially if it is based on as assessment of externalities. There does not, however, seem to be scope for this device to become the main source of revenue for the city.

User Charges

Many public choice writers have advocated public sector adoption of user charges in order to attain the perceived benefits of market sector. With user charges, consumers of a good or service are required to pay for its use. By utilising this device governments are said to be able to reduce their reliance on taxes.

Market Efficiency (**** strong)

According to economic theory, with user charges consumers will only demand the level of services they are prepared to pay for (Goetz, 1973, p. 113). Thus when a tax is replaced by user charges as a means of financing the service, demand for the level of service is reduced to that which consumers are willing to pay for. In the absence of monopoly, local governments have to compete with each other and the private sector, which enhances local government efficiency (Saras, 1987, pp. 248-50).

As noted previously, economists refer to three types of services or goods: public goods, merit goods and private goods. User charges are most appropriate to private goods as it utilises the price mechanism to ensure that consumer choice is unaffected by the means of financing. It also addresses the free-rider problem where the full cost is charged.

With merit services, however, if users are charged the full price they may under-consume the service since they are only willing to pay for the value to themselves and not for the benefit to the wider community, so the free-rider problem is not eliminated. Many writers argue that there should be a subsidy equivalent to spillover benefit to the wider community (Baumol, 1972, p. 307; Goetz, 1973, p. 123).

By definition, it is not practicable to charge individuals for the use of public goods or services because the services are indivisible. The free-rider problem would still exist since consumers are willing to pay nothing for the service (because they cannot be excluded) but still demand provision of the service. It should be noted, however, that economists generally argue that there are very few services provided by the public sector which are pure public goods (Gardner, 1978, p. 19).

It is difficult to measure the value of any spillover benefits to the wider community when justifying the level of price subsidy for merit services. This is essentially a political decision. In practice it is likely that interest groups which are the main beneficiaries of any spillover benefits may tend to over-state the value of those benefits to the community and give wide publicity to the claimed benefits.

A recent OECD report claims that technical and infrastructure services are more feasible than social services for user charges because the beneficiaries are more identifiable and the value of the services and cost of inputs are more quantifiable (1987a, p. 66).

Some local governments have experimented with the use of vouchers as a means of providing price subsidies as well as gaining market efficiencies (OECD, 1987a, p. 55). With inflation it could be easier to hold the value of the subsidy below inflation with vouchers than by direct pricing.

Policy Effectiveness (**** strong)

More funds may be available for policy objectives if the local government is not providing services at a loss. The use of pricing also gives municipal administrators clear signals from consumers or to the level and quality of services they prefer and are most willing to pay for (Savas, 1987, pp. 248-9). The Layfield Committee conducted a survey which showed a high degree of community satisfaction with particular user services compared with local governments overall (1976, p. 366).

Visibility and Intelligibility (***** very strong)

User charges have clear visibility and intelligibility (Savas, 1987, pp. 248-9). Consumers will search for alternative suppliers if the quality of the service is inadequate (Savas, 1987, p. 249). This improves accountability and consequently efficiency.

Autonomy (*** very strong)

The local government and the consumer are the only parties to the transaction, therefore the autonomy of the local government is enhanced. Thus, automony improves as the council increases its reliance on user charges. This assumes however, that the municipality has the power to levy charges at a price it sets (Stewart, 1983, p. 205). In some instances higher levels of government impose statutory limitations to certain user charges.

Revenue Potential (*** moderate)

There is a division of opinion as to whether user charges have any major revenue potential. Many writers argue that there is only a limited revenue potential from user charges because of the narrow range of private services supplied (Goetz, 1973, p. 114). Others, however, argue that people may be more prepared to pay for specific local government services than for a general tax to fund those services (Harris and Seldon, 1976, pp. 96-7). Nevertheless there is a strong trend towards user charges (Jones, 1981, p. 246). Increasing resistance to taxes is likely to expand the utilisation of user charges (Savas, 1987, p. 249).

The predictability of user charge revenue is governed by the fact that revenue is related to the demand for service. Therefore it is dependent on the predictability of service demand.

Collection Costs (*** moderate)

There may be cases where it is too expensive administratively to introduce a direct user charge. For example it would be difficult to charge road users for their direct use of local roads, although tolls exist on some major roads and there have been isolated experiments with electronic recording of road usage (BTE, 1982). We will look at an alternatives to direct user charges when assessing licence fees.

Local government accounting practices may not lend themselves to accurate costing of services (OECD, 1987a, p. 62). Local governments generally do not know the total cost of services (Jones, 1981, pp. 151-2).

The extent of administrative costs needs to be weighed against the cost of over-consumption of the service in the absence of a restraining price mechanism. With improvements in technology it is likely to become increasingly feasible to introduce user charges as administrative costs are reduced and technology becomes available to enforce exclusion of non-contributors. For example the use of credit cards and automatic turnstiles, and so on, may in future make user charges practicable.

Benefit Relationship (***** strong)

User charges are the most direct way of implementing the benefit principle (Break, 1980, p. 229), and are especially appropriate for private services (Jones, 1981, p. 245).

Where the wider community enjoys some spillover benefit from a service user charges would adhere to the benefit principle only if the prices were subsidised by the community (through general taxes) to the same extent as the benefits to the whole community (Goetz, 1973, p. 123). However, user charges overcome the spillover problem of private services consumed by non-residents (Jones, 1981, p. 167).

Ability to Pay (* negligible)

One of the main criticisms of user charges is that they are related to a person's willingness to pay rather than ability to pay (Gardner, 1978, p. 399). Poor people may be willing to pay the price but have insufficient funds. Ridler argues that user charges increase the regressivity of the national tax structure (1984, p. 436). On the other hand, this inability to pay could be addressed by central government's welfare and redistribution policies. This would be more efficient than the manipulation of individual transactions or prices. Moreover, the private sector has numerous examples of reduced prices for pensioners and other low income people, for example during off-peak periods (Jones, 1981, p. 246). There is no reason why local government could not follow suit: indeed, in Brisbane, it does so to some extent in making cheaper fares available to pensioners travelling on municipal buses in off-peak periods.

Summary

From an efficiency standpoint, user charges are an excellent revenue source for private services as well as merit services with assessable spillover benefits, and where the consumers can be easily excluded from consuming the service without paying.

It would seem that, with advances in technology, user charges may be able to play an increasing role for certain types of services, (Goetz, 1973, p. 119) if the overall question of income distribution is effectively addressed by the central government.

Brisbane has been increasing the level of many charges for its services towards a level of full cost recovery. But many services remain heavily subsidised from ratepayer funds. The main areas of under-recovery are recreation and sport, and transport operations (BCC, 1989, pp. 50-1).

The level of cost recovery varies greatly even amongst similar types of service, such as recreation facilities, which indicates that the level of price subsidy is not based on an assessment of externalities. Rather, it seems that fees are set at a level that the market is likely to bear. There seems to be a concern that marginal prices would result in low levels of utilisation of existing facilities. There is limited scope for increasing fees without requiring closures or sale of many existing facilities. But many market services, particularly water and sewerage, are funded primarily by property taxes. There is scope for replacing these taxes with user charges based on water consumption. By adopting this strategy, the council could gain the market and government efficiencies whilst reflecting the benefit principle. The BCC recently announced its intention to introduce domestic water meters to facilitate water pricing (BCC, 1989).

Licence Fees as Surrogate User Charges

Licence fees have been promoted in Australia by the ACIR, Joint Study into Local Government Finances, and other bodies and commentators (Harris, 1975, p. 40) as being an alternative revenue source. This is a major source of revenue in some European countries, for example West Germany. But local government licence fees in Australia are generally only levied to cover administrative costs of regulatory activites. There are some state controls which prevent even the administrative costs from being recouped (ACIR, 1981b, p. 31).

There is a very broad range of bases for licence fees. At one end of the spectrum licence fees have very similar characteristics to sales taxes, as fees are based on sales turnover. An example of this is the tobacco franchise fee levied in most Australian states. At the other end of the spectrum, the fee is similar to a user charge, since it is based on the cost of providing the service (for example regulatory service).

In the middle of the spectrum, licence fees could be used as a surrogate user charge where direct prices are impracticable (Goetz, 1973, p. 119). For example, local roads could be partially financed from licence fees on parking stations and fuel sales.

For the purposes of this study, we will confine our attention to the middle category of licence fees, namely the kind of surrogate price charged to consumers of local government services. The reader is directed to the evaluation of local sales taxes for the evaluation of licence fees based on sales turnover. Although legally different, their impact on the evaluation criteria will be almost identical.

Similarly, the reader is directed to the evaluation of user charges in relation to licence fees for the recovery of costs associated with regulatory services. The impact is similar although not identical for two reasons. Licence fees are not voluntary transactions as is the case with user charges. Secondly, the beneficiaries of the licenses are not the licencees who pay the fee, but their clients and the public generally. It can be argued that charging the cost of regulation to business is simply an attempt to internalise the external (spillover) effects of the business. Businesses are thereby forced to take into account the external costs imposed on the economy. Under this assumption it is therefore valid to consider regulatory licence fees as a user charge.

For our study of the use of licence fees as surrogate user charges we shall examine the area of road funding which is currently topical in the literature and in local government circles. In Australia, roads have traditionally been funded from property taxes (rates) and through central government grants. Ratepayer funding is becoming less appropriate given the mobility of road users, compared to limited travel in the days of horse and buggy and early motor cars (Manning, 1973, p. 79). In addition, as central governments are faced with financial pressures they are re-assessing the level of funding passed on to other levels of government. Road funding has been the subject of such a re-assessment, and has reduced in real terms recently (BCC, 1989, pp. 57-8). As direct user charges, in the form of tolls and so on, are impracticable for local roads the appropriateness of business licence fees as proxy user charges on motorists is of interest.

<u>Market Efficiency</u> (**** strong)

The Bureau of Transport Economics (1985, p. 107) claims that it is desirable for reasons of economic efficiency to recover avoidable costs caused by motorists through variable charges related to actual usage. It argues that avoidable costs should not be recovered through fixed charges.

At present, the majority of local government road funding is from property taxes (rates) as a fixed component in each rate levy. It is therefore likely that this funding results in an inefficient allocation of road resources. Any shift towards variable pricing leads to an alteration of consumer preferences. If the prices reflect the cost variability then this is likely to result in the removal or reduction of economic distortions and hence a move towards a neutral situation. Therefore licence fees based on factors which affect road costs is more efficient than fixed licence fees. For example, a fuel establishment licence fee based on volumes of fuel sold is more efficient than a motor vehicle registration fee.

There would, however, be new distortions introduced if such a variable fee were introduced unilaterally by one local government. With consumer mobility, there would be a tendency to distort consumer preferences towards services provided in other local government areas without the licence. For this reason, a degree of tax harmonisation would be required (King , 1984, pp. 201-9).

According to the Bureau of Transport Economics (1985, p. 111) the variable costs from heavy vehicles are significantly greater than for light vehicles. Therefore a licence fee based on fuel usage over-recovers from light vehicles and under-recover from heavy vehicles. This leaves some distortions in the market. If the fee differentiates between petrol and distillate there would probably be a shift in consumer preferences from distillate vehicles to petrol vehicles (BTE, 1985, p. 111].

Spatially based fees might reduce some distortions whilst introducing others. For example, a car park licence fee could be introduced to cover the cost of congestion (in increasing traffic capacities) thereby removing a distortion. But this would have to be spatially based and there would always be fringe areas where motorists would unwittingly be encouraged to park in residential areas and so on.

Consequently, licence fees could be devised to remove existing economic distortions but great care is needed to minimise the creation of new distortions.

Policy Effectiveness (**** strong)

Policy effectiveness is enhanced to a major extent since local government is in a better position to satisfy real consumer preferences rather than the virtually insatiable demand without some form or pricing. For example, parking licence fees encourage greater utilisation of public transport infrastructure and limit peak private transport demand. This allows a better utilisation of existing facilities enabling local governments to give greater emphasis to other policy areas. Empirical testing of these notions would be useful.

Visibility/Intelligibility (*** moderate)

These charges are visible to business owners but much less visible to, and possibly hidden from, to the consumers. It could be argued though, that road funding is already hidden within general property rates. Depending on publicity given to any change in funding arrangements, consumer confusion and lack of comprehension over the charging rationale is possible. In the absence of consumer education and offsetting rate reductions it is likely that consumers may consider the changes to be another government "revenue grab". Despite this lack of understanding of the rationale, motorists would be very aware that each road usage is expensive and are likely to question the value of road facilities funded.

Autonomy (*** moderate)

Surrogate user charges enhance public sector accountability, but the degree of autonomy determines whether this pressure for accountability results in improved local government accountability and efficiency. If the licences are adopted at a central level and the revenues hypothecated to local governments to spend the pressure for operational efficiency are less than if the local governments collect and spend the funds.

Revenue Potential (*** moderate)

It could not be expected that licence fees in the form of surrogate user charges would yield sufficient revenues to finance local government. But a mixture of licence fees could be used to fund particular local government services such as roads, leaving general funding for public goods and services. The potential growth of the revenue base is linked to the basis of licensing. This should be sufficient if the level of the charges is related to costs. The imposition of these licences may reduce or contain demand for new infrastructure as well as the maintenance costs (Goetz, 1973, p. 128).

Predictability of revenue could be assured if the base is related to avoidable costs since both sides of the budget ledger are adjusted. There is, however, be a time lag between funding, based on service, and the provision of services because of the response time and lead time required to improve road facilities.

Collection Costs (*** moderate)

Administrative costs are likely to be high depending on the level of tax harmonisation and the possibility of evasion. For example licence fees may require an increase in parking regulation enforcement costs, although this could be offset by penalty revenue.

The relative cost of collection also depends on the number of licences administered for a given revenue requirement. One licence is cheaper to administer than several, but this needs to be weighed against possible market distortions otherwise created. Validation of licensee records on which the fee is based is also required and this adds to administrative costs.

Compliance costs for the businesses and individuals licensed is also greater. With a variable licence fee, the licensee is required to record and make reports according to the licence base. This adds to the licensee's compliance costs.

Tax Effectiveness (*** moderate)

The extent of evasion also varies according to the degree of fee harmonisation between areas, and the method of recording. The Bureau of Transport Economics noted the widespread evasion of the pre-1980 road maintenance charges as well as the New Zealand use of hubodometers which minimises avoidance and evasion (1985, p. 110).

Avoidance is also possible by altering corporate structures to eliminate liability for the license. But if a licensee is required to operate particular business activities for example, fuel sales or parking, then this can be controlled through legal channels. As noted above, certain types of licences (parking and so on) require additional enforcement to ensure fees are not avoided in undesirable ways such as parking in adjacent residential areas outside the licensed area.

Delinquency of payments is unlikely, but instances of using "straw" companies which became bankrupt to escape payment have been noted (BTE, 1985, p. 110). Provided that payment of the licence fee is required to continue or transfer business operations then delinquency is unlikely to become a problem. Long term delinquency can be eliminated if any outstanding licence fees can be attached to the land.

Benefit Relationship (***** very strong)

Roads are not public goods, but can be considered market goods (Haritos, 1973, p. 19). Roads are only available to vehicle owners and operators, not equally available to all. The exclusion principle can be applied by imposing licence fees and fuel taxes, and "the marginal cost of a vehicle journey is not an insignificant portion of the overall road cost" (Haritos, 1973, p. 19). Therefore the benefit principle as applied to market goods would seem to be very appropriate.

Ability to Pay (** weak)

Vertical equity of the fees is difficult to judge and depends on the composition of road users. Manning (1973, p. 79) argues that motoring is an activity of the wealthy, which makes charging for road use vertically equitable.

Horizontal equity depends on the degree of licence harmonisation or cross-subsidisation. With widespread implementation of similar licence types, horizontal equity is achieved. One area that needs close attention is the relationship between heavy and light vehicle usage. It would seem that some additional form of heavy vehicle license fee is required to ensure horizontal equity, as well as economic efficiency.

Summary

Although some isolated countries have experimented with pure road pricing (BTE, 1985), such pricing through direct prices is not yet generally feasible. The recent development of a driver information system which "reads" bar codes stored in roads could be adapted to charge road usage directly (Davis, 1989, pp. 61-2). Surrogate charges through licence fees can only be a second best solution. This, however, would be a vast improvement over the present situation which results in enormous urban problems.

It seems then that licence fees offer scope for local governments to fund some of their services. Caution is needed to structure fees which are economically efficient as well as minimise administrative and compliance costs and the potential for evasion and avoidance.

Roads and transportation facilities are one of the main services provided by the Brisbane City Council. Funding is currently from property taxes, grants and user charges (bus fares and parking fees). Many of the arterial roads are at maximum capacity, resulting in the commissioning of a major traffic and transportation study. Federal funding for urban arterial roads has been declining over the last decade (BCC, 1989, p.58). It is therefore pertinent to consider licence fees as surrogate user charges from which to finance these services.

Unlike other states of Australia, Queensland has no fuel tax. Therefore there is scope for the council to introduce fuel establishment licence fees based on volumes sold. But if the council introduces a licence fee unilaterally there will be some market distortion, as motorists may be encouraged to purchase fuel outside the city boundaries. This device will have greater distortionary effects on the city outskirts. Such distortion, however, needs to be weighed against the existing distortion caused by the lack of consumer pricing for road usage and the resultant public transport losses.

Car parking licence fees could also be introduced to account for the cost of peak commuter road usage. This needs to be coupled with enforcement of parking controls in adjacent streets to be effective which will increase administrative costs. This would still fail to recover peak load costs imposed by motorists who pass through the city centre without parking.

Heavy vehicles cannot be fully charged by the above method unless the licence fee differentiates between petrol and diesel fuel. Even then petrol driven heavy vehicles will be underpriced. It is unlikely that a fee introduced in one city will result in any significant distortion in the type of heavy vehicles normally purchased. But heavy vehicles, often with large fuel capacities will be encouraged to purchase fuel supplies outside the city.

An alternative is to seek an arrangement with the state government for a share of heavy vehicle registration fees to cover additional costs imposed by such vehicles, in addition to subsidies to cater for general externalities.

Despite these problems, careful structuring and implementation of a package of licence fees, accompanied by a corresponding reduction in property rates could result in a more efficient and equitable transportation system in Brisbane.

Local Government Enterprises (Direct Involvement)

A joint state and local government conference in Melbourne 1987 promotal municipal enterprises (Osbourne, 1987, p. 28). Local governments have traditionally operated enterprises both for service delivery and revenue raising (Richards, 1984, p. 1), including electricity, gas, water, sewerage, abattoirs and so on. In many cases they have had monopoly control of these markets and sometimes still do. In the face of reducing grant funding and increasing taxpayer resistance to all forms of taxes, local governments are again being advised to undertake enterprises or "entrepreneurial activities". As with the treatment of the other revenue sources we will apply our evaluation criteria to these activities. But we will distinguish enterprise activities operated directly by the local government (possibly with a venture partner) from independent enterprises which also could include a private sector venture partner. The distinguishing feature is whether or not the enterprise is an independent organisation with limited liability. As we shall see each affects the criteria in different ways.

Market Efficiency (** weak)

If a local government enterprise faces different conditions in the market to that of its competitors a distortion occurs (Howard, 1985, p. 308). In many cases, local governments are exempt from taxes and may also be exempt from government-imposed market controls. It could even be in the position of enforcing regulations on its competitors whilst being exempt itself (Baumol et al., 1988, p. 588). These circumstances give municipal enterprises a competitive advantage which distorts consumer preferences. On the other hand, a local government may be subject to additional controls and procedures from which other market players are exempt and places it at a competitive disadvantage.

For example fees and charges may have to be set annually and subject to budget debates, whereas competitors may have more flexibility.

Where local government is in a monopoly position consumer preferences are distorted towards the services provided by the enterprise (Savas, 1987, p. 251).

It is likely, therefore, that local government enterprises will distorts the market in some manner.

Policy Effectiveness (** weak)

Effectiveness of local government policy may also be weakened by these enterprises. Management may be distracted away from mainstream functions as attention is diverted to ensure enterprise effectiveness rather than policy effectiveness (Joint study, 1976, p. 89). "American experience showed a city would become an entrepreneur more interested in commercial ventures than the needs of its community" (Courier-Mail, 1988, p. 15). Cosy relationships between Councils and business people can lead to the public being ignored in favour of businesses (Jones, 1981, p. 2). A joint venture in Woollongong required the Deputy Town Clerk and Deputy Treasurer to abandon all of their normal duties for two years in order to participate in the venture (Liverani, 1987, p. 15). Funds may also need to be diverted to meet enterprise capital requirements, making fewer funds available for policy areas in some years.

In addition, the local government may find conflict between its policies and enterprise activities. If the conflict is resolved in favour of the enterprise (to protect revenues) then obviously its policy effectiveness has suffered. Stewart argues that "political" criteria dominate over "commercial" criteria in the management of trading activities (1983, p. 133). On the other hand local government enterprises are often established to effect some form of economic intervention. Barnes, Campbell and Preston (1987, p. 8) assert that such intervention is a "game of hit and miss played with more enthusiasm than success". Therefore no additional policy effectiveness can be attributed to this device for economic intervention policies attempted.

Visibility/Intelligibility (*** moderate)

Although the enterprise is visible in the market the revenue (profit) transferred to general local government revenues for privision of services are not be visible. But the enterprise is fully accountable to its consumers for the services it supplies, provided they are funded on a user charges basis rather than a taxation basis.

A similar situation occurs with intelligibility so that the local government is accountable for transactions with clients, which encourages enterprise efficiency. But it is not accountable for the profit utilised for general services, so it does not encourage general local government efficiency.

Autonomy (**** strong)

Assuming local government has the independence to undertake these activities, it must already have a degree of autonomy. An independent source of revenue reduces reliance on grants and also enhances autonomy.

There is a potential conflict of interest which needs to be addressed (Howard, 19875, p. 308). A close working relationship often occurs between the local government and its private sector partners (Stewart, 1983, p. 133). The local government is also partly dependent on venture revenue. This may create a conflict of interest when the local government is considering, for example, a development application by the enterprise or a private sector venture partner (Peat, Marwick, Mitchell, 1987, p. 4).

Revenue Potential (** weak)

It is unlikely that these enterprises yield sufficient funds to be the primary revenue source. As noted above, in some years the enterprise may require considerable capital injections. (Joint Study, 1976, p. 90). This may result in a net drain on revenues rather than an increase in revenue.

Because the municipality has the full liability of its enterprise it is subject to considerable risk (Groom, 1987, pp. 272-3). If the enterprise fails and makes substantial losses or becomes insolvent, the loss has to be funded from other revenue sources, which are probably taxpayer funds (Lewis, 1985, p. 192). The risk to the Council is unlimited but the extent of risk depends on the likelihood of business failure. Many joint ventures or local government enterprises are those that are avoided by the private sector because of disproportionate risk (Groom, 1987, pp. 272-3). An example of an enterprise insolvency threatening the financial viability of a municipality is the City of Sale Development Project (Peat, Marwick, Mitchell, 1987, p. 4). However there is minimal risk associated with monopoly undertakings which provide essential products such as water and sewerage.

The predictability of the revenue is dependent on market conditions, capital requirements and any liabilities resulting from the unlimited risk borne by the Council. This revenue source is therefore much less predictable than any taxation source.

Collection Costs (** weak)

Existing administrative systems and processes may not be suitable for the flexibility the business units require in order to adapt to the market. Therefore dual administrative processes could occur or the business unit must comply with normal administrative processes. Either situation leads to internal conflicts and confusion which could damage operational efficiency (Groom, 1987, pp.273). Administrative costs are increased in attempts to resolve problems.

There are unlikely to be any additional compliance costs to those who provide the revenue, namely the business's consumers. The local government itself may have additional costs in complying with market controls and reporting requirements.

Tax Effectiveness (**** strong)

Avoidance and evasion is not a problem, provided the transactions with customers is by user charges. If services are financed by a tax then the evasion and avoidance problem is according to our evaluation of that particular tax. For example if improved value taxes are used to finance water and sewerage undertakings the enterprise's tax effectiveness is related to that of improved value taxes.

Delinquency of payments may be a problem for local governments. If credit facilities are normal in the market the local government enterprise is pressured to compete. But local government debt collection prodedures are based on the premise that most debt can eventually be recovered as a charge on the land. Municipalities may not have the expertise or system required for such credit management (Dotter and Mansfield, 1984, p. 70).

Benefit Relationship (*** moderate)

The equity effects of local government enterprises are dependent on the pricing policy of each Council. If the products are priced along market lines it adheres to the benefit princple for market services. But if the services has a degree of external benefit to the wider community, in other words if they were merit goods, then such a pricing policy does not strictly adhere to the benefit principle and leads to a less than efficient level of consumption.

It is not, however, uncommon for local government trading operations to sell at a price below cost or below market levels (Stewart, 1983, p. 133). Provided there are in fact external benefits to the community and this is reflected in the level of subsidy or underpricing the benefit principle is still be applicable.

Ability-to-Pay (*** moderate)

Elected local government representatives can easily be susceptible to interest groups representing the users of a service pressing the case for price subsidies on the grounds of benefits to the community or ability to pay. Opposition to user charges, could be expected from consumers accustomed to free or subsidised services previously funded by taxes (Savas, 1987, p. 281). For example, a motorists journal describes road pricing as "Orwellian" (Davis, 1989, pp. 61-2). It is therefore quite likely that the prices levied by a local government enterprise are less than the level of private benefit and may contain elements of ability or capacity to pay.

These pressures for price subsidy create a tension in the organisation between equity issues and the profit making purpose of the enterprise.

Summary

Overall, direct local government enterprises appears to have potential for distorting the market and create other inefficiencies. With the exception of monopoly operations there is a high risk factor and the capital requirements may negate the revenue raising potential of this device. Interest group pressure may lead to underpricing and other market distortions, whilst the overall equity impact is unclear.

Local Government Company Ventures

An alternative means of undertaking local government enterprises is through a joint venture with a private sector organisation or through a special purpose venture company. North American and European governments have set up limited liability companies on a large scale to provide technical services or public utilities (Norton, 1985, p. 41). In the United Kingdom "Business in the Community" (BIC) organisations have been established as limited liability companies with the objective to establish corporate social responsibility and community involvement (Duncan and Goodwin, 1988, p. 143). New Zealand has converted a number of trading departments into state owned enterprises (Reynolds, 1987). Company ventures are either wholly owned by a municipality or a joint public/private sector venture. They can be subsidised, required to break-even or return a profit.

Market Efficiency (***** very strong)

A separate joint venture organisation is more likely to have a neutral effect on the market as it is subject to market conditions, such as regulations and taxes. Such organisations are not be subject to the special regulatory constraints of a municipality (Goldman and Mokuves, 1984, p. 162).

Policy Effectiveness (***** very strong)

Operational efficiency of both the local government and the venture organisation is also enhanced. The local government would be able to focus its energies on municipal functions to ensure policy effectiveness. The venture managers, utilising private sector expertise can focus on business effectiveness(Savas, 1987, p. 140). Reynolds (1987) notes however that a tension can develop between the social and commercial objectives of state owned enterprises.

Venture companies also allow local governments to exploit opportunities and maximise the use of its assets. A local government may find it has under-utilised assets such as property, by-products and expertise (Savas, 1987, p. 165). Through an enterprise it can improve the utilisation of assets so that a return is achieved (Henningham, 1987, p. 36). Duncan and Goodwin however, claim that this device allows non-elected bodies to use public funds or assets whilst being dominated and responsive to the interests of private capital (1988, p. 144).

Visibility/Intelligibility (*** moderate)

As with direct local government enterprises, the venture organisation is visible in the market. Its services and prices are visible and intelligible, but the profit returned to local government and applied to services is invisible. To this extent, accountability and efficiency of the enterprise would be encouraged, but not the local government accountability and efficiency.

Autonomy (*** moderate)

We have assumed that the joint venture has independent management. This entails the local government handing over some of its own autonomy to another organisation. Local government therefore is partially dependent on the actions and results of these independent managers, unlike the direct local government venture (Duncan and Goodwin, 1988, pp. 141-144).

A municipality can, however, establish the organisation with set objectives and accountability mechanisms to ensure the objectives are met (Terry, Jones and Braddock, 1988, pp. 57-8). There is a delicate balance between venture autonomy and accountability to the local government. If carefully developed, both local government and joint venture efficiency may be optimised.

As noted with local government enterprises there remains potential conflict of interest which needs to be addressed. A close working relationship can occur between the local government and its private sector partners and the local government is still partly dependent on venture revenue. This might create a conflict of interest when the local government is considering, for example, a development application by the venture or a private sector venture partner.

Revenue Potential (*** moderate)

As with local government enterprises, venture organisations are unlikely to have sufficient potential yield to be the primary local government source of funds. But it does not share the undesirable yield consequences of the local government enterprises. Capital funds need not be provided by the local government but can be raised through private sector mechanisms such as share floats, venture partner funding, loans or through capital markets (Goldman and Mokuvas, 1984, p. 162). This enables the municipality to utilise its funds for local government services rather than for fluctuating business requirements.

Although a venture organisation is assumed to be liable for all taxes some taxation incentives may enhance potential yield. For instance, tax deductability of interest costs and dividend imputation can be utilised to reduce the overall level of tax and make debt financing less expensive than for direct local government enterprises. (Goldman and Mokuvos, 1984, p. 162).

Another important yield benefit is that risk and liability is contained within the venture. Local government liability is limited to its equity in the venture but the potential risk cannot spread to other local government funds.

Throughout the world there is an increasing involvement of local government in joint ventures and enterprise activities suggesting that this device is a potential growth area. Whether or not this increases municipal revenues depends on the viability and profitability of each enterprise.

Revenue from joint ventures is more predictable than for local government enterprises, since the fluctuating capital requirements are eliminated and the risk is contained within the enterprise. Nevertheless, revenue from the enterprise is dependent on market conditions and is less predictable than taxation devices. This is different from to the City of Sale experience where the Council experienced a massive liability associated with a venture risk because it underwrote the main loan financing, even though the venture was operated through a limited liability company.

Collection Costs (*** moderate)

A separate venture organisation requires a separate and independent administrative system. This allows the local government's administrative systems to remain unaltered but requires some additional establishment and operational costs in the venture organisation.

The organisation also has additional costs in complying with all government and market requirements, but is not subject to special legal requirements imposed on local governments. There are however no additional compliance costs for the consumers of the services who ultimately provide the revenue.

Tax Effectiveness (***** strong)

As there is free market exchange of goods for a price, evasion and avoidance problems do not arise. Delinquency is also less likely to be a problem as the private sector business managers involved in the joint venture are likely to have sufficient credit management experience.

Benefit Relationship (***** very strong)

Equity effects are much clearer with separate enterprises than local government enterprises. Market prices are invariably charged. If the services are considered to be merit goods by the local government because of perceived external community benefits then a direct subsidy to the organisation or the consumers, for example by vouchers, is the only way a non-market price can be introduced.

Ability to Pay (* negligible)

In the case of services previously supplied directly by local government (at a loss) which are transferred to an independent enterprise there is likely to be a shift from pricing on the benefit principle for merit goods or capacity to pay considerations towards market pricing in line with the benefit principle for market goods. Interest groups protesting at this shift are less likely to be successful because of the operational independence of the enterprise.

Summary

This form of enterprise activity has many efficiency benefits and shifts the equity effects towards the benefit principle for market goods. Considerable care is needed in establishing the appropriate degree of autonomy and accountability and to minimise the potential for conflicts of interest.

Summary of Non-Tax Revenue Sources in Relation to the Criteria.

The non-tax sources of revenue have a number of virtues which make each of them viable as a supplementary form of revenue, although direct enterprises may have considerable risks. With the exception of grants none of them have sufficient revenue potential to be a primary source but each of the devices is applicable in certain circumstances. There are instances where grants are the primary revenue source but this is associated with a loss of antonomy and agency efficiency.

Grants seem most appropriate for financing Brisbane's externalities. In this case it satisfies most of our criteria. User charges are suitable for private and merit services wherevertechnologically feasible. For Brisbane such services include refuse collection, buses, water, sewerage and some forms of recreation. Technology is not presently viable for applying users charges to roads but a package of licence fees may serve as a suitable surrogate. Entrepreneurial activities offer some scope to supplement revenues, perhaps for financing some non-property public goods whilst putting underutilized assets to work. Direct involvement may be appropriate for "natural monopolies" such as water and sewerage but too risky in other cases. Company ventures satisfy more of our criteria than direct ventures but care is needed to balance enterprise autonomy with accountability to minimise the possibility of conflicts of interest arising.

Having evaluated each of the revenue devices we now need to consolidate the findings. This is in the form of a matrix table showing the impact of each device on the criteria and a discussion of the research findings.

MATRIX OF REVENUE DEVICES TO THE CRITERIA

	LV	IV	PB-ST /IT	LIT /LST	POLL T	GRANTS	UC	LF	LGE	LGCV
Market Efficiency	*****	**	**	**	****	**	****	****	**	*****
Policy Effectiveness	*****	**	*****	**	****	**	****	****	**	*****
Visibility	****	****	*	****	*****	*	*****	***	***	***
Intelligibility	***	***	**	**	***	0	*****	***	**	***
Autonomy	***	****	*	***	***	**	*****	***	***	***
Revenue Potential	****	****	**	***	****	**	***	***	**	***
Collection Costs	****	***	**	**	*	***	***	***	***	***
Tax Effectiveness	****	**	**	**	*	0	***	***	****	****
Benefit Relationship	**	**	*	**	****	***	*****	*****	*****	*****
Ability to Pay	***	***	***	***	**	***	*	**	*	*

0	not applicable
*	negligible adherence to criteria
**	weak adherence to criteria
***	moderate adherence to criteria
****	strong adherence to criteria
*****	very strong adherence to criteria

LV	Land Value Taxes
IV	Improved Value Taxes
PB-ST/IT	Piggybacked Sales/income taxes
LIT/LST	Local Income Tax/Local Sales Tax
POLL T	Poll Tax/ Community Charge
GRANTS	Grants and Subsidies
UC	User Charges
LF	Licence Fees (Proxy user charges)
LGE	Local Government Enterprises
LGV	Local Government Company Ventures

CHAPTER SIX

CONCLUDING REMARKS, SCOPE FOR FURTHER RESEARCH, AND A SUGGESTED TAXATION PACKAGE

In the foregoing chapters I have outlined the efficiency and equity aspects of the main local government revenue sources. It needs to be remembered that each of the devices has been reviewed in their pure form although some common adjustment devices have been noted.

The Impact of Adjustment Devices

In practice, it is unlikely that many of the devices are implemented in their purest form. Adjustment devices are common and each of these impacts on our evaluation criteria. We will look at some examples.

Exemptions and rebates given against property taxes may introduce distortions in consumer preferences, creating market distortions and excess burdens. Valuation concessions, for example valuing commercial property used for residential purposes as residential property, may work against the policy effectiveness a tax may otherwise have in encouraging the highest and best use of land.

Deferral of tax liabilities and changes to payment methods may reduce the visibility of the tax. Most concessions, exemptions and so on increase the complexity of the tax, thereby reducing intelligibility. Autonomy may be reduced by central government decreed exemptions or central concession schemes.

Potential yield, growth and predictability are influenced by concessions and exemptions. For example, with an aging population, pensioner concessions affect both the yield and growth of a tax.

Administrative costs may be increased with each adjustment device. Taxpayer compliance costs may also be increased, if for instance, special concession applications are required to be lodged and evidence of eligibility provided.

Differential rates of tax may encourage evasion or avoidance activities. And finally, delinquency may be reduced by concession schemes related to capacity to pay.

Caution needs to be exercised in examining particular local governments revenue sources, to also consider the effect of any adjustment devices. The evaluation criteria we have developed would be equally applicable to these devices.

The foregoing analysis is primarily an analysis for policy making in that it enables the policy maker to select the revenue device which most suits his preferences. But it can also be used as an analysis of policy making that has already occurred. By determining which evaluation criteria have been satisfied by a particular policy change we can see whether the changes accord with one of the normative theories (OT, ET or FE) or whether the change supports the positive fiscal exchange theory of a levethian attempting to maximise its extractions from the public.

Policy changes which increase revenue growth, potential yield, predictability and tax effectiveness or reduce visibility and intelligibility would support the positive fiscal exchange theory. Such policy makers are likely to prefer grants, capital taxes (including property taxes) and the use of multiple concessions to minimise taxpayer resistance.

In contrast, a policy maker attempting to implement the normative fiscal exchange tradition would seek changes to reduce growth, predictability and yield and increase visibility intelligibility and benefit relationship. Changes which increase market efficiency, vertical equity, (ability to pay), tax effectiveness and seek revenue elasticity (growth) whilst ignoring collection costs would support optimal taxation concepts.

Changes in support of normative equitable taxation literature would tend to increase horizontal equity, market efficiency and intelligibility whilst reducing collection and compliance costs. Horizontal equity, however, may be the only focus of attention.

Overall Evaluation and Suggested Packages

Of the taxes we have evaluated in their pure form land value taxes seem to be the most efficient. If the benefit principle is accepted as the basis of equity, land value taxes could be made more equitable by funding many municipal services, other than property services and general community services, from other sources. This would enhance the intelligibility of the tax as well.

Many authors (Musgrave, 1985, p. 27) while recognising the superiority of land value taxes notes the inequity in shifting from other taxes to this tax. Such a transition needs to occur over a long period of time to minimize this inequity.

> Radical reform of the property tax requires the weighing of advantages and disadvantages in a hard and unpleasant choice among alternatives none of which is desirable on all counts. It is in the nature of life to present societies and individuals with hard choices (Netzer, 1966, p. 220).

Zodrow (1981, pp. 401-418) demonstrates that immediate partial reform may be the optimum solution since it is likely to maximise the efficiency gains whilst minimising the inevitable inequities that will ensue.

For Brisbane, it seems that the site value form of LV tax is superior to the existing uniform capital value base on the grounds of improved intelligibility and administrative costs. Of the other taxes I offer some conclusions for local government in general and Brisbane in particular. The non-property taxes appear to have too many administrative problems to be a viable option for local government funding at this stage. These problems tend to make the taxes inefficient.

It remains to be seen if the British community charge can be administered efficiently, but at the outset it seems to have fundamental disabilities. Such a poll tax would be more equitable according to the benefit principle for local governments which provide more community services, such as welfare, education and police, than property services. Therefore, it seems more applicable for American and British local governments than for their Australian counterparts.

None of the non-tax sources of funds offer potential yield to be a candidate for the primary local government revenue source. This may not be a problem under optimal taxation theory but would ocnflict with the ideals of normative fiscal exchange theory. Some of these devices offer scope for supplementary funding which could make the property taxes more efficient and equitable. User charges could be utilised to finance and control demand for market services provided by local governments. This includes water, sewerage, refuse, public transport and some health and recreation services. Licence fees, used as surrogate user charges could be used for road funding, provided they are carefully designed and monitored. This could also be supplemented by specific user charges such as tolls on bridges.

Grants seem to be a poor general revenue device from the efficiency criteria, but could be utilised to a small extent to fund redistributive services on behalf of central government and to compensate for externalities. Grants could be replaced by local government enterprise revenues as a form of general purpose funding for general community services (public goods). This would need to be in the form of company ventures to minimize risk and policy distraction.

Sometimes these devices could be used in conjunction. For instance, a bridge could be constructed and funded by a company venture and recouped through a user charge in the form of a toll (OECD, 1987b).

By utilising these forms of non-tax revenues, local government is required to raise much less funds from the property tax. It could become primarily a tax used to finance property services, making it more intelligible and equitable (benefit based) to the community. Although these suggestions offer many advantages they have the consequence of raising much less revenue from LV taxes for the same cost of valuation and administration. Therefore, the relative cost of collection would be increased, making it a less efficient tax from this standpoint. This in turn will put pressure on valuation authorities and local governmentsto reduce these costs, perhaps with the aid of computerisation.

Computerisation has already enabled annual valuations in some areas. Perhaps the future will see even more frequent valuations linked to billing periods (e.g. quarterly, half yearly). Given the low incidence of changes to valuations after objections and appeals, valuations could be made effective immediately, with retrospective adjustments in the event of a valuation change. This is similar to personal income tax deductions which are made on assumed basis during the year and adjusted following an annual return. There seems to be no need for delaying the impact of valuation changes on the much smaller amount of local government rates. This possibility would reduce tax visibility and partially support the positive FE theory of a levethian attempting to maximise revenue but it also would increase intelligibility of the tax.

Scope for Further Research

These conclusions can only be tentative since we have not undertaken an evaluation of the effect of common adjustment devices or the applicability of particular local government services to the various revenue devices. As there is no comprehensive study on these matters, there are obviously areas which would benefit from further research.

Empirical research into the impact of user charges, surrogate prices (licence fees) and municipal enterprises on the evaluation criteria could also be useful.

As noted above, the evaluation criteria could be used to determine which tradition is implemented in practice. In particular it would be useful to analyse the policy changes that are eventually implemented by the Brisbane City Council.

Conclusion

Nobody likes paying taxes, therefore there is never likely to be a perfect tax in the eyes of either the community or policy makers. But one of the hallmarks of local government is that it allows diversity to efficiently adapt to local community needs. There it should be able to adapt its revenue source to satisfy community needs. It is hoped that this review will assist in gaining a better understanding of the revenue options available to municipalities and the motives which may govern which options are chosen.

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