METHODS OF MUNICIPAL FISCAL EVALUATION

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ABSTRACT

This is an analysis of methods available for municipal fiscal evaluation. The study attempts to explain the selection of factors included in evaluation tools designed to gauge municipal financial condition. It also attempts to explain how these factors are interpreted as municipal fiscal strengths and weaknesses. Among the consequences which can undermine municipal financial management are dwindling revenues, increasing service demands, and increasingly complex financial administration systems.

The municipal fiscal evaluation literature provides information about the technical design possibilities as well as choices expressed in tools currently used. There are inconsistencies in the measurement of fiscal indicators as well as differences in the interpretation of results. Two basic approaches, comparison and case study, are discerned within the variety of tools found in the literature. However, that literature does not provide explicit reasons for choosing a specific evaluation approach.

An inherent problem in municipal fiscal evaluation design is the conflict between public service objectives such as health and welfare and corporate objectives such as financial solvency and economic efficiency. Further investigation focuses on attempts in public finance theory to reconcile public and corporate objectives. The two mainstream public finance ideologies, Social Welfare and Public Choice, are found to parallel the comparative and case study evaluation approaches.
A second conclusion relates the design of a municipal fiscal evaluation to the role it is intended to serve. Financial management requirements are not uniform across cities, nor are the political objectives of agencies doing evaluations. Sponsors tend to emphasize factors which reflect their own interpretation of financial problems or management requirements. In general, case study fiscal evaluations are best suited for use by municipalities, while the comparative approach can assist senior governments in ensuring the financial security of local governments.
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1.0 INTRODUCTION

Local public expenditure levels in Canada are a function of activities mandated by the provincial government, and activities accumulated in response to local voter demand. Whatever the degree of provincial control may be, Canadian municipalities are involved to some extent in a variety of expenditure responsibilities, such as education, transportation, planning, protection, health and social assistance, housing, industry and tourism, and recreation and culture (Bish 1981). Most provinces have established some form of board with quasi-judicial powers to monitor municipal activities, particularly in land use planning, capital expenditures, and borrowing (Bird & Slack 1983). In British Columbia, the Municipal Finance Authority (MFA), affiliated with the provincial Ministry of Municipal Affairs, is the authority overseeing borrowing (Bish 1981). Other municipal functions are monitored by the ministry administration.

When financial resources were on the rise, governments were able to increase their spending responsibilities with relative ease, to reach an unprecedented level of involvement in the local economy (Bennett 1980). Rapid growth in municipal expenditures during the 1960's to 1970's was caused by rising demands, such as those for increased services, local improvement projects, social services, as well as increased public employee bargaining power. The increase in expenditures was off-set by senior government aid, higher levels of personal income, and economic growth, resulting in enlarged revenue funds. The
voluntary addition of new spending responsibilities along with higher level commitment to existing programs was accepted when it was accompanied by an accretion of wealth in the municipality.

The growth of local government continued largely uninterrupted and unquestioned until the economic recession forced public administrations to consider the financial implications of municipal policy and service levels. The recent recession, as evidenced in economic decline, population change (often decline), and constricted local and intergovernmental public revenues, has intensified the fiscal pressures being experienced by municipalities.

The level of revenues required for municipalities to sustain traditional operation standards is no longer available, and the tax burden has become excessively noticeable to taxpayers. Sometimes, these circumstances have contributed to the financial emergencies of larger American cities, and to considerable financial difficulties in other cities. The continuous juxtaposition of revenue and expenditure demands has induced the consideration of ameliorating tools other than tax increases.

The search for alternatives to local tax increases and local service cutbacks has sparked interest in techniques of municipal fiscal evaluation. Municipal fiscal evaluation tools are thought to be useful for managing scarce financial resources without risking the good-value-for money that taxpayers expect. Usage of the "evaluation" term conjures up images of traditional
evaluation formats which are associated with specific programs. Municipal fiscal evaluations are not molded to the same rigid structure because they are responding to some unorganized perceptions of fiscal stress.

The basis of fiscal evaluation tools is the use of financial indicators for financial analysis. Indicators may show direct, or indirect relationships to fiscal condition, and they may also show changes over time in the fiscal health of one jurisdiction, or permit comparisons of jurisdictions with similar characteristics.

The use of formal fiscal evaluations in a municipal context is fairly novel. In the past, other strategies of financial management have been favoured. At the local government level, city treasurers have been forced to accept some expenditure cutbacks, and the postponement of planned program or service enhancements. At the provincial government level, most activity has focussed on the degree of provincial financial responsibility for local service delivery.

Regardless of whether or not a 'financial crisis' exists within a municipality, local government continuously faces the challenge of managing scarce financial resources. Downes (1985), suggests that without guidance, or planned strategy, most local governments, can at best, muddle their way through fiscal uncertainty. Typical municipal responses are described by Downes as:

Denying there is a problem, delaying action until a crisis occurs, stretching the organization to its limits, resisting timely action, cutting, but then restoring lost funds as soon as possible. (1985, page 3)
Municipal fiscal evaluations have been used as a research tool, and as a management tool. As a research aid, municipal fiscal evaluations have been used to learn about three important aspects of municipal fiscal stress (Bird & Slack 1983 p. 13).

1. Its measurement (identification)
2. Its causes (indicators)
3. Its significance (criteria)

The preliminary objective of researchers was to become reasonably adept at identifying financial problems, as in item (1) above. Attempts to find a solution involved refining the research to include (2), financial indicators. Senior government agencies focussed more intently on the significance of problems, and criteria to interpret their seriousness.

The use of fiscal evaluations by management is becoming increasingly popular. More often, the literature reports that fiscal evaluations are the tool chosen by credit agencies, municipalities, and senior governments. However, that is not to suggest that the evaluation is the only answer to effective management, nor that municipalities have begun to accept it as such.

The American public has become attuned to the question of local fiscal condition since the virtual bankruptcy of New York city in 1975. By 1980, similar problems were detected in Cleveland, Toledo, Detroit, and San Francisco (Standard & Poor's 1980). Municipal credit rating agencies like Standard & Poor's became sensitized to the accounting and financial reporting
practices of U.S. cities, resulting in several cases of Standard & Poor's downgrading or withdrawing municipal bond ratings (Standard & Poor's 1980).

There have been several efforts in the U.S. to develop fiscal indicators that would help cities interpret financial information and take action to avoid financial emergencies, such as those experienced by New York in 1975, and by other cities since. The commitment of resources in the U.S. to studying problems of local public finance has come from both public and private sectors, and has produced several major studies of urban fiscal strain.

The documentation of Canadian experiences with the municipal fiscal evaluation as a research or management tool is sparse. In a survey of western Canadian municipalities, researcher Brian Downes (1985) found very little systematic monitoring of financial performance. Indeed, a search in the library for materials pertaining to the measurement of municipal fiscal health anywhere in Canada retrieves very little. Downes suggests that this is so because in Canada, very few people perceive resource constraint at the local government level as a serious problem and certainly not as a fiscal crisis.

Bird and Slack (1983) also support this view, in their examination of urban public finance in Canada. It is their contention that Canadians mistakenly perceive American problems as their own, including the recent attention given to the fiscal crises of many large U.S. cities. Downes, and Bird and Slack agree that Canadian municipal fiscal problems could never result
in bankruptcy, largely because of the constitutional status of municipal corporations, and the tendency of provincial governments to bail out municipalities when necessary. In addition to the protective structures enveloping Canadian municipal finances, is the fact that social and economic conditions which can accentuate fiscal stress are less severe in most Canadian cities.

Nevertheless, Canadian municipalities could benefit from the American experience with fiscal evaluations. Although Canadian municipal fiscal problems are not in the magnitude of some American cities, Canadian municipalities share the challenges of eroding revenues, increased expenditure demands, aging infrastructure, and complex financial arrangements with senior levels of government. The fiscal evaluation could prove most useful to municipalities as a tool to improve financial management, and, ultimately, financial performance. In this role, the fiscal evaluation could also serve as an early warning system.

This research turns to American examples of municipal fiscal evaluation in order to discover the critical elements of an evaluation, and to identify the most appropriate uses for an evaluation in the British Columbia context.

A preliminary examination of this literature finds that there are variations in evaluation approach and in the selection of indicators. Furthermore, very few authors of evaluations offer a rationale for the approach and indicators chosen. What becomes clear from the overview of evaluation tools, is that
municipal fiscal evaluation is not simply an exercise of assembling measures of financial operational status and wealth.

Serious consideration of municipal fiscal condition automatically involves measures which implicitly reflect the balance between public service objectives and economic efficiency. Consideration of financial stability also includes an examination of fiscal responsibility: Are taxpayers getting what they pay for?; and, Does the government deploy funds efficiently? These are questions which relate fiscal management to current operational status. The scope of these concerns is not often addressed by a single evaluation. Nevertheless, evaluation design inherently reflects trade-offs between public service objectives and economic efficiency.

This study has two purposes; first, to examine how American municipal fiscal evaluation tools are designed; and, secondly, to examine how those tools deal with the conflict between public service objectives and economic efficiency. The choice of factors used as indicators of municipal fiscal condition, and their interpretation as municipal financial strengths and weaknesses is not consistent amongst existing tools. It is important to discover why there are variations in the construction of tools, and in their application, in order to be able to use the tools effectively.

The analysis of municipal fiscal evaluation design is facilitated by:

1. Presenting an overview of how fiscal condition has been described by 'experts'.
2. Examining the main factors postulated to determine fiscal stress.
3. Focussing on the selection of factors used in fiscal evaluation tools.

The analysis of how evaluation design reflects the conflict between public sector service objectives and economic efficiency objectives is achieved by:
1. Looking at how evaluations are applied to achieve the management requirements of users.
2. Examining theoretical responses to resolving the conflict between public service and economic objectives.
3. Articulating the logical links between theory and municipal fiscal evaluation design features.

Based on the preliminary literature review, the discussion is organized by design type: comparative and case study. This analysis of evaluation design employs eight American examples of comparative approaches to municipal fiscal condition, and three American examples of the case study approach. The reasons for choosing these examples are:
1. The number of examples was limited to a 'doable' project.
2. The number of examples for each design type parallels their incidence in the literature.
3. The specific examples chosen are widely referenced in the literature.
4. The examples represent interests which have Canadian counterparts.

Information received from the analysis of design examples is
examined for similarities and differences in the indicators chosen by design type, and for differences between the comparative and case study approach.

The presentation of this study's findings proceeds in the following manner:
1. A discussion of the fiscal stress concept.
2. Definition of terms prevalent in the evaluation design literature.
3. Description and analysis of the examples of municipal fiscal evaluation.
4. A review of theoretical responses to the conflict between public and economic objectives.
5. Analysis of the logical links between theory and evaluation design features.
6. A discussion of evaluation design merits and limitations with respect to the conflict between public and economic objectives.

Based on the findings from the analysis of literature and theory, the merits of specific evaluation tools become clearer. Further conclusions focus on the applicability of municipal fiscal evaluations as a tool for municipal financial planning.

As a precursor to describing the examples of municipal fiscal evaluation, the next section of this study describes some of the important concepts used by evaluation authors.
II - BACKGROUND ON MUNICIPAL FISCAL EVALUATION

2.0 The Concept of Municipal Fiscal Condition

The concept of municipal fiscal evaluation has a qualitative and a quantitative component. One indicator of 'good' fiscal condition is when a municipality can perform its responsibilities with financial 'ease'. However, it is difficult to define and quantify the concept of 'ease'. Ease could refer to the ability of a municipality to raise taxes without political repercussions; or, the ability to meet expenditure demands within the existing budget. The qualitative component of fiscal condition is most often described in terms of political responsiveness to citizen demands. The definitions of political responsiveness and citizen demands are equally ambiguous as the concept of ease, but are, at least, more descriptive.

The quantitative component of municipal fiscal condition usually includes accounting measures of budget solvency, or cash flow. It does not measure whether or not the budget is economically efficient, or advantageous to meeting policy objectives. Quantitative aspects are strictly concerned with financial operations directly related to balancing the budget, meeting expenditure obligations, and financial planning priorities. In contrast, the qualitative component emphasizes the relationship among financial operations, administration, public accounting principles, and government policy objectives. Since financial planning and budget setting are responding directly to government policy, qualitative and quantitative components of fiscal condition are inextricably linked.
Optimal financial condition is not an absolute concept due to several choices of economic organization and public finance. Nevertheless, there are situations which are conceded by financial analysts, treasurers, and taxpayers, as being 'unacceptable', 'poor', 'strained', or 'stressed'. These descriptives point to unacceptable deviations from a state of harmonious affairs, (however loosely perceived and defined), which are perceived to threaten the role and operation of local government. The relevant questions associated with these deviations are:

- in what context(s) do deviations appear abnormal?
- when are they the threshold to repeated and serious financial difficulty?
- when do they compromise principles of financial management and public administration?
- when do they threaten local government expediency?

Problematic financial circumstances (abnormal deviations), are usually described by the labels fiscal stress, fiscal strain, fiscal imbalance, or fiscal need. All labels refer to vague perceptions of problems directly with financing or indirectly attributable to financing. It is difficult to predict a fiscal stress situation, and its consequences for program delivery because there are no universally accepted guages of financial condition. As a result, considerable discretion enters into the identification and definition of fiscal stress. This section looks at some of the more prevalent ideas used in the literature to define and describe fiscal stress.
2.1 Definitions of Municipal Fiscal Stress

The perceived critical financial condition of several large American cities has spurred many descriptions of the problem. Some authors associate economic hardship with municipal fiscal stress, and focus on measures of unemployment, industrial migration, obsolete manufacturing plants, etc., (Touche-Ross 1981). Other research examines social and demographic components such as age and racial composition, and income characteristics of the population (HUD 1979; U.S. Treasury 1979). There are fewer studies which focus on the interrelationships among fiscal stress, politics, public service delivery costs, and financial management (Clark and Ferguson 1981; ICMA 1980).

Whatever aspect of financial stress is emphasized by authors, the general agreement seems to be that fiscal stress does not necessarily mean bankruptcy, or annual budget imbalances. Within these parameters are several conditions which affect the long and short term finances of a municipality. Short term fiscal stress is often evidenced or measured by the degree of 'cash solvency'; a stressed verdict results when expenditure obligations exceed revenues during a specific budget period (Groves, Godsey, Shulman 1984). Long term fiscal stress extends the condition into the foreseeable future, endangering the fulfillment of capital plans such as the replacement and maintenance of existing capital facilities (MIS Report 1980). The long term stress leads to slow deterioration of the quality of life with respect to protection, sanitation, access and environment.
The basic difference between long and short term fiscal stress is the severity and duration of problems. Definitions of municipal fiscal stress may allude to the process contributing to fiscal condition, or concentrate on the character of fiscal condition.

The definitions of fiscal stress which apply in a Canadian context are less severe than American problems. One reason why Canadian municipalities do not experience the same magnitude of problems is that social and economic conditions are more stable in Canada. Another reason is the institutional setting of Canadian cities. The financial activities of Canadian municipalities are closely monitored by provincial governments. How the status of Canadian municipalities compares with American cities is discussed in Section 2.2.1

Bird and Slack define Canadian municipal finance problems in term of fiscal imbalance. The imbalance is the inability of many jurisdictions to fund current expenditures from own source revenues (Bird & Slack 1983). Why? Because good fiscal decisions and public accountability are best maintained when spending is matched with taxing authority. Own source revenues are those raised directly by the local jurisdiction as permitted in the pertinent legislation. Bird and Slack discover that the share of current municipal expenditures covered by own-source revenues decreased from 1967 to 1978, but that provincial grants increased to more than make up the difference. The inelasticity of the principal revenue source -- property tax -- has hindered the ability of many municipalities to keep pace with expenditure
increases. 

The "fiscal crisis of urban America" has been described by Burchell and Listokin as the inability of many jurisdictions to:

- provide regular operating funds to support minimum levels of basic services like fire and police protection
- regularly and fully meet existing long term debt obligations
- maintain a sound financial position for future borrowing in municipal bond markets
- evaluate necessary services and expenditures, and shape a public service system which reflects these needs
- maximize the emphasis on local revenues so that local accountability is maintained (1981, page 12)

The literature often refers to fiscal stress as arising from a "need" (CBO 1980; HUD 1981; Brookings 1980). The need for additional revenues is estimated by poverty levels (using income variables), the physical condition of housing, and of service infrastructure. The ability of these fiscal indicators to gauge municipal fiscal health rests on the assumption that they capture the many economic and social conditions which affect local government finance (Aronson 1984).

The different definitions of fiscal stress are difficult to rank according to accuracy because there are so many different perceptions of the problem. Some refinements have occurred as

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1 Several studies estimating the income elasticity of various revenue sources have shown that for average national data, the property tax and general sales tax are neutral, indicating that revenues rise exactly with income. The problem is that expenditure needs rise faster than, and sometimes inversely with income (Bennett 1980).
knowledge about the behaviour of municipal financial systems increases. More often, however, definitions of fiscal stress reflect an agency's purview of responsibility. The popularity of definitions is derived from successive endorsements by respected authorities.

2.2 A Municipal Fiscal Condition Vocabulary

Several quantitative measures may be used to describe the fiscal stress concept. The variety of indicators used by authors to describe fiscal stress contributes to the ambiguity of the concept, thereby limiting the accuracy of fiscal evaluations.

Some of the concepts used by authors of municipal fiscal evaluations are outlined below.

**Population dynamics** are important to fiscal condition. The debate centres on the relative importance of population characteristics. Research has found that larger populations tend to be heterogeneous and demand a wider variety of services (Seidel 1985). Growing populations lead more specifically to capital facilities demands. Declining populations can weaken community resources because local government cannot proportionately reduce costs due to high overhead (Seidel 1985). Common measures of population dynamics include: total population, population changes over specified periods, growth rates.

**Community (and other) Age**: The age structure of a community can place pressures on local finances through changing community services needs, resulting in changes to expenditure patterns. Common measures include: declining property values, obsolete

**Basic Services** are those provided by almost every municipality of a critical size. For example: fire, police, street maintenance, sewer and water services. Fiscal evaluation studies often focus on expenditures only for these services to avoid comparing municipalities providing different ranges of services. The most common measure of Basic Services is the cost of Basic Services per capita.

**NonBasic Services** are not provided by all municipalities, and include welfare, libraries, hospitals, health services, parks and recreation, culture. The common measure of these is cost per capita.

**General Debt Burden** refers to outstanding debt except that which is financed by user fees, such as utilities. Common measures include the ratio of long term debt to assessed property value; debt per capita.

**General Debt Service** refers to the principal and interest payments a municipality makes to reduce debt. Common measure is payments as a percentage of operating budget. Usually, high debt service ratios are interpreted as a sign of fiscal stress, due to the limits on operating expenditures.

**Fiscal Capacity** is the term used to describe the financial resources available to local government. Common measures of fiscal capacity include per capita income and assessed property value per capita. The accuracy of these measures is limited
because income is not taxed by local government, and unlike Canadian municipalities, some American cities receive less than 50 percent of their revenue from property taxes (Seidel 1985). Fiscal Effort refers to the degree the local government attempts to meet community service demands from its own revenue sources as opposed to relying on intergovernmental transfers. For example, a municipality with high fiscal effort, i.e., using all local resources could be viewed as stressed, or not. Taxpayers may have chosen to exhaust resources in order to finance services. Common measures of fiscal effort include: the ratio of local taxes, permit fees, etc., to assessed value.

2.2.1 The Institutional Environment

The evaluation tools examined in this study sometimes use the above terms. The definition of items such as fiscal effort, general debt burden, and community age are universal to Canadian and American cities. However, the measures used to describe these conditions are not identical. The standards used for American cities' performance in any of these areas are not always applicable in the Canadian context. There are differences in the economic and social make-up of Canadian cities, as well as different constitutional arrangements. The preparation of an evaluation for Canadian municipalities would require a selection of measures that reflected Canadian municipal responsibilities and financial arrangements.

For example, any home built before 1940 was the standard measure for aged housing in the U.S. examples. Since Canada has
urbanized at a different pace, it might be appropriate to adjust that date in some cities to 1945. Another measure which is often used in the American examples is utilities debt service. Most Canadian cities are not involved in the provision or delivery of utilities, hence this measure is not an indicator of fiscal condition.

Generally, American cities have more independence in the responsibilities which they may assume than their Canadian counterparts. Correspondingly, American cities also have more financial freedom. Although the state legislation varies, American cities can borrow money on bond markets without state approval (Magann 1983). In addition, the accounting procedures to maintain accountability and accurate financial statements are often not followed by American cities under fiscal pressure (Magann 1983).

Contrasting the rather 'loose' American reporting procedures are the very strict controls on Canadian cities. In B.C., only the City of Vancouver can borrow independently of the provincial government on international money markets. Other municipalities must prepare five year capital plans and submit their annual capital requirements to the provincial agency, the Municipal Finance Authority. If the request is approved, the amounts required are included in the provincial government's borrowing for that fiscal year.

The revenues available to municipalities for operating expenses in B.C. are similarly restricted by provincial legislation. Each classification of municipality; city,
district, town or village, has its own property tax limits, and other source limits. The overall annual financial operations of municipalities is reviewed annually by the MFA when municipalities submit the required audit report.

Much of the literature on municipal fiscal evaluation is produced in the United States. For the most part, the Federal level represented in the American literature is extrapolated to the provincial level in Canada. Some of the evaluation tools to be discussed do have possible application in Canadian federal government contexts, but this study focuses exclusively on their application at the municipal level.

The differences between American and Canadian cities do not render the findings from this study irrelevant because the discussion focuses only on those applications which are appropriate to the Canadian situation.

2.3 Factors Associated with Municipal Fiscal Stress

There are many socio-economic and macro-economic conditions which have been associated with municipal fiscal stress. The relationship of these factors with municipal fiscal condition, is empirically inconsistent. The literature for understanding municipal fiscal stress in the United States has been summarized by Irene Rubin (1982) in terms of 3 models: (1) The migration and tax base model (2) The bureaucratic growth model, and (3) The political vulnerability model. This particular view to categorizing the literature may, in part, stem from a consensus statement, (premature according to some), on the primary causes of municipal fiscal stress in American cities (Touche-Ross
Kamer (1983) summarizes these causes to be:

- reduced federal aid to local government
- the national recession and its inflationary affect on interest rates for municipal bonds at a time when the requirements for additional revenue became acute
- economic and demographic shifts comprised of two movements: (1) urban-suburban (2) north-south
- poor municipal management as a result of overgrown bureaucracies seeking to perpetuate themselves.

Rubin (1983) suggests that fiscal studies implicitly take on one of the three approaches, sometimes combining elements from each and assigning different weights of importance.

The migration and tax base model attributes stress to population and job shifts, and their negative affect on the tax base. Whether the shift be urban-suburban or extra-regional, both types cause stress to cities experiencing the loss or gain. A city with a decreasing number of taxpayers must maintain existing service levels with less revenue to remaining constituents. The growing city experiences a wave of new demand which cannot be easily or quickly accommodated.

The bureaucratic growth model is based on the premise that local government grew too large too quickly as the result of over-zealous bureaucrats. Their emphasis on empire building rather than responding to genuine demand for additional services has lead to unnecessary overhead during times of retrenchment, and has proven difficult to remove.

The political vulnerability model postulates that the more
vulnerable a city is to the demands of special interest groups, the greater likelihood that over spending and fiscal stress will result. This model is particularly applicable to older American cities experiencing an exodus of the middle class to the suburbs, leaving economically disadvantaged minorities in the central city.

Quite often, some elements of the three models suggested by Rubin are translated into indicators of municipal fiscal condition. The variables used to measure fiscal condition fall into three categories: Social, Economic, and Governmental. This study uses the label "exogenous factors" to describe these non-financial measures used in fiscal evaluation tools.

2.4 The Development of Fiscal Evaluation Tools

The municipal fiscal evaluation is one of many tools which can contribute to municipal financial management and planning. Tools with similar objectives have also evolved in the private sector. This study differentiates between the private sector tool of municipal auditing and municipal financial evaluation. The main reason for this separation is that the traditional role of auditing in Canadian municipalities has been limited to the attest function (Hanson & Boisclair 1983). Generally, auditors examine accounting records and supporting evidence to express an opinion as to whether the financial statements are fairly represented (Hanson & Boisclair 1983).

The attest audit's ability to contribute to municipal financial management is limited because attest audits ignore the main operating officers of a municipality (Magann 1983; Hanson &
Boisclair 1983). Without consideration of the problems and plans of senior officials, attest audits are unable to satisfy client needs in the management function (Magann 1983; Hanson & Boisclair 1983). Research into the financial reporting practices of American cities found many discrepancies and misrepresentation of fact (Magann 1983). As a result, the balance sheet approach to financial analysis came to be viewed as a poor substitute for in-depth evaluations.

Auditors came to realize that financial criteria applied in the private sector were not necessarily applicable to local government operations because the purpose of local government is not to accumulate assets and maximize profits. Auditors began to view municipal financial stability in terms of fiscal responsibility, and they are beginning to probe deeper into municipal operations, managerial practices, and the like. This new approach is known as Comprehensive Auditing (Hanson & Boisclair 1983).

Comprehensive auditing at the municipal level is particularly new, and not well documented. Techniques for applying comprehensive auditing in municipalities are slowly being developed and experimented with. However, the broader mandate being given to auditors is perceived by many to threaten council's democratic procedure, and as overriding citizen concerns (Hanson & Boisclair 1983). Since there is very little documentation on the specific techniques of doing comprehensive auditing at the municipal level in Canada, there is genuine doubt in the minds of some municipal officers that auditors
could contribute to solving financial management problems.

There is significantly more literature on the design and application of municipal fiscal evaluations in the genre discussed by this study. This study focuses on the selection of indicators used in municipal fiscal evaluations, and their perceived association with municipal fiscal condition. The examples of fiscal evaluation reviewed here fall into two categories: comparative and case study.

The comparative approach is designed to compare and rank the fiscal condition of municipalities. Generally, federal agencies and academic researchers employ the comparative approach because they are examining many municipalities. Their purpose is often to identify those which fall into the bottom faction. The comparative technique uses composite index scores to rank cities.

The case study evaluation is designed to monitor the response of local government finance to socio-economic trends in the municipality. Credit rating services developed the case study approach on behalf of creditors and investors in municipal securities. Variations on the original design developed to enable municipal self evaluation, and to promote an understanding of the credit analysis process. Where credit analysis uses information to rate the ability of a municipality to repay debt, the two main variations utilize historical trend analysis to monitor overall financial performance. The case study design bases its interpretation from recognized financial performance standards, which are tempered to account for any
special municipal characteristics.

The second section of the literature review is devoted to three examples of the case study design. Together with the eight examples of the comparative design, the study finds information with respect to design options, alternative measurements and indicators, and how to interpret results.
3.0 Introduction

This chapter critiques some of the methods available for municipal fiscal evaluation as the first step in attempting to explain the selection of fiscal indicators, and their interpretations as municipal fiscal strengths and weaknesses. As previously mentioned, the comparative and case study designs are discerned within the variety of tools currently used for municipal fiscal evaluation. This literature review will demonstrate that the two designs ascribe different symptoms and measures to municipal fiscal stress. The ensuing presentation is organized by individual study in order to highlight each author's choice of evaluation methods.

Differences among the evaluation tools examined are found at two levels of the evaluation procedure. Authors have narrowed their investigations to areas of specific concern to their clients. Taken together as a body of literature, the studies cover many dimensions of fiscal condition.

The second source of differences among evaluation methods is the specification of fiscal condition in terms of social objectives, such as health and welfare, rather than restricting descriptions to measures of financial solvency, bouyancy, and economic efficiency. This chapter finds that the comparative and case study evaluation designs give different interpretations to balancing the measurement of public service and market force objectives.

The comparative evaluation approach uses data on municipal
socio-economic trends which is converted into composite scores for each municipality. An analysis of eight comparative studies finds that analysts do not agree on a definition of municipal fiscal stress, and that few common elements exist among the studies. A primary difficulty with the comparative design is the limited accuracy of quantitative models to measure the influence of socio-economic variables on municipal fiscal condition. The reliability of quantitative methods is undermined by the abstruse relationship among exogenous factors and municipal fiscal condition. In addition, analysts often fail to recognize differences in service responsibility with corresponding adjustments to the index of city scores. Several inconsistencies found in the literature prevent any one method from emerging as superior.

An analysis of three case study approaches reveals that they are designed to monitor how well a local government manages its finances in response to socio-economic trends in the municipality. The distinctive municipal attributes examined by case study analysts prevent valid comparisons of fiscal condition among municipalities. Close examination of the examples reveals that the reliability of the case study approach is derived from rigorous data collection and the use of established financial indicators. The case study design recognizes unique municipal responsibilities and circumstance through discretionary tempering of the established benchmarks.
3.1 The Comparative Evaluation Design

The first part of this section reviews eight examples of the comparative approach to municipal fiscal evaluation. Comparative studies share a number of technical characteristics, allowing them to be classified as the same evaluation design. Many evaluations of this kind, including five of the eight discussed here, were designed by American federal agencies for: (Burchell et al., 1981 p.170)

(i) demonstrating the need for federal funding assistance programs
(ii) establishing municipal eligibility for a grant

Most of the comparative examples reviewed are attempting to identify some form of financial need at the local government level. However, not many examples have design features which are used to determine if the financial need measured warrants public sector assistance. Very few authors clearly articulate the rationale for senior government assistance activity.

Studies using the comparative approach generally share six procedural elements (Burchell et al., p. 160). It is useful to review these six elements here because they provide a basis for understanding how each analyst constructs the evaluation, as well as a terminology to describe the procedure.
The six elements identified by policy analyst, Robert Burchell (Burchell et.al., 1981 p. 160), can be described as follows:

(1) Legislative Intent: American federal agencies often receive legislative direction on which dimension of fiscal stress is to be measured. Nongovernmental agencies describe intent by specifying the evaluation focus;

(2) Conceptual Indicators: these are the major dimensions of the problem which are analyzed. For example: economic growth, physical decay;

(3) Quantifiable Variables: These are the measures used to represent each of the conceptual indicators. For example: employment structure, age of housing stock, tax base change;

(4) Variable Definition: The mathematical format of the variables used: static, increments, or rates;

(5) Variable Linkages: This refers to the statistical technique used to aggregate quantifiable variables into a composite index;

(6) Standards and Eligibility Criteria: Federal agencies select some threshold criteria from the measures used to establish municipal eligibility for assistance. Non-governmental agencies identify fiscally stressed municipalities with similar threshold criteria.

Unlike most of the comparative approaches, two federal studies (ACIR and the Urban Institute) modify the analysis procedure by omitting the 'variable linkage' procedure. Specific trends are examined without converting data into composite scores. These two studies and a non-governmental example are critiqued in the last section of the comparative evaluation review.
3.1.1 The Department of Housing and Urban Development

The American federal Department of Housing and Urban Development (HUD) developed two evaluation methods in response to Congressional mandates for federal funding assistance to cities (Burchell et al., 1981). Developed in 1979, the Community Need Index (CNI) attempted to bring increased sophistication to the measurement of need and inferred fiscal stress for illustrative purposes.

Multivariate Factor Analysis was chosen as the statistical technique. The empirical data used as inputs to the factor analysis included quite a variety of indicators of demography, poverty, economic activity, and social trauma. Three conceptual variables emerged from the factor analysis, which were identified with the labels Age and Decline, Density, and Poverty. The purpose of the analysis required a composite index indicative of above average need, so a single score for each city was computed by weighting and combining the factor scores. The weights chosen, (without explanation) were 40% Poverty, 35% Age and Decline, and 35% Density (Burchell et al., 1981 p.186). A city would receive a high score on a factor if it had a high percentage of most of the variables that defined that factor; with positive scores being indicative of above average need.

While the CNI can illustrate the relative position of a municipality, it is difficult to quantify the difference between individual municipal scores due to the factor analysis. The three variables groupings are not mutually exclusive; therefore, the importance of variables which appear twice versus those that
appear once is unclear. For example, the percentage of families with a female head is included in both the AGE and DECLINE and POVERTY indicators, similarly with the percentage of non-white families. In addition, the weights which are assigned to the conceptual factors are not explained in any account of the research. The CNI evaluation would be more appropriately described as a method to identify cities with the greatest prevalence of social and welfare need, and the HUD department (CNI method) equates municipal fiscal stress with that sort need.

The HUD department is also responsible for UDAG, Urban Development Action Grants, which are intended to help alleviate physical and economic deterioration in urban areas. The six criteria which were selected as indicators of physical and economic deterioration are: age of housing, per capita income, population decline, unemployment, job lag/decline, and poverty (Burchell et. al., 1981). The median value of each variable representing the criteria is considered to be the acceptable standard score. A municipality is eligible for a UDAG if it has scores below the median on three of the six criteria.

The UDAG legislation and program objectives do not claim to evaluate municipal fiscal health. However, the UDAG eligibility criterion is often referenced as an example of fiscal evaluation because it addresses a common manifestation of fiscal stress: economic and physical deterioration. The UDAG program is associated with the redevelopment of special areas like the downtown, where a large proportion of the redevelopment requires
capital outlay beyond the means of the local government. Again, the HUD department associates fiscal stress with an inability to make large capital expenditures to stem physical and economic deterioration.

3.1.2 The Congressional Budget Office

The Congressional Budget Office technique conceptualized urban need in terms of three phenomena; social, economic, and fiscal (Burchell 1981; Aronson 1984; Kamer 1983). According to the CBO, the possibility of financial crisis and default is manifested in unbalanced budgets, low liquidity, high taxes, large debt, and low bond ratings. The quantifiable variables used to represent long term fiscal need were tax effort, property tax base, and service needs. The variables were defined as below: (Aronson 1984 p. 12; Burchell et. al., 1981 p. 181)

1. Tax Effort - Taxes as percent of income
2. Property Tax Base per Capita
3. HUD Index 1 - A multiplicative index to measure community development need, tax effort, and fiscal capacity.
4. HUD Index 2 - HUD index 1 (item 3 above) a different index to measure community development need, tax effort, and fiscal capacity.

Each city's score on the above four variables was standardized to a Z-score, and the Z-scores were summed into a single
composite score. City scores were ranked, with higher scores representing greater need.

Aronson (1984) identifies the major weakness of the CBO index as failing to recognize the different service responsibilities across cities with corresponding adjustments to the index. As a result, cities with greater spending responsibilities are predisposed to show up as having greater need, even if they have similar socio-economic conditions as cities with less responsibilities. The precise significance of an individual city's rank is another weakness of the index approach. In this case, the combination of pure data (e.g., tax effort, property tax base) with the indexed scores of HUD compounds the effect of some characteristics on the composite score.

3.1.3 The U.S. Treasury

The U.S. Treasury developed an index in order to evaluate the impact of the federal economic stimulus package on 48 cities (Aronson 1984 p.16; Burchell et.al., 1981 p.187). Variables were measured in each of the 48 cities, and transformed to standardized Z-scores. A single composite score for each city was determined as the weighted sum of the five standardized scores, using the weights shown in parenthesis with the variables listed below (Burchell et.al., 1981 p. 187).

1. Population change (37)
2. Change in city per capita income as a ratio to national per capita income (27)
3. Change in per capita own source revenues
as a ratio to Change in per capita income (12)

4. Change in per capita long term debt outstanding as a ratio to change per capita income (12)

5. Percentage change in full market value of property (12)

This evaluation index shares some technical characteristics with others examined. The HUD Community Need Index also employed weights without rationalizing their distribution among the variables. HUD placed greater importance on POVERTY, but the U.S. Treasury chose to emphasize population change. The variables chosen by the Treasury correspond with the migration and tax base model described in Chapter 2.

3.1.4 Clark and Ferguson

The Clark and Ferguson evaluation is designed in response to the major criticism of other comparative methods. Heretofore, analysts have failed to recognize the difference in municipal responsibilities with corresponding adjustments to the index rankings. Clark and Ferguson were particularly interested in observing the consequences of different economic and social trends on municipal finances. The authors attempted to develop fiscal strain indicators as ratios of "fiscal policy outputs to private sector resources", and tested them using data from a sample of 62 American cities (Clark and Ferguson 1983).
Fiscal strain was conceptualized in the following function:

\[ \text{City government spending} + \text{debt} \]

\[ \text{Fiscal Strain} = \frac{\text{Private sector resources}}{\text{Private sector resources}} \]

Clark and Ferguson contended that the relationships among private sector resources and fiscal condition are not deterministic because they are often shown to be empirically weak. Instead, the authors view private sector resources as "facilitators of influence" (Clark and Ferguson 1983 p. 26). The authors argue that resources are properties of individuals or collectives that facilitate attainment of their interests. The role of private sector resources, in their view, is as follows:

The larger the quantity of resources at the disposal of a participant (sector, organization, or political leader), the greater the participant's potential effects on other participants and on fiscal policy outputs (Clark and Ferguson, 1983 page 26.)

A critical point in the authors' theory is that resources are often not used. When they are, influence is exercised and the local government finance system responds. The closer public policies are to citizen preferences, the more stable the system. According to their theory. A system near equilibrium should generate a relatively stable pattern of fiscal policy outputs, such as expenditures. Instability results from a changing pattern of fiscal policy output, such as volatile spending patterns (Clark and Ferguson 1983, page 29).

Clark and Ferguson interpret the strength of a relationship, or the amount of influence a resource has on local
finance, as a function of citizen participation. This approach is a complete reversal of concepts used by other comparative methods examined thus far. Previous studies strongly allude to a direct relationship between exogenous factors and municipal fiscal condition, and they often assign weights to magnify the effect of particular characteristics.

Clark and Ferguson use two common methods to overcome the barrier of noncomparability in functions across cities by using common function expenditures, and comparing proportionate changes as opposed to absolute levels of expenditures and revenue. In order to capture the variations across cities on variables measured by absolute level, the authors developed a "Functional Performance Index" (FPI) to measure the range of functions performed by a city and control for them in statistical analysis. The FPI explained over 80 percent of the variance in level measures of general expenditures, revenues, and personal services.
Differences in the revenue structure across cities was addressed through a City Wealth Index, defined as follows:

\[ \text{CWI} = \text{WiI} + \text{WiT} \]

The weight for property tax revenues \((T)\) is the percentage they are of total government revenues.

The weight for median family income \((i)\) is the percentage of all other local government revenues (Clark and Ferguson 1983 page 30).

The authors develop fiscal strain indicators, handling the differences in functional responsibility with one of the three methods described. Ratio indicators use four numerators: general expenditures, own revenues, common functions, and debt; and three denominators: median family income, population change, and the City Wealth Index (CWI). The three level measures, general expenditures, own revenues and debt, were regressed on the FPI to adjust for locational variations. The residual was divided by the CWI score.

The series of fiscal strain indicators derived for each city were compared. After adjusting for functional responsibility, cities with similar City Wealth Index scores were found to have different fiscal strain indicators. Similarly inconclusive results were found with the population change characteristics of cities. Low correlations between socioeconomic characteristics and fiscal problems supported the authors' hypothesis that the two are weakly related. The finding also supports their initial assessment that private sector resources may or may not be "activated" in a municipality; therefore, fiscal condition cannot be explained by private sector resources alone.
The evaluation design employed by Clark and Ferguson involves a series of statistical operations. Indeed, far too many were performed (regressions, ratios of residuals, etc.) to elaborate on here. No criteria are used to distinguish fiscal strain from fiscal health, as the authors felt it was more useful to make comparisons among the cities.

3.1.5 Touche-Ross

A major creditor of American municipalities, the First National Bank of Boston, and Touche-Ross, an international accounting and investment firm, undertook a study to isolate the impact of socio-economic forces on municipal financial performance. The authors challenged the assumption that municipal stress can be detected by using only socio-economic indicators (Touche-Ross 1981). The authors identified three categories of factors associated with municipal financial condition (Touche-Ross 1981 p. 116).

1. Economic factors describe the resource base of a community. The variables include: manufacturing investment, change in manufacturing employment, change in manufacturing investment, median family income, change in population, percent change in single family housing starts.

2. Social conditions describe the "consequences of economic growth". The variables used are: percent of minority population, percent below low income level, unemployment rate, percent of pre-1939 housing stock.

3. Structural conditions describe the taxing and spending parameters of a jurisdiction. The variables used include the square miles in the jurisdiction, and population density.
Touche-Ross employed economic, social and structural variables to classify 66 mid-sized cities (population less than one million) into groups of homogenous characteristics. The 66 cities were classified statistically into four clusters based on six variables.¹ Four groups with the following characteristics were formed:

- High investment and income cities
- Above average investment and income cities
- Average investment and average income cities
- Below average investment and income cities

These categories were further subdivided into groups of a (1) large or small dependent population and (2) a high or low population density.

The label 'fiscal stress' was applied to each city whose tax, debt or expenditure variable score was more than one standard deviation worse than the mean of cities in its cluster. Touche-Ross do not rationalize the use of one standard deviation as a threshold value.

The hypothesis chosen to test the linkage between socio-economic indicators and financial performance was "that older, industrially aged cities would be the ones most likely to have high tax, debt and expense ratios; therefore, fiscally stressed" (Touche-Ross 1981). The examination of cities with two or more financial ratios in excess of one standard deviation found that

¹ The statistical technique used by Touche-Ross to classify cities into groups was not specified in this reference.
there were significant numbers who "bucked the trend", and that the hypothesis was not supported by the data (Touche-Ross 1981).

The researchers found that cities do avoid fiscal stress under what appear to be adverse socio-economic conditions, thus making it difficult to formulate reliable theory about the influence of socio-economic conditions on municipal financial performance. The authors suggested that the management and decision-making process is the component that holds the growth of local public services in balance with underlying economic resources under adverse conditions.

Although the methods employed by Touche-Ross compare cities with similar characteristics, functional responsibility is not one of the variables used to classify cities. However, the findings about municipal fiscal behaviour support the conclusions of Clark and Ferguson.

3.1.6 The Urban Institute

The trend monitoring approach compares municipalities to each other in terms of their performance on several socio-economic and financial characteristics. Unlike most of the comparative approaches, data on the trends examined are not converted into composite scores and indexed. In a good example of this approach, the Urban Institute explores fiscal stress to identify the key elements of federal fiscal aid programs designed to alleviate fiscal strain resulting from weak municipal economies (Aronson 1984).
The following variables were employed as indicators of fiscal strain.

- value & growth of local taxes
- level & growth of spending relative to revenue capacity
- level & change in the number of municipal employees
- level & change in municipal wages

The dominance of local government function and size suggests that the Urban Institute has a notion that fiscal strain is tied to the bureaucratic growth model discussed in Chapter 2. This is not consistent with the objective of linking the economic base to fiscal condition.

The Urban Institute suggested short term financial position be measured by

- current year surplus/deficit as a percent of total expenditures
- cumulative surplus/deficit
- excess cash on hand as a percent of total expenditures
- the number of consecutive cash deficit months

The design limitation of the Urban Institute evaluation is that both sets of measures are suggested without reference to normative standards.
3.1.7 The Advisory Commission on Intergovernmental Relations

The Advisory Commission on Intergovernmental Relations (ACIR) developed a measure comprised of tax effort and the change in tax effort and named it "Fiscal Blood Pressure" (Aronson 1984). Tax effort was defined as the ratio of own source revenues to resident personal income. The change in tax effort was defined as the average annual rate of change in the ratio of tax collections to resident personal income. Both tax effort and change in tax effort were indexed by expressing them as a percentage of the median value. ACIR used state and city data in a national study and divided the results into four categories of Fiscal Blood Pressure:

1. High and Rising; high tax effort and rising
2. High and Falling; high tax effort and falling
3. Low and Rising; low tax effort but rising
4. Low and Falling; low tax effort and falling

The ACIR evaluation design is the first to make predictive efforts using trends analysis. However, the concept of having four categories of "Fiscal Blood Pressure does not translate well into significant or quantifiable differences. Presumably, ACIR lists the four categories in descending order of severity; however, it is not clear that the absolute level makes more difference than the direction of change in the recent past. The ACIR technique is further limited by interpreting fiscal stress
in terms of personal income and taxes paid. Personal income level is not the basis of municipal taxation, nor does it represent the range of revenues available to a municipality.

3.1.8 Aronson and King

Independent research by Aronson and King (Aronson 1984), focuses on developing an early warning system to detect impending fiscal crises. Aronson (1984) explains their task as follows: (Aronson 1984)

> there are government units unquestionably in financial straits. If it is possible to partially describe this condition, and if relatively good time series data exists describing their deteriorating fiscal position, it should be possible to determine the problem at hand.

Their approach uses the following seven indicators of fiscal condition. These are common measures of corporate liquidity which, according to their theory, will change values over time to reflect a build-up of financial troubles.

- long term debt retired
- total annual interest payments
- short term debt outstanding at year end
- revenue from own sources
- total revenues
- State personal income
- cash & security holdings of the government

Measurements of these indicators were examined for two samples of cities, and for several periods between 1961 and 1975. A sample of cities with definite symptoms of fiscal stress was compared to a control sample of cities without known problems. After noting that short-term debt trends for New York
indicated an unmistakable build-up in fiscal pressure over the 1961-1975 period, New York was excluded from the aggregate analysis. Aggregate measures excluding New York produced no dangerous trends.

Although Aronson and King believe that the seven indicators chosen capture the essential financial characteristics of municipal fiscal condition, they are unwilling to exclude other possible indicators of fiscal stress. New York was known to have fiscal problems during the 1961-1975 period, and this was captured with the short term debt measure. No other city included in the same sample exhibited the same uninterrupted pattern in any of the seven indicators. Aronson and King suggest that a signal of impending financial crisis could be when the amount of debt incurred by a local government exceeds the average use of debt by other municipalities.

3.1.9 Synthesis of the Comparative Approach

The eight examples of comparative evaluation design demonstrate that each study has unique qualities. Some of the variations among study methods can be attributed to three methodological challenges associated with municipal fiscal evaluation.

(1) Inadequate financial data for some locations

(2) Difficulty in accounting for the effect of varying municipal responsibilities
(3) Complex relationship among factors which are external to municipal financial operations.

There are four reasons to be uncertain about the reliability of the comparative evaluation approach.

1. The experts have not agreed on a definition of municipal fiscal stress.

2. Study authors debate about appropriate conceptual indicators, and make inconsistent use of quantified variables and measurement techniques.

3. Study authors do not universally recognize that some exogenous factors could have a relatively weighted affect on municipal fiscal condition.

4. The effect of varying municipal responsibilities is treated inconsistently, or not at all.

Most of the studies reviewed share the same intentions.

Economist Roy Bahl observes that:

The spirit of many studies relates to the possibility of redistribution of income through the government sector; therefore, one purpose of [this] research is to identify candidates for special assistance (1984 page 52).

Most of the comparative studies also have a common "variable linkages" method. Standardized measures of socio-economic indicators are aggregated into a single index score for each municipality in the study. The purpose of the index format is to represent the position of each municipality relative to others.

The nature of differences between index rankings is inadequately explained in quantified terms by any study. Some
authors vaguely refer to municipalities being "worse off" (ACIR) than others, or as having greater or more immediate "need" (HUD). However, as discussed in Chapter One, the terms lack definitive meaning.
3.2 The Case Study Evaluation Design

An alternative approach to measuring municipal fiscal condition is the case study design. The case study approach focuses on monitoring the response of local government finances to changes in socio-economic characteristics of the municipality. This section looks at three examples which have been widely referenced in the municipal fiscal evaluation literature. The examples demonstrate that case studies use the type of data which is commonly used in public policy and program planning. Users of the case study design find that it facilitates an in-depth analysis of the factors important to a specific city.

Case study analysis procedures rely on the judgement of analysts to interpret the meaning of data. Judgemental procedures allow all features of municipal operations to be considered in the context of local historical development. This is a feature unavailable with the comparative design. Case studies depart from the framework of six procedural elements identified by Burchell (1981). However, three of the definitions described in section 3.1 can be transferred to the case study design: Conceptual Indicators; Quantifiable Variables; and Variable Definitions.

The case study design for municipal fiscal evaluation originated with municipal bond rating agencies like Moody's, and Standard and Poor's. They have a history of representing municipal fiscal condition with respect to debt repayment. The rationale for evaluating a municipality in the context of its
own environment is based on the desire to accommodate each municipality's unique characteristics. Credit analysis is designed to interpret the following characteristics which can differ by municipality:

- legislation, services provided, sources of revenue
- degree to which tax base is shared
- ancillary services provided and extent of user charges
- method of funding utility services
- extent of debt financing
- schedule of debt repayment
- relationship of assessment to market value.

The first example reviewed is the credit rating evaluation design. Until the municipal financial crises of American cities in the late 1970's, the analytic techniques of credit analysis were not articulated to the public.

Two variations of the credit rating process have emerged largely in response to the desire for municipal self evaluation. The Financial Trend Monitoring System (FTMS), developed by the International City Management Association (ICMA), is the second example reviewed because it provides greater detail about the information used by case studies, and the analysis process. The specific trends associated with financial decline are summarized by a review of the Municipal Finance Officer's Association study.
3.2.1 The Credit Rating Evaluation Approach

Credit rating agencies place importance on the depth of experience and amount of influence the finance department has in municipal administration. Naturally, the analysis of debt in credit rating is quite extensive and covers numerous relationships. The objective is to establish a safe level at which the taxpayer can support future debt levels. There are five major areas of evaluation: expenditures, revenues, debt structures, operating budget, and the capital budget.

Credit rating agencies place more emphasis on the local economy as a factor contributing to financial condition than any other factor. Not only are measures of overall wealth important, but measures of the attractiveness of a city to economic growth are also included (Neysmith 1980). The location and availability of amenities play an important part in attracting new residents and industry, thereby contributing to the economic viability of the community. These tests for the soundness of the local economy result in lower credit ratings for those which are less diverse penalizing single industry type communities.

A review of external legal constraints will include documenting supervision and control procedures, and provincial regulations with respect to incurring debt, setting tax rates, and any other controlled financial functions. The municipality will be evaluated on how well it operates within the legal infrastructure.

Legislative and management policies and practices are reviewed in an attempt to gauge the willingness of local
government to respond to citizen demand, as well as the degree of public accountability. The following questions are asked to examine corporate operations.

- Can the government impose taxes without voter approval?
- How professional is the administration?
- What are the capital budget plans? Spending priorities?
- Is there an annual audit?

The questions asked and measures used are to help identify historical trends; however, there is no set rule for how long the trend should be, other than being long enough to show consistent changes or cycles (Neysmith 1980; MIS Report 1980).

The major criteria used by credit analysts is summarized as follows: (Neysmith 1980)

WHAT LOOKS GOOD
- Balanced budgets
- Revenue bases with steady growth patterns
- Diversity of revenue bases
- Liquidity to pay current liabilities
- Steady employment growth rates
- Low outstanding debt when new debt is incurred
- Even debt schedule

WHAT LOOKS BAD
- Deficits for more than one fiscal year
- Short term debt not retired at end of fiscal year
- Shrinking revenue bases
- Lack of revenue diversity
- Sudden or large population change
- History of defaults or gimmickry
- Tax and debt levels approaching legal limits
- Large amounts of outstanding debt when new debt incurred
- Layoffs or strikes in public or private sector
The credit rating given to a municipality is based on the significance accorded to any of the above criteria. A high rating indicates that the security is well protected, now and in the foreseeable future, and warrants a lower rate of return (Neysmith 1980). A low rating means that the amount of protection is less and the issuer's ability to hold this level of protection is uncertain. Since this represents a greater risk to the investor, a low rating carries a higher rate of return as compensation for the risk. As a result, credit ratings indirectly influence the amount of revenue devoted to debt service, as opposed to other municipal goods and services.

3.2.2 The International City Management Association

A variation of the credit analysis design is the Financial Trend Monitoring System developed to describe a municipality's financial strengths and weaknesses. The authors argue that the FTMS is a management tool useful in the following situations.

1. Municipalities do have problems and wish to place them in broader perspective.

2. They sense the emergence of problems but are having difficulty pinpointing them.

3. They are in sound condition, but searching for a system to monitor their financial position.

The system pulls together information from budgets and financial reports, mixes it with the appropriate economic and demographic data, and creates a series of local government financial indicators which, when plotted over time can be used
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to monitor changes in fiscal condition (Groves 1984). Chart 3.2 illustrates the FTMS design. The system is based on the 12 conceptual indicators that influence financial condition. These 12 are derivatives of three basic influences: environmental, organizational, and financial.

Environmental factors are comprised of the private sector resources available to a municipality, as well as macroeconomic conditions. Private sector resources refer to the demographic, social, and economic structure of a community. The macroeconomic conditions are not considered important themselves, rather, analysts are concerned with the response of local government to inflation, economic recession or expansion.

Organizational factors are measures of the government's response to changes in the environmental factors. Qualitative factors such as these are the most difficult to incorporate into an empirical analysis. The influence of organizational factors on fiscal health is most appropriately estimated by comparing them to principles of public finance theory, and accounting, budgeting and financial management practice standards (Magann 1983).

Financial factors reflect the condition of the city's finances. These are the type of measures introduced by Aronson and King (1984), as funds flow measures.

Complementing the 12 conceptual indicators represented in Chart 3.2, are 36 quantifiable variables acting as surrogate measures for the different aspects of each factor. A visual examination of graphs displaying these indicators over time is
the analysis tool.

While the FTMS provides suggestions of what trends should be watched, the determination of whether a trend portrays a problem is left to the discretion of the analyst. The number and range of indicators used by FTMS gives a comprehensive view of city trends; however, caution is necessary to interpret the impact of many interrelated details.

3.2.3 The Municipal Finance Officer's Association

In the same vein as credit rating, the Municipal Finance Officers Association (MFOA) developed a guidebook entitled "Is your city heading for financial trouble?" consisting of questions municipalities can answer to analyse their financial condition (Aronson 1984). The MFOA approach identified five conditions which contribute to fiscal decline, and suggested monitoring specific trends or indicators associated with each.

1. Declining economic vitality.
   - the appraised value of real estate per capita is growing slow or declining
   - the number and value of building permits is stagnant
   - the number and value of business licences is declining
   - retail sales values are declining
   - expenditures for social services as a percent of total expenditures is growing
   - population is declining
   - per capita income is declining

2. Loss of financial independence and flexibility.
   - the percent of basic services funded from grants is growing
   - a growing percent of own source revenues is committed to matching fund requirements
   - debt burden is growing
   - pattern of budget overruns in specific
departments or programs
• tax rates approaching legal limit
• a growing percentage of expenditures is funding mandated costs

3. Declining municipal productivity.
• number of municipal employees per capita is rising
• per capita municipal expenditures after inflation are rising
• municipal enterprises are incurring a loss
• user fees on the rise

• short term debt outstanding at year end is growing as a percent of revenues
• funding of capital items is postponed or declining
• deferral of current pension costs is increasing

5. Unsound financial management practices.
• steady pattern of budget overruns
• assessments vary from true market value
• earnings are down on short term investments
• rising interest costs
• incidence of estimate-actual revenues shortfalls increasing

The MFOA approach also relies upon good judgement to weigh the significance of a particular trend. The exercise of discretion to determine whether a trend portends a problem replaces a statistical approach to sensitivity analysis.

3.2.4 Case Study Design Findings

The strength of the case study design is derived from the use of established financial indicators as well as guidelines to adjust the benchmarks for the special characteristics of a municipality. Generally, case studies are more rigorous in the collection and analysis of data than the comparative evaluation
design. In addition, the case study literature makes repeated use of the same conceptual indicators, and adheres to a common set of quantifiable variables. The case study literature illustrates that there is considerable agreement among the authors about what factors influence municipal financial performance, and what constitutes fiscal stress.

A difficulty which the case study approach encounters is that data is often unavailable in smaller communities. Sometimes unique economic and social dynamics of resource communities provide little historical precedence. There is also considerable difficulty in assessing the degree to which the conceptual indicators used by case studies influence the fiscal condition of small, or new communities.

The main shortcoming of the case study approach is its reliance on judgemental analysis. An analyst's discretionary adjustments to benchmarks of fiscal performance does not provide statistically based error margins or probabilities. For the statistically minded, this is a compromise.

3.3 Summary of Evaluation Design Findings.

The examples presented in this section exhibit some overlap in the areas of financial concern and in the selection of measures used. Taken together, the eight comparative and three case study examples provide a wide variety of fiscal indicators for use in municipal fiscal evaluation tools. Each example forwards a somewhat unique evaluation procedure or makes use of different variables.
Many of the differences in indicators consist of variations on a theme. For example, a debt structure indicator may use as a numerator, total long debt, long and short term debt, general obligation debt; and, use as its denominator, population, personal income, assessed property value, general revenue, or operating expenditures. A ratio comprised of any two of these variables could be considered a valid measure of municipal indebtedness.

Such inconsistency in the literature makes it difficult to explain the selection of fiscal indicators and their interpretation as municipal fiscal strengths and weaknesses. Since the literature does not offer explicit reasons for the choice of design, method or measures used; this section turns its focus to the differences between the two designs, and the differences among design methods.

The differences among methods of the same approach are in the variables chosen as fiscal indicators, and the weight attributed to them as agents influencing municipal fiscal condition. Several observations about the body of literature as a whole provide clues about the inconsistency of choice.

Several references are made in the literature review (and in the discussion in Chapter Two), to the multi-dimensional nature of fiscal stress. Experts have defined and associated fiscal stress with social, economic, demographic and financial conditions. As a result, depending on how fiscal stress is defined and measured, the amount of data required can become unmanageable.
The response of municipal fiscal analysts was to narrow the investigation of fiscal stress to the purview of their expertise or responsibility. Examples of this are: HUD addressing community development need; the U.S. Treasury employing income measures; the Urban Institute focuses on municipal operations and finance.

Essentially, the evaluation examples chosen are a collection of methods developed for a specific application, and the transferability to other circumstances is very limited, particularly with the comparative approach.

Another reason why the use of variables as indicators of fiscal stress is not consistent through the literature is related to the function of the evaluation. Social objectives are addressed by authors of municipal fiscal evaluations by including measures of health and welfare along with measures of fiscal bouyancy and economic efficiency. The difference between the comparative and case study evaluation design seems to stem from how each balances the use of economic and social measures as indicators of municipal fiscal stress.

The comparative approach emphasizes the relative fiscal condition of a municipality, alluding that the normative situation would be similar levels of health, welfare, and fiscal responsibility among municipalities. In contrast to the comparative design, case studies focus almost entirely on the local factors affecting municipal fiscal condition. Proponents of the case study approach argue that the degree of local accountability in the local finance system warrants fiscal
evaluation in the socio-economic context of the municipality.

The analysis of municipal fiscal evaluation examples demonstrates that regardless of design, it is difficult to capture or anticipate the range of local government fiscal responses to economic activity and demography. Both evaluation approaches share the objective of identifying financial need in municipalities. However, neither approach incorporates an evaluation feature to determine if that financial need requires assistance (CMHC, RRAP Evaluation 1986). Many of the comparative studies in particular, do not articulate the rationale for public sector assistance activity. The responsibility for assistance is assumed by the senior government.

The underlying difference between the two designs is their approach to resolving public service objectives and public finance objectives. The selection of exogenous factors used in evaluation tools, and their subsequent interpretation will be further explained by investigating how public finance theory reconciles public objectives with market forces.
IV - THE ROLE OF PUBLIC FINANCE

4.0 Introduction

The methods of municipal fiscal evaluation examined in the previous chapter provided information on the selection of variables used as indicators of municipal fiscal condition. Several options exist in the literature: socio-economic indices, fiscal indices, trend monitoring and case studies. However, that literature does not provide explicit reasons for choosing any particular design. The selection of exogenous factors used in tools to gauge municipal fiscal condition, and their interpretation as municipal fiscal strengths and weaknesses, has yet to be fully explained.

The underlying difference among evaluation methods (and between the two designs) stems from the conflict between public service objectives and economic objectives. Although it is not clearly stated in the literature, authors select variables and interpret their significance according to their view of how public objectives should be balanced with market forces.

This chapter outlines the theoretical possibilities of economic organization and roles for public finance. The discussion centres on theoretical responses to resolving the conflict between public service objectives, and economic efficiency or market objectives.

Public service objectives of distributional justice and social welfare have several definitions according to value choices. Public finance theory reflects these choices by forwarding several modes of operation. Local government finance
is specifically designed to ensure the efficient and equitable delivery of local public goods and services. In response to this objective, evaluations of local financial performance emphasize particular aspects of local government operation.

Different views on the public-private partnership can be roughly translated into many public finance theories. Once the theories are defined, the evaluation literature can be classified as falling closer to one ideologic position or another. A convenient method of discerning between possible views on how the economy should be organized is to pose questions related to organizational structure. The remainder of this chapter summarizes answers to the following questions (Musgrave 1980).

1. What kind of economy can there be?
2. How does government evolve from the economy?
3. What is the rationale for the public sector?
4. What factors determine the size and role of the public sector?
5. How is economic income distributed among individuals?
6. What are the geographic implications of each ideology?
4.1 Economic Choices

Two mainstream positions on economic organization have developed to address how the economy and the public sector interact. One view is an "evolved" economy resulting from the collective choices and preferences of individuals (Bennett 1980). Economic functions evolve because the values which determine individual preferences are also evolutionary in nature: each set is particular to the society in which it is formed. Economic theory labels this the market approach to the political economy, and extends the rule of individual choice to the public sector. Bennett (1980) describes the attitude of the evolutionary school toward the public sector as spectative: "the public finance of the state depends for its continuance upon the desire of individuals to fulfill their wants collectively."

The alternative view is of "designed" economies, where decisions about the public sector are made at the ideologic or scientific level of debate. This view finds two areas of support (Bennett 1980).

A. Marxists and Radical economists believe that society should be organized on a clearly stated ideology.

B. Scientific schools represented by Jeremy Bentham, Mill, Wicksell, Lindhal and the Utilitarians, believe that economic organization and government result from man attempting to solve problems.

The latter has been developed into modern welfare economics. In particular, Pareto (1966) argued that governments should attempt to achieve a relative, as opposed to total, improvement in social welfare, especially in the justice of its
distribution. Current applications of this view emphasize the analysis of public sector decisions according to predefined objectives, a view which Bennett (1980) notes, has been particularly influential in land-use and physical planning, as well as the evaluation of public policy.

4.2 The Need for a Public Sector

Both views on the economy contend that the public sector is a necessary entity because of the nature of public goods. Musgrave (1959) and Samuelson (1954) first described pure public goods in terms of three characteristics.

(1) non-rival consumption: the amount consumed by one individual does not subtract from the amount available for other consumers;

(2) non-excludability: the supply to any one person prevents any person from being excluded, even persons who do not pay for the service (free-rider phenomena)

(3) unrejectability: once a service is supplied it is consumed equally by all, even those who do not wish to do so.

Where benefits are available to all persons, consumers will not voluntarily pay for the goods; therefore, no private firm will produce it. Enter, the public provision for social goods, and a government whose objective it is to ascertain what the consumer voter wants for public goods, and tax him accordingly (Tiebout 1956).

A classic example of a good which has all these characteristics is national defence. Although few other goods possess these characteristics, many are publicly provided.
Several other reasons for public provision include such technical factors as: the degree of externalities generated, jointness of supply, and the degree to which there is a collective desire. Hence, the size of the public sector, what services it provides, how it is financed, and who benefits, is constrained by the political economy (Bennett 1980).

At this point, it is useful to discuss the main ideologic underpinnings of how public expenditure is determined according to each of three schools of thought which have developed in alignment with the evolutionary and design ideals of the economy. Each of the three schools of public finance organization, Preference, Appeasement, and Needs Assessment, have corresponding methods of determining need for public goods and services; hence, the size of the public sector. Figure 4.2 is a schematic diagram of political ideologies (Bennett 1980).

4.3 The Market School

The market school is associated with the Public Choice label because it adheres to the principles of an evolved economy. Public sector responsibilities are defined by advocates of the Public Choice ideology as

(a) responding to preferences which are expressed by individuals
(b) allocating public goods on the basis of willingness to pay
(c) distributing costs of provision according to the benefits received.

These characteristics translate into a public service system based entirely on the collective desires of individuals. Social goods theory was originally based on assumptions of
CHART 4.2

FRAMEWORK OF POLITICAL IDEOLOGY and ECONOMIC ORGANIZATION

Designed Economy
- Centralist
  - Radical
    - Social Welfare
  - Class Acquiesence
    - Social Design Efficiency
  - Equal Welfare
  - Central Funds Local Decisions
  - Local Query

1. Postulate
2. Political Organization
3. Rationale for Public Sector
4. Role & Size of Public Sector
5. Distribution Principles
6. Local Mechanism for Delivery

Evolved Economy
- Public Choice
  - Collective Agreement
  - Revealed Individual Preferences
  - Market Pricing
  - Local Funding
  - Local Decisions
uniform taste, income, and population distribution. In this scenario, Musgrave suggests that public services with benefits that accrue equally across the country should be provided centrally.

Buchanan (1967) challenged the validity of central provision by suggesting that preferences tend to be more homogeneous within given regions than between them; therefore, preferences are best satisfied by decentralized decision making. Estimates of public service demands must be sensitive to preferences, which vary across jurisdictions and over time.

Buchanan (1967) and Tiebout (1956) offer the localist model to explain how consumers could reveal their preferences to coincide with decentralized decision making. The Buchanan hypothesis suggests that, given a geographic pattern of separate political jurisdictions, individuals will band together in service clubs within each jurisdiction. Each service club allows public goods to be provided only when collectively desired. Variations in service preference across jurisdictions will result in an unequal distribution of public goods from place to place. If an individual is not in agreement with the collective choice of public goods in a jurisdiction, he "votes with his feet" by moving to the jurisdiction with an agreeable mix of public goods and taxes (Tiebout 1956). This fiscal stimulus to migration is known as the Tiebout hypothesis. The act of moving or failing to move represents the usual market test of willingness to buy a good. Together, the Buchanan and Tiebout hypotheses allow the Public Choice political structure to
deliver services and tax according to market principles.

In conventional economic terms, the criteria employed by the Public Choice system to obtain a just distribution of total income are referred to as endowment based criteria. Ethical support for distribution by factor endowment and pricing of those factors comes from philosophers who argued that a person has an innate right to the fruits of his or her labour (Musgrave 1980).

Scott (1964) and Musgrave (1980) present plausible arguments in support of the localist approach to allocating public expenditure. Scott proposes that the geographic inequities in wealth and public benefits between locations should be accepted as inevitable in any state where a measure of local autonomy is permitted. Musgrave's comments are similar: "each community will do its own thing and everyone will be satisfied" (Musgrave 1980). Acceptance of endowment based criteria leads to the formation of an "economic map" which illustrates differences in preference and income. (Musgrave 1980).

However, there are three basic problems to implementing the public choice model.

1. Impure public goods
2. Service provision externalities.
3. Violation of 'equal treatment of equals.'
4.3.1 Impure public goods

Impure public goods refer to those goods which are provided through the public fisc, but do not have all three of Musgrave's and Samuelson's characteristics. There is the special case of communal wants which bring benefit to the group as a whole, but would not be demanded by individuals. These goods require some degree of government provision so that the benefits of their consumption are maximized. For example, education has clear external benefits, but individuals would not consume adequate amounts to provide maximum benefits to society if they were left to purchase it through the market.

4.3.2 Service provision externalities.

The public choice model ignores problems of service provision stemming from spillovers, tapering, and pure public goods. Tapering, often called the neighbourhood effect, occurs where the benefits of a public good diminish or 'taper off' with distance from the point of provision. Property services such as parks, fire halls, police stations, some social services such as hospitals, schools and special care facilities are considered to have tapering benefits as well as negative externalities. As a result, local service provision may follow preference rules, but at the expense of economic efficiency as it would be measured across jurisdictions.

4.3.3 Equal treatment of Equals

Another problem with revealed preferences as a case for provision is that demand for a particular service is not evidence of the ability to pay. The different income of people
and wealth of business result in a geographically variable tax base. Therefore, an equal tax rate across all jurisdictions would give different per capita yields, and the inability to pay for service preferences in some locations. As a result, individuals with similar income and demand characteristics would not receive the same amount of service for their tax dollar. However, this is a violation of the principle in taxation known as basic entitlement, qualifications may be added in recognition that factor endowments are unequally distributed. Variations away from the endowment rule are associated with other schools of thought on distributive justice.

4.4 The Centralist Provision of Public Goods

The basic difference between the market approach and the centralist approach is the power of individual choice in determining the size and function of the public sector. Political scientists argue that regardless of democratic intentions, it is unrealistic to view the political process simply as the implementation of voter preferences, without having an influence or will of its own (Musgrave 1980). Musgrave captures the essence of the centralist system.

"the existence of merit and demerit goods... Suggests that our society, which considers itself democratic, retains elements of autocracy which permit the elite (however defined) to impose their preferences."

The centralist model has public goods allocated geographically, on the basis of need demonstrated by each spatial unit. There are two branches extending from the
centralist ideal: the radical element of ideology appeasement, and the moderate element of needs assessment.

4.4.1 The Ideology Appeasement School

The ideology appeasement school is supported by the radical economist element, and suggests that the origin of public goods is determined by the specific interests of capital (Bennett 1980). Public goods would not be provided by a private capital investment due to their unprofitability, but nevertheless necessary to maintain acquiescence in class dominated society, and assure a higher rate of private profits (Bennett 1980). This radical view of growth in public expenditures is based on Wagner's law, which states that public expenditures expand to absorb those sectors where profit is low (Musgrave 1980). History seems to have illustrated that as the general level of wealth increases, so does either the demand for, or cost of providing public goods. Peacock and Wiseman (1961) argued that once new levels of public expenditure are reached, the old ones are not returned due to displacement effects.

The radical view of a just distribution of benefits is guided by Egalitarian criteria which argue that equality of welfare is desirable. This approach is based on the humanisitic view of the equal worth of individuals. According to Marx, differences in need due to objective factors, such as family size and health, are resolved by his statement "from each according to his ability, to each according to his need" (Musgrave 1980). The radical school shares the principle of equity as the basis of a designed economy with the Needs
Assessment branch. However, the two philosophies differ in their pursuit of equity. The radical position gives prescriptive direction to the economy. The needs assessment school is more reactive to specific problems which obstruct the path to equity.

4.4.2 The Needs Assessment Branch

The needs assessment school also suggests that public goods be distributed to people on the basis of their need (Bennett 1980). The scientific allocation of public goods and benefits has the objective of achieving greater welfare for society, while maintaining an element of individual choice. The cost of public goods provision is distributed according to the ability to pay.

The needs assessment school of public finance is described by Bennett as the "interplay between scientific schools of social design and efficiency" (Bennett 1980). Efficiency criteria are the technical character of public goods which impact upon the economics of provision. A concern for economic efficiency prompts the needs assessment school to be sensitive to service provision externalities and economies of scale. The social design aspect of needs assessment can be approached as either an absolute or relative concept.

The absolute concept of social justice is contained in utilitarian criteria (Musgrave 1980). Philosophers proposed measures of total welfare or utility, and overall social happiness. In essence, these writers would distribute income to achieve the greatest sum total of happiness (Musgrave 1980).
However, maximum satisfaction would not lead to an egalitarian solution because the point would be reached where the marginal utility of the last person would be negative (Musgrave 1980).

The relative concept of needs assessment seeks a relative improvement in social welfare, and particularly in the justice of its distribution. Bennett (1980) describes this approach to defining need as "improvements in the social distribution of the status quo." The needs assessment view is most adequately represented by combining equity and endowment criteria which call for ensuring that no one suffers poverty, and allowing those who produce more to be rewarded more (Musgrave 1980).

Rawls' principle of "maximin" argues that the single rational choice is (1) equality in the assignment of rights and duties, with (2) the acceptance of inequalities to the extent that they raise the position of the lowest person on the scale. Rawls finds support for his view in the observation that people are (generally) extreme risk averters, and do not wish to risk being too badly off if caught at the bottom of the scale. Rawls interprets the motivation for public services and income redistribution as being self serving, rather than being compassionate altruism.
4.5 Summary of Public Finance Theories

The preceding discussion of political organization and public finance theory reveals two possible ideal systems of government and public service provision. Each can be compared to an input-output matrix of political choices, graphically represented by Figure 4.2. The level and nature of public finance varies with political ideology.

The social welfare ideology is followed by central government decision making, and places greatest emphasis on the relative welfare of individuals. This concern is translated into two basic responsibilities for central government.

(1) Maintenance of stable employment, prices, and economic growth; and
(2) The redistribution of income.

In pursuit of these two goals, the central government attempts to establish a minimum standard of welfare through taxation policy and program service delivery. Government expenditure requirements are based to a large extent on the collective desire of individuals for public goods and services, but final expenditure determination is supplemented by recommendations from government expertise.

The social welfare ideology refers to public expenditures as arising from a "need". The needs assessment branch makes specific use of the "need" concept. Bennett (1980), describes three possible expressions of need which could be recognized by a centralist government.

(i) 'justified' need: in which individual,
expert and political opinion are all in agreement.

(ii) 'unjustified' need: where individuals desire a certain need to be satisfied but political and expert opinion agree that it should not be.

(iii) 'irresolvable' need: political, expert, individual opinions all differ, but individuals want a certain service.

Both the unjustified and irresolvable types of need recognize the ability of political power and expert opinion to determine public sector activity.

The taxation policy of social welfare is based on the principle of 'ability-to-pay'. Individual income earners are called upon to contribute to the revenue fund in proportion to their earnings. What public services are received in return are not necessarily in proportion to taxes paid, but considered to be to the mutual and maximum benefit of society.

Public Choice, by responding to jurisdictions of choice within a larger framework of government, cannot become involved with, or concerned about the two main functions of the social welfare ideology. The impact of a stabilization policy is most effective on a national scale because labour and capital flows freely across subnational borders. Redistributive policies are also best implemented by a senior government to avoid tax induced migration of labour and capital across local jurisdictions.

The Public Choice ideology identifies its responsibility as being the efficient allocation of public goods and services. Efficiency is defined according to two concepts: collective choice, and the payment for benefits received. Public
expenditure levels are determined by the collective desire of individuals for a certain good within a specified jurisdiction, and their willingness to pay for it.

In theory, Public Choice might amount to as many jurisdictions as services because of geographically variable public service demands. The pattern and level of service delivery is regulated by income variations also, because the public choice system employs a pay-as-you-use system of public finance. The principle of payment for benefits received is the antithesis of the ability-to-pay, and results in a completely different pattern of service delivery.

The essential difference between Social Welfare and Public Choice is the service provision functions each performs. Public Choice focusses on local demands, and delivers local public goods and services. On the other hand, the Social Welfare ideology focusses on longer term responsibilities with a broader geographic incidence. The financial mechanisms each employs are attempts to secure reliable funding and achieve their program objectives.

The combination of public service objectives and financial objectives employed by the two ideologies can be compared to municipal fiscal evaluation objectives. The following chapter analyzes how evaluation design is associated with public finance ideology.
V - LOGICAL LINKS BETWEEN THEORY AND EVALUATION DESIGN

5.0 A Framework of Comparison

The preceding sections have demonstrated that the conflict between public service objectives and private market objectives is treated differently by each political ideology. Each political ideology has definite preferences for social or economic objectives, and incorporates principles of public finance which complement those objectives.

Theory offers two ideologies: Social Welfare and Public Choice. The proponents of the Social Welfare ideology were found to place greater emphasis on public service objectives. Their preferred finance system incorporates elements of distributional justice, as evidenced by taxation according to the ability-to-pay.

Private market objectives such as economic efficiency, financial solvency, and fiscal responsibility were favoured by advocates of Public Choice. Public service provision is financed by the mechanism of payment for benefits received. This market approach serves to protect the interests of individual rather than the betterment of the entire society.

In order to explain how municipal fiscal evaluation design confronts the conflict between social and economic objectives, this section draws on the tenets of public finance theory outlined in Chapter Four. The objective is to discover the aspects of public finance theory which are linked to tools for evaluating municipal fiscal condition. Once the theoretical
implications of each evaluation approach become clear, the merits of each approach also become evident.

The concepts expressed by each political ideology are examined for logical links to evaluation design. It follows that the emphasis given to either public service or economic objectives in municipal fiscal evaluations would parallel one ideology or the other. Two patterns emerge for discussion: (1) The social welfare ideology and comparative municipal fiscal evaluations, and (2) the public choice ideology and case study evaluations.

The study will find direction for the refinement of fiscal evaluation design tools, and for their application in different institutional milieu from the analysis of logical links and from the findings of the literature review. Examining the logical links between public finance theory and evaluation design brings to light some principles for the application of municipal fiscal evaluations. Observations from the evaluation examples reviewed provide some direction for the choice of evaluation approach, and the choice of indicators. The discussion continues by stating some of the merits and limits of each type of evaluation approach.

5.1 Logical Links: The Comparative Evaluation Approach

This section examines the conceptual links between the social welfare ideology and the comparative approach to municipal fiscal evaluation. The stated objectives of the evaluation are matched with parallel theoretical concepts. These concepts will be discussed as they relate to the design features
of the comparative approach. The logical links between the comparative approach and the social welfare ideology are summarized in Chart 5.1.

The link between the comparative fiscal evaluation approach and the social welfare ideology is the emphasis on public service objectives like equity, distributional justice, health, and welfare. Both ideology and evaluation give preference to principles of finance which do not jeopardize the integrity of public service concerns.

Public finance theory tells us that the two basic responsibilities of the social welfare ideology are to maintain stability across the nation and to redistribute income. Senior governments evaluate municipal fiscal condition because local government is responsible for providing a number of services which senior governments include in their assessment of relative welfare.

Another similarity between comparative fiscal evaluations and a centralist political structure, is that both are responding to problematic circumstances. As a reactive measure, the comparative method shares the same objective as the needs assessment branch of the centralist political structure.

The comparative evaluation examples reveal the link to theory through the variables most frequently chosen as fiscal indicators. Indicators are more directly associated with the health and welfare of the populace, than the fiscal bouyancy of local government. Common among the variables used are unemployment, per capita income, and minority population
<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>OBJECTIVE</th>
<th>RATIONALE</th>
<th>EVALUATION DESIGN FEATURE</th>
<th>POTENTIAL PROBLEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Assistance</td>
<td></td>
<td>Senior government role is assumed. Intervention deemed necessary.</td>
<td>No feature to test the necessity of senior government involvement.</td>
<td>Misspecification of problem leads to ineffective financial aid programs.</td>
</tr>
<tr>
<td>3. Equity</td>
<td>To target funding for substandard municipal services and related conditions.</td>
<td>Senior governments are unsatisfied with current levels of service &amp; living standards.</td>
<td>Comparative analysis. Needs based allocation to subsidize lesser endowed municipalities.</td>
<td>Evaluations do not consider variable service delivery levels as a function of local choice.</td>
</tr>
<tr>
<td>4. Quality Improvement and Maintenance</td>
<td>To allocate government resources effectively and efficiently.</td>
<td>To promote sustained improvements and ensure quality standards across jurisdictions.</td>
<td>Lowest rated municipalities are favoured for funding, usually for capital works.</td>
<td>Over emphasis on capital funding could lead to ineffective investments. Social welfare programs might be more appropriate.</td>
</tr>
</tbody>
</table>

The organization of this chart was inspired by CMHC: RRAP Evaluation, 1986.
quotients of one location compared to regional or national averages (HUD: CNI method 1979; UDAG method; U.S. Treasury; CBO; Touche-Ross). By emphasizing the relative differences, comparative evaluations imply that the desirable situation would be to have no differences.

Most of the comparative fiscal evaluations originated with a federal or senior government agency. Only three examples were sponsored or authored by a non-governmental agency: Clark and Ferguson (1983); Touche-Ross (1981); and the Urban Institute (1984). These three will prove to be 'special cases' in terms of their alignment with a public finance ideology due to their particular approach.

The HUD department comparative evaluation (UDAG method) provides a demonstration of how the comparative design is associated with the social welfare ideology. HUD department programs are generally attempting to reduce regional disparities manifested in urban areas by propping up the 'worst' cases among the group with programs like UDAG. However, public sector intervention is limited to ensuring that no one city should suffer poverty. Only municipalities exhibiting below average performance receive this form of federal attention.

The extreme left of centralist philosophy is not represented in the examples of municipal fiscal evaluation reviewed here. The radical extension would not allow for local decision making with respect to either the funding or delivery of local public goods and services. Under this system, the optimal situation would have no geographic variation in either
the financing or delivery of local services. Local administrative agencies would be confined to implementing central decisions with respect to the level of services and rates charged.

There are three examples of the comparative evaluation approach which do not fall neatly into the social welfare ideology: Clark and Ferguson, Touche Ross, and the Urban Institute. Two of these three attempt to balance the use of public service measures with economic efficiency concerns: Touche Ross, and Clark and Ferguson. Their methods attempt to recognize diversity in services across cities.

For example, Clark and Ferguson state that they view government "as a system which must adapt to its environment", and the analysts concern themselves directly with how local government expenditures are adapted to city resources (Clark and Ferguson 1983 p.6) The authors' view exogenous factors, such as economic activity, indirectly influential on "fiscal policy outputs", or public expenditure. The main actors are citizens, citizen sectors, and politicians.

The Touche-Ross study also places emphasis on local government management and decision making in their fiscal analysis. The authors argued that similar socio-economic characteristics cannot be reliable indicators of financial performance. Cities which were grouped into clusters of common characteristics proved to have dissimilar financial performances. Both the Touche-Ross, and Clark and Ferguson study exemplify the principle of supporting a welfare floor. At the
same time, both studies recognize the ability of local government to choose particular levels of debt, service provision, and taxation. By recognizing the choice element, both authors are including a criteria of the public choice ideology.

The Urban Institute study also falls between the needs assessment and public choice ideologies. The Urban Institute designed an evaluation to identify local governments suffering from fiscal strain as the result of weak economies (Aronson 1984). The paternal nature of the evaluation suggests that the Urban Institute represents federal needs assessment interests. However, the variables which are chosen as indicators of fiscal strain are measures of local government activity, suggesting that the Urban Institute perceives local government activity as the driving force behind fiscal health. This aspect of the Urban Institute evaluation method is more closely aligned with the Public Choice school because the local corporation is held responsible for its financial position.
5.2 Logical Links: The Case Study Approach

The examination of logical links between the case study approach and political ideology proceeds in the same manner as the previous section. Hypothesized relationships are stated, and the discussion articulates how evaluation design features reflect ideological concepts. The case study approach to municipal fiscal evaluation is shown to use concepts which parallel the public choice ideology. The logical links discussed here are summarized in Chart 5.2.

A precept of the public choice ideology is a collective agreement to provide some services publicly. The exact types, levels, and distribution of these services are regulated by two factors: (1) individual preferences and, (2) market pricing. These factors translate into a local public service system which has the following characteristics: variable by location, variable over time, and variable according to the willingness to pay. Essentially, the public choice system emphasizes the security of payment and the freedom of choice. Choice is bounded neither by time nor by location.

Case studies mirror these concepts in their approach to municipal fiscal evaluation. Credit or bond rating, as an example of the case study approach, specifically protects the interests of the investor, as opposed to society's objectives of equity. This is accomplished through the ratings which signify a municipality's ability to repay debt. In other words, municipalities are called upon to reveal their willingness to pay for the level of services provided. The result is an
## Chart 5.2

### Logical Links Between Public Choice Ideology and the Case Study Evaluation Approach

<table>
<thead>
<tr>
<th>Concept</th>
<th>Objective</th>
<th>Rationale</th>
<th>Evaluation Design Feature</th>
<th>Potential Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Collective Agreement</td>
<td>Role of Local Government is to Ascertain &amp; Provide Goods &amp; Services in Demand.</td>
<td>Freedom of individuals &amp; collectives to choose services &amp; levels.</td>
<td>Focus on Local trends, local finances. No comparative analysis.</td>
<td>Local Government is not a closed system. Not all circumstances are within local purview of responsibility.</td>
</tr>
<tr>
<td>2. Choice</td>
<td>To allow choices across jurisdictions &amp; over time with respect to public services.</td>
<td>Personal preferences vary over time and in different geographic locations.</td>
<td>Use of ratio measures of change over time. Trend analysis.</td>
<td>Unwritten acceptable levels of services from place to place.</td>
</tr>
<tr>
<td>3. Market Pricing</td>
<td>Local Financial Accountability.</td>
<td>Payment for benefits received is a &quot;fair&quot; method of distribution.</td>
<td>Evaluation criteria emphasize the locally raised revenues.</td>
<td>The &quot;dual&quot; nature of local government is unaccounted for.</td>
</tr>
</tbody>
</table>

1 The organization of this chart was inspired by CMHC: RRAP Evaluation, 1986.
evaluation of municipal fiscal condition which emphasizes the achievement of economic efficiency over social welfare objectives.

Case study evaluations, bond rating in particular, also mirror the concept of distribution of public services by individual preferences. Bond rating is time sensitive because the evaluation process examines changes over time, as opposed to static levels. This procedure includes an examination of whether or not local government is responsive to changes in socio-economic conditions, voter preferences, as well as changes in revenue capacity.

Credit rating does not judge the financial performance of one city in comparison to others. Variations in service provision and payment for public goods across locations are acceptable. As a result, the assessment of local fiscal condition emphasizes internal operations and trends. Although case studies do not measure the degree of equity among cities with respect to financial performance, the measures used have been refined through repeated use in many locations.

The monitoring systems developed by the ICMA and the MFOA, have similar objectives to the credit rating approach. The interests of the investor are replaced with the interests of the local taxpayers or local residents. Issues of distributional justice such as access to social programs, are examined only as they affect the delivery of local public goods and services. These evaluation tools are used in the framework of ensuring that a city is in a financial position which allows sensitive
responses to local resident wishes.

The choice of variables used as evaluation criteria with the case study approach reflects the attempt to ascertain the degree of local accountability. Measures of economic activity, social and demographic trends are used to interpret and rationalize the municipality's financial performance.

5.3 Lessons Learned from Evaluation Examples

The preceding analysis, combined with the findings from the literature review of municipal fiscal evaluations, leads to the discussion of appropriate evaluation design features and applications. Most of the commentary focusses on how different variables may be used as evaluation criteria, and what principles, if any, should guide the choice of variables for use in evaluations. Because there are such a variety of socio-economic and financial variables which could be used, this section groups the comments about the types of indicators which are available.

Often, the validity or appropriateness of a particular measure, such as debt per capita, is dependent on the selection of other measures used in conjunction with it. This holds true in any situation where the variables used are closely related to each other, and combined in statistical analyses. The two evaluation approaches assign different interpretations to the relative importance of variables.

Social variables, such as measures of racial composition, demographic characteristics, and income levels, are used by the
comparative approach as indicators of social welfare. The case study approach tends to recognize social variables as a means to determine the demands made on the public service system.

Economic variables are used by the comparative approach to municipal fiscal evaluation as measures of equity across several local jurisdictions. Local scores are compared to each other, as well as to national averages. The case study approach recognizes the influential nature of economic variables on local government finance, and uses these measures to represent the fiscal capacity of local government.

Financial indicators are usually direct measures of financial status. The comparative approach will use these as a fiscal disparity measure. On the other hand, case studies expand the interpretation to include indicators of management expertise, and local accountability.

The experiences of the evaluation examples reviewed also highlight a couple of general principles which are applicable to the comparative or case study approach. It was found that, generally, the most useful evaluation results come from evaluation formats which are comprehensive, that is, using variables from each indicator category; and from evaluations which have uncomplicated procedures. The information and data used in fiscal evaluations should, where possible, communicate trends or relationships to other factors, in order to permit the recognition of problems or opportunities.

Another lesson learned from the literature review is that evaluation formats and procedures should be flexible. Experience
demonstrates that the abstruse relationship among exogenous factors and municipal financial performance presents a barrier to using 'cast in stone standard measures'. In order for analysts to be able to monitor and measure accurately, the nuances of change need to be examined. Subtle variations are usually best discovered or observed by using several measures of the same factor or characteristic.

5.4 Merits of Evaluation Design

5.4.1 The Comparative Approach

One feature often incorporated into comparative evaluation designs is weighted variables. Weights allow the evaluation user to be more precisely aware of how important certain variables are in the analysis. While there are problems with the choice of weight values, the idea of having traced impacts is appealing, especially if compared to the case study approach. Case study municipal fiscal evaluations are interpreted by an analyst who does not assign exact weights to variables. Variables are merely given more or less subjective consideration.

Another benefit of the comparative approach to municipal fiscal evaluation is that it usually has a longer term perspective. This coincides with the senior government functions of maintaining stability and redistributing income. As a result, the benefits of a comparative approach are best realized by a senior government or institutional agency.

Comparative studies lend themselves for use as research
tools because they focus on measuring the achievement of longer term social welfare objectives. As a research tool, the comparative approach increases the opportunity to learn more about the consequences of regional variations in social welfare on municipal finance. Findings from such studies could promote a better understanding of financial dynamics in a system of devolved government.

Another merit of the comparative approach is that it is a reasonably effective method for a senior government agency to do periodic monitoring of smaller municipalities. Small municipalities may have financial problems which are similar to large cities, but not the resources or expertise to find a solution. Senior governments have a vested interest in the stability of local government finance, and would have the resources to perform financial evaluations.

Systematic monitoring of municipal fiscal condition through the comparative approach would contribute to the Ministry of Municipal Affairs' supervisory mandate. In addition, the measurement of fiscal condition could provide a better foundation for deriving revenue sharing formulae, cost sharing agreements, and the distribution of other provincial funds. In fact, since evaluations may address a range of issues, any provincial ministry distributing funds to municipalities could make use of a comparative evaluation approach.

The next section summarizes the major benefits of the case study approach. Comparative and case study limitations are discussed in section 5.5.
5.4.2 The Case Study Approach Merits

The case study approach to municipal fiscal evaluation offers features which are most beneficial to local government. From an administrative perspective, case studies can be treated as 'in house' evaluations (Hanson & Boisclair 1983). As such, reports need not be made public, and some element of confidentiality from the public is maintained. This situation allows local councils to control the response to evaluation results. Time can be allotted to the administration to develop a strategy that would address the issues raised by the evaluation. The reliability of an 'in house' fiscal evaluation could be challenged by outsiders on the basis of objectivity. However, the details of administration and municipal operations are best known by municipal employees.

Case study evaluations also have flexibility. Four different perspectives of municipal finance could be examined within the design of a case study. The four choices are:

(1) Assessing the quality of information used for decision making.
(2) Assessing the quality of managerial processes.
(3) Quantifying efficiency and operational costs.
(4) Comparing results to statistics from other municipalities (Hanson & Boisclair 1983).

This flexibility permits effective use of information which is more or less readily available, and not requiring complex statistical procedures.

Another benefit of the case study approach is that it
incorporates measures of managerial skills. Touche Ross, and Clark and Ferguson explicitly point to the importance of municipal management to evaluation results. The argument used is that good value for money can be audited, but the "twin" - good value for money management - provides more relevant information for improving the financial operations of the municipality. The managerial component picks up on extreme frugality, which may appear attractive on audit sheets, but is known to contribute to the decline in effective local service delivery (MIS: Information Report 1980). Sometimes, a small increment in expenditures could bring substantial benefits to taxpayers (Hanson & Boisclair 1983).

A feature of the case study approach which is particularly attractive to local councils and administrations is the use of data. Statistical data manipulation is kept to a minimum, and can easily be accommodated by a micro computer. As a result, councillors and administrative personnel can perform the evaluation and understand the results. The information can then be used in the service planning or strategic planning of the municipality.

5.5 Limitations of Evaluation Design

5.5.1 The Comparative Approach

The review of evaluation literature found that the largest obstacle to using a comparative fiscal evaluation is the lack of patterned relationships among the economic, social, demographic,
and financial variables measured. Comparative evaluations rely on a certain amount of similarity across municipalities in order to make the comparison valid. When there are differences in municipal expenditure responsibilities, revenue capacity, and voter preferences, comparative evaluations fail to make amends. This flaw in the comparative design can be corrected, as demonstrated most effectively by Clark and Ferguson (1983). However, the required methodology is cumbersome and falls short of judgement calls permitted with the case study approach.

Provincial governments might become involved with municipal fiscal evaluations themselves, or by compelling municipalities to perform them. Municipalities would likely respond negatively, unless they were compensated for the administrative costs. On the other hand, some provincial governments may be slightly concerned about intruding on local autonomy (Hanson & Boisclair 1983).

Another limit to the comparative approach would be the availability of data for small municipalities. The range of information would not be there, nor would the locational specificity. In provinces like B.C., municipalities are formed for small villages, rural townships and large cities. The comparative analysis format is more suitable to large cities because the information is available.

5.5.2 Limits to the Case Study Approach

Case study evaluations, as an internal review process, could bring out departmental rivalry. Finger pointing could be
avoided by setting up a policy of periodic reviews prior to the evaluation process (Hanson & Boisclair 1983). The municipal administration could also resist the case study concept if it suspects that the review would highlight the negative aspects of municipal operations. One way to overcome this would be to establish the type of responses or actions that council will consider when the evaluation report is received.

Case study evaluations are limited in their ability to maintain a long term perspective. For municipal governments, the long term perspective applies mostly to debt structure, capital expenditure plans, and the provincial enabling legislation. Municipalities do not have direct control or responsibility for social welfare and economic efficiency objectives. As a result, the case study is not particularly well suited for research purposes.

5.6 Implications

The preceding discussion leads to a few suggestions with respect to the appropriate application of each municipal fiscal evaluation approach. This study has found that there are good qualities with each approach, but it has also found corresponding limits to each approach. Clark and Ferguson (1983), and Musgrave (1980), concur that it is not useful to speculate about which interests should take priority. Neither the comparative nor case study approach emerges as superior.

Clark and Ferguson (1983) suggest that all parties involved would be best served if each party restricted its evaluation
activity to corresponding responsibilities. This means that the municipal and senior government roles in fiscal evaluation should concentrate on the parameters of their respective constitutional status. Local governments would do well to recognize what they can, and cannot, affect. Provincial or senior governments should evaluate factors within their sphere of influence, thereby receiving information more useful to provincial planning and program priorities.

Provincial governments have constitutional jurisdiction over municipalities; therefore, they are likely to have a substantial effect on the development and application of municipal fiscal evaluations. As long as the potential for improved targeting of funds and programs for municipalities exists, the concept of comparative municipal evaluations should become known to provincial authorities. Hanson and Boisclair (1983), found that provinces have not taken the initiative to encourage comprehensive auditing at the municipal level, and the same observation can be extended to fiscal evaluations. The authors also found that some municipal administrators perceive the lack of permissive provincial legislation as an obstacle to the development of a periodic audit.

In British Columbia, municipalities are required to have an external audit done every year. However, the audit only performs an attest function. Some auditors are close advisors to their municipal clients. Hanson and Boisclair (1983) found one municipality in their sample that kept the auditor up-to-date on bylaws, and sought the auditor's financial opinion. Such a
relationship requires a high mutual regard, long experience, interest, and wisdom; and, it is not something that all auditors may wish to do (Hanson & Boisclair 1983). Both the comparative and case study approaches to municipal fiscal evaluation represent an avenue of ongoing consultation without relying on the dedication of a single person.

The use of municipal fiscal evaluations as a management tool would contribute to the strategic or corporate planning process. Through strategic planning, provincial and local government gains a broader perspective of its role and can make consistent and complementary decisions. The strategic planning function is to assess external conditions, (e.g., the impact of the economy on activities), and to examine the organization's capability of responding to changes and implement decisions. Situation assessment parallels the fiscal evaluation process which examines major trends likely to affect the local government finances.

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6.0 General Conclusions

The initial motivation for this study was to explore techniques of municipal fiscal evaluation for use in fiscal management. The concept of a fiscal evaluation is fairly novel, and its application in a municipal context is especially rare. As the use of municipal fiscal evaluation grows more popular in the United States, the possibility of using it in a Canadian context emerges. Although Canadian municipalities rarely experience severe financial problems, the tool of fiscal evaluation is touted as an effective management tool.

The development of a municipal fiscal evaluation tool for application in British Columbia has the benefit of the American experiences. However, it becomes clear from the overview of evaluation tools that the design of municipal fiscal evaluations is not simply an exercise of choosing measures of financial operational status. The analysis of eight comparative and three case study evaluations finds that there are several variations in evaluation approach and in the selection of indicators. The study also finds that some of the measures used as fiscal indicators are not applicable to Canadian fiscal responsibilities.

An objective of this thesis was to discover why the choice of variables used in fiscal evaluation tools varies. The analysis finds that the choice of variables is only partially explained by such factors as:

- availability of data
- statistical procedures involved
- issues addressed by the evaluation

These findings support the conclusion that the choice of variables also depends on the approach: comparative or case study. An examination of the differences between the two approaches finds that the choice of indicators tends to emphasize either public service objectives, like health and welfare, or economic efficiency objectives such as local accountability. The literature examined fails to establish that these objectives are guiding the choice of evaluation criteria. On closer examination, the study finds that there are theoretical foundations to the choice of measures.

A second objective of this study was to discover how municipal fiscal evaluation tools balance the measurement of public service objectives with economic efficiency objectives. Chapter Four outlined the theoretical treatment of these two objectives, and found two options. The Social Welfare ideology was found to emphasize the social welfare objectives. The Public Choice theory gives preference to economic efficiency.

A comparison of theoretical concepts and the comparative and case study evaluation design features, supports the conclusions that:

(1) The Social Welfare ideology best describes the focus of Comparative municipal fiscal evaluations
(2) The focus of the case study approach incorporates many of the Public Choice concepts.
Several findings support the conclusion that the comparative and case study approaches to municipal fiscal evaluation embody different political interests. The most obvious of these are:

- comparative evaluations originate with a federal or senior government agency
- case study evaluations represent a single jurisdiction

- comparative evaluations focus on the relative differences among jurisdictions
- case studies focus on local trends, and local finances

- comparative evaluations often measure local fiscal problems through measures of health, welfare, economic activity, and other macroeconomic objectives
- case study evaluations focus on local goods and services provision, and local accountability

The interpretation of variables used by both the comparative and case study approaches is unique to each. For example, the literature shows that social variables, such as measures of racial composition, income variables, and demographics are used by the comparative approach as measures of social welfare. A low level of social welfare is often interpreted as evidence of fiscal stress. In contrast, the case study approach recognizes social variables as a means to determine the demands made on the local public service system.

Political interests aside, some general principles to guide the use and construction of fiscal evaluations become obvious from the lessons learned through experience. Generally, the most useful evaluation results come from comprehensive evaluation formats, that is, using variables from each indicator category;
and from evaluations which have uncomplicated procedures. The information used in fiscal evaluations should convey trends so that problems and opportunities can be recognized.

Another lesson learned from the literature review is that evaluation formats and procedures should be flexible. The complex relationship among exogenous factors and municipal financial performance presents a barrier to using 'cast in stone standard measures'. The ability to monitor and measure accurately, is enhanced if the nuances of change are examined. Subtle changes are usually best discovered or observed by using several measures of the same factor or characteristic.

6.1 Implications for the Application of Fiscal Evaluations

A third objective of this study was to clarify the implications of political interests on the application and design of a fiscal evaluation for B.C. municipalities. Municipal fiscal evaluations would be most effective if the province and municipalities restricted evaluation activity to their corresponding responsibilities. This study concludes that generally, comparative evaluations would be most appropriate for provincial governments and case studies most suitable for municipal government. The involvement of American federal agencies in local government finance, or local development finance, highlights the advantages of the comparative approach. These advantages are easily extrapolated to application in a provincial government context.

The province is the funding agency furthest removed from
the actual provision of local public goods and services. However it is closer with respect to locally administered provincial programs. As a result, municipalities perform a dual role. The strength of the comparative approach in this situation is that it enables the Province to ensure the fiscal responsibility of local government operations, and it fosters monitoring broader socio-economic objectives without interrupting local operations.

It is concluded that comparative studies are useful as research tools because they focus on measuring the achievement of longer term social welfare objectives. As a result, the opportunity to learn more about the consequences of regional variations in social welfare on municipal finance opens up. Findings from such studies could promote a better understanding of financial dynamics in a system of devolved government.

It is also concluded that comparative evaluations are a reasonably effective method for a senior government agency to do periodic monitoring of smaller municipalities. Small municipalities may have financial problems, but rarely have the resources to find a long term solution. The comparative approach would help the Ministry of Municipal Affairs perform its supervisory mandate. Municipalities could be classified into groups with relatively similar characteristics, and evaluated periodically.

The measurement of fiscal condition could provide a better foundation for deriving revenue sharing formulae, cost sharing agreements, and the distribution of other provincial funds. In fact, since evaluations may address a range of issues, any
provincial ministry distributing funds to municipalities could make use of a comparative evaluation approach. The amount of detail comparative analyses are able to incorporate is limited because of the procedures involved. However, the evaluation results are adequate for broad brush types of queries.

The basis of the comparative approach is historical analysis, as a result it is not particularly useful for predicting. It also tends to penalize municipalities that do not have the average financial characteristics. In these instances, the province would find that a case study of outliers explains whatever anomalies exist. However, case studies should be restricted to special cases of either repetitive problems, or unexplained deviation from the average performance due to the sheer volume of work involved.

Municipalities generally require more detailed information for their financial planning process. The case study approach to municipal fiscal evaluation provides detailed analysis process, and the results are useful to many departments. This finding supports the conclusion that the case study approach is most effective in a municipal context.

A feature of the case study approach which is particularly attractive to local councils and administrations is the ease of using data. Statistical data manipulation is kept to a minimum, and can easily be accommodated by a micro computer. As a result, the case study evaluation can be performed 'in house', at the discretion of municipal administration. As a management tool, case studies would contribute to the strategic or corporate
planning process. Through strategic planning, local government gains a broader perspective of its role and can make consistent and complementary decisions.¹

The case study approach draws information from all government departments and examines a wide range of external factors to provide local council with a picture of current circumstances. Local councils may find the tool useful for examining the possibility of adding new services, increasing service levels, increasing taxes, or other user charges. The case study approach lends itself to if...then types of analyses, allowing local councils to be more aware of the possible impact of their decisions. In this type of application, case studies become very useful as an early warning system. Local councils and administrators can be alerted to environmental changes which will have negative or positive consequences for the budget plans. As a result, fiscal 'crises' should be avoided when local government has sufficient lead time to be in a state of 'readiness'. Financial set-backs can then be approached by pre-arranged management decisions as opposed to ad hoc emergency measures.

Provincial governments have constitutional jurisdiction over municipalities; therefore, they are likely to have a substantial affect on the development and application of municipal fiscal evaluations. Research by Hanson and Boisclair (1983), and by this study, finds that provincial governments

have not yet taken the initiative toward developing more comprehensive municipal fiscal evaluations. Hanson and Boisclair speculate that the lack of evaluation activity is due to the lack of permissive or mandatory legislation.

A topic for future research could examine how the current legislation encourages or discourages the use of municipal fiscal evaluations. Further study of what supportive structures would be necessary to begin systematic evaluations would be prudent before embarking on legislative rules for mandatory evaluations.
LIST OF REFERENCES


ARONSON, RICHARD J. And KING A.E. "Is There a Fiscal Crisis New York?" In the National Tax Journal June 1978.


BIRD, RICHARD M. And SLACK, ENID E. Urban Public Finance in Canada Toronto: Butterworths, 1893.


BOADWAY, ROBIN. Intergovernmental Transfers in Canada Toronto: Canadian Tax Foundation, 1980.


BURCHELL, ROBERT W., LISTOKIN, DAVID., STERNLIEB, GEORGE., HUGHES, JAMES W., CASEY, STEPHEN C. "Measuring Urban Distress" in Cities Under Stress R.W.


MANAGEMENT INFORMATION SERVICE REPORT. "Evaluating Your City's Credit Position" Volume 12 No. 6 June 1980.

MUSGRAVE, RICHARD A. And MUSGRAVE PEGGY B.

MUSGRAVE, RICHARD A. "Approaches to a Fiscal Theory of Political Federalism" in The Economics of Federalism op.cit.


SEIDEL, KAREN M. Oregon Municipal Fiscal Indicators Bureau of Governmental Research and Service, University of Oregon, 1983.


TIEBOUT, C. "A Pure Theory of Local Expenditures" in The Economics of Federalism op.cit.
