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Local Government Fiscal Austerity and Innovation: A Literature Review and Research Agenda

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I: INTRODUCTION

During the past decade there has been a substantial body of research on local fiscal problems and on the responses of local governments to these problems. Since resource scarcity represents a new situation for local governments [1], it has frequently called forth new forms of local government activity and behaviour. This has led to an interest in the kinds of innovative activity fiscally stressed local governments are likely to adopt and in the type of fiscally stressed local government most likely engage in innovative activities.

This research has not, as yet, been well integrated into the existing and very substantial body of literature known as innovation research. In his 1983 review of the literature on innovation, Rogers (1983, p.xv) found 3085 studies of which 2297 were empirical research reports. About half of the research had been published since 1970. It included studies of innovation and innovation adoption by individuals, small groups, communities and organisations, both private and public, and represented work undertaken by social scientists in a wide variety of disciplines including anthropology, sociology, economics, organisation theory and geography as well as political science.

II: INNOVATION RESEARCH

Given a research tradition of such richness, it seems prudent to turn directly to it for guidance prior to an examination of innovation in fiscally stressed local governments and reasonable to expect it to yield a variety of generalisations for hypothesis testing. However, the results of such a review are, at first glance, disappointing. Frendreis (1983, p.110) characterises the innovation research literature as "a mile wide and an inch deep" and observes (p.118) that it reveals "a disappointing tendency toward idiosyncratic results". G. Downs and Mohr remark (1976, p.700)

'Perhaps the most alarming characteristic of the body of empirical study of innovation is the extreme variance among its findings, what we call instability. Factors found to be important for innovation in one study are found to be considerably less important, not important at all, or even inversely important in another study. This phenomenon occurs with relentless regularity.'

Part of the reason for this instability is clearly conceptual confusion. A variety of different kinds of activities are being examined in a variety of different kinds of settings and it is assumed that all of these are instances of a common phenomenon-innovation. Thus Downs and Mohr (1976, p.702) observe:

'The suggestion that a single theory and set of determinants are applicable to the entire set of newly implemented techniques, programs, rules and norms that are lumped under the general heading "innovative" should be considered suspect'.

As the above quotations suggest, the application of the literature on innovation research to fiscally stressed local governments first requires a determined effort to make some sense out of a seemingly chaotic set of studies and findings. In particular, some definitional clarity is a prerequisite. We begin at the beginning. What is an innovation?

Most studies consider an innovation as activity new to the organisation. Rogers and Kim (1985, p.87) define innovation as 'an idea, practice or object perceived as new by an individual or other relevant unit of adoption. It matters little whether an idea is "objectively" new as measured by the lapse of time since its first use or discovery. If an idea is perceived as new or different to the adopting unit, it is an innovation'. Walker (1969 p.881) defines a state government innovation as 'a program or policy which is new to the states adopting it, no matter how old the program may be or how many other states may have adopted it'.

In the above definitions innovation is defined relative to the organisation in which it is introduced. This we shall term 'organisational innovation'. Another approach, though one less used, defines innovation with respect to the system of which the organisation is a part. This we term 'systemic innovation'. Thus, Becker and Whisler (cited in Zaltman, 1973, p.11) define innovation 'as the first or early use of an idea by one of a set of organisations with similar goals'. Pettigrew (1973, p.11) considers innovation 'the adoption of a change which is new to an organisation and to the relevant environment' (my underlining). In these conceptions, only the early adopters of a new activity are considered innovators; as the innovation diffuses throughout the system of organisations later adopters are said to engage in organisational change but not innovation.

In addition to the problem of specifying the relevant unit for analysis (i.e. the organisation or the system of organisations), much of the definitional ambiguity revolves around the question of how new or different a change must be in order to be considered an innovation. Mohr (1982, p.16) defines innovation simply as 'the departure from habit, custom, or tradition', or, in his 1969 research, 'The successful introduction into an applied system of means or ends that are new to the situation'. Innovation in this usage appears to be synonymous with change. However, G. Downs (1976, p.xv) confines the term innovation 'only to policies that represent significant, unprecedented and qualitative departures from past practices'. Pettigrew (1973, p.11) argues that innovation is non-routine, non-programmed decision-making'.

There is widespread agreement, however, that "newness" by itself does not define innovation. However new or different a technique, practice or policy is, it must be first adopted in order to be considered an innovation. Schumpeter was the first to make the frequently-cited distinction between invention - the discovery or development of something new - and innovation - the process of adoption of something new (Kindleberger and Herrick, 1977, p.132). An invention - that is the creation of something new - is not an innovation until it is adopted for use by an individual or organisation.

As an innovation is adopted by more and more members of a system, it is said to diffuse. Rogers (1983, p.5) defines diffusion as 'the process by which an innovation is communicated through certain channels over time among the members of a social system. Diffusion is a special type of communication in which the messages are concerned with a new idea'. It is, according to Gray (1973, p.1175), 'the process by which an innovation spreads'. Many innovation studies are concerned with innovation diffusion and the way in which the diffusion process operates.

The rate of adoption is defined as the speed with which an innovation diffuses and is adopted among the various units within a system: 'the rate of adoption is usually measured by the length of time required for a certain percentage of the members of a system to adopt an innovation' (Rogers, 1983, p.23). Rogers divides adopters into five categories: 1) innovators 2) early adopters 3) early majority 4) late majority and 5) laggards. Under the organisational definition of innovation cited above, all of the categories would 'innovate' when they finally adopted the innovation, while under the systemic definition of innovation only the first and perhaps second categories could be said to be engaged in innovation.

While adoption is a definitional prerequisite for innovation, there is ambiguity about whether it is a sufficient condition. The question of at what point an organisation can be said to have innovated is not treated consistently in the existing literature. Much innovation research considers an innovation to have occurred when an organisation adopts the innovation. However, others argue that mere adoption of an innovation which is never implemented or institutionalised does not constitute an innovation. Increasingly, innovation research divides the organisational innovation process into an adoption or initiation phase and an implementation phase (see Zaltman, 1973, p.52; Rogers, 1983, p.363). G. Downs and Mohr (1976, pp.709-710) argue that these stages involve two different kinds of behaviour and should be studied separately.

As the above discussion suggests, some of the 'instability' in innovation research findings may result from different definitions of innovation (organisational innovation as opposed to systemic innovation) and different research foci (innovation adoption, implementation, the diffusion process, characteristics of early adopters etc.). However, it is also possible that the variability

in innovation research finding may result in part from different kinds of innovations studied. Zaltman (1973, pp.14-15) lists five types of innovations: 1) product or service innovation, which involve innovation in the kind of product produced or service provided by an organisation 2) production process innovations, which are changes in the way in which products or services are produced 3) organisational structure innovations which are changes in the internal structure of the organisation, 4) people innovations, which are changes in the way people interact within the organisation, and 5) policy innovations which involve changes in the organisation's strategies for achieving its objectives.

Much of the research on organisational innovation is concerned with production-process innovation and relatively little on service and policy innovation. In his review of the literature on organisation, Rogers (1983, p.12) notes that almost all of the innovations studied are technological innovations. Much of the work on subnational government organisation is also concerned with technological innovation rather than policy or source innovation (see, for example, Bingham et.al., 1981; Yin, 1979; Perry and Danziger, 1980), although there are exceptions (see Walker, 1969; Mohr, 1969; George Downs, 1976).

Classification schemes of innovation along other dimensions have also been suggested. Zaltman (1973, p.23ff) refers to several studies which divide innovations by importance (major vs. minor) or extent of departure from past practice (routine vs. radical) [2]. G. Downs and Mohr suggest (1976, p.702) that innovations be distinguished according to their cost (high vs. low) and (1979, p.394) according to the kinds of benefits they produce: programmatic (related to program efficiency or effectiveness), prestige (status benefits accruing to the organisation and its members because of early adoption) and structural (benefits related to smoother internal workings of the organisations). In all these cases, it is suggested, explicitly or implicitly, that distinctions in the type of innovation may correspond to behavioural differences in the way in which they are adopted, implemented and diffused.

Similarly, differences in type of organisation may affect their innovativeness. Since the majority of innovation studies are concerned with private-sector organisations, the distinction between public and private sector organisations, particularly those which are profit-seeking, is of particular importance.

The market context of private sector firms affects their goals, structure and motivation. Rainey (1983, pp.208-209) cites various studies which distinguish important differences between public and private-sector organisations:

'Warwick (1975) charges that many organization theorists have ignored the political and legal environments of public agencies... he argues that in the absence of economic markets for outputs, accountability to other public institutions and to the public results in a proliferation of rules, procedural specifications and hierarchical controls. Similarly, Meyer

(1979) notes the failure of most organization theorists to consider literature in political science and economics concerning differences between profit-oriented firms and public bureaucracies. He argues that public bureaucracies (to which market and quasi-market alternatives tend to be unavailable) have a greater tendency toward simple hierarchy, Weberian forms of bureaucracy, and measurement of performance by reference to "criteria of conformity" with higher authority'.

This identification of public organisation with the more traditional 'Weberian' conception of bureaucracy suggests important differences between innovation behaviour in the public and private sectors. Both Thompson and Deutsch comment on the tension between innovation and bureaucracy. Thompson (1969, p.22) comments that, in Weber's conception, 'The bureaucratic organisation is conservative. Novel solutions, using resources in new ways, are likely to appear threatening'. Deutsch (1985, p.20) speculates on the possible 'limits of innovation in a routinized bureaucracy. Max Weber made routine, repetitiveness and order the essence of bureaucracy - seemingly, the opposite of innovation'.

Indeed Roessner (1977, pp.348-50; 1979, pp.191-92) cites a variety of reasons to suggest why public sector organisations might be expected to be less likely to innovate than private sector organisations. He argues (1979, p.192)

'Several institutional features of public organizations act as disincentives for public officials to innovate: 1) The democratic accountability of government agencies to clients, legislative bodies and higher levels of government means that, relative to private firms, public agencies are less capable of independent action than their private counterparts. Displeased subordinates have multiple, extra-agency routes of appeal. 2) Top leadership changes are both more frequent and more far-reaching in public agencies in public agencies than in private firms. The short tenure of most elected public officials means that political survival is dependent upon production of short-term, highly visible results. Programs to produce these kinds of results must have low risks and quick payoffs, characteristically not the attributes of innovative activities. 3) The client or constituent groups of public agencies tend to be more heterogeneous than those of private firms, particularly in the sense that demographic characteristics such as age, race, education and health all have political implications. Because the values, interest and reward structures of public agency constituents vary so much, and because public decisions are so visible, significant changes are difficult to effect. 4) Since public agency outputs are not evaluated in external markets, it is difficult to develop objective performance measures and to specify goals and functions operationally. Goals and objectives consequently lack clarity, which makes developing performance

incentives difficult and favors highly visible but superficial change over change that might significantly affect service effectiveness or efficiency in the long run.'

However, Roessner does point out that the small number of empirical studies on diffusion rates (the time it takes a new innovation to be adopted by some specified percentage of units in the system) do not indicate any difference in the rate at which public and private sector organisations adopt the same innovation. In addition, other research indicates that some of the characteristics of public organisations which Roessner suggests are impediments to innovation (e.g. turnover of top personnel, heterogeneity) are, in fact, positively related to innovation (see discussion of organisational structure below).

Nonetheless, the above discussion suggests great care must be taken in considering which findings from studies of innovation in private sector firms may be applicable to public sector organisations. G. Downs and Mohr (1976, p.702) argue that the distinctions among types of innovation and types of organisation must be considered in efforts to make sense of the literature.

'When findings surrounding the impact of a variable on innovation are contradictory, the common reaction has been to view the matter as yet undecided and call for further study, rather than to explore the divergent studies in search of linkages between the kinds of results obtained and the kinds of innovations considered'.

They argue (1979, p.383) that the proper unit of analysis for innovation research should not be the organisation (why do organisations innovate?) or the innovation (what kinds of innovations are adopted?) but the 'innovation decision' - a particular type of organisation in relation to a particular type of innovation.

III: INNOVATION AND LOCAL FISCAL AUSTERITY: A RESEARCH AGENDA

The above discussion suggests that there are a variety of research questions that might be pursued:

1. Are fiscally stressed local governments more likely to engage in innovation than non-fiscally stressed local governments, i.e. does fiscal stress lead to innovation? Or, following the injunction of Downs and Mohr, does the innovation adopting behaviour of fiscally stressed local governments differ from that of others, e.g. are they likely to adopt different kinds of innovations?)
2. What are the determinants of innovation for fiscally stressed local governments, i.e. what factors explain why some fiscally stressed local governments adopt certain kinds of innovations, while others do not?

3. What are the determinants of innovativeness, i.e. early adopters of an innovation, among fiscally stressed local governments? What distinguishes early adopters or leaders in the local government system from late adopters or laggards?
4. What is the diffusion process by which innovations spread through the system of fiscally stressed local governments? Is there a stable pattern with some local governments consistently leading the way and others lagging?
5. What kinds of innovations are fiscally stressed local governments most likely to adopt?
6. How do fiscally stressed local governments innovate? Where do innovations come from and how do innovations get matched with problems or opportunities?

It is obvious that research questions 2-6 can really be considered subsets of the broader research question relating to innovation in local governments implied in question 1. Thus, for example, question 2 could be rephrased as 'what are the determinants of innovation in local governments (for specific types of innovation) and do these differ between fiscally stressed and non-fiscally stressed local governments?

IV: INNOVATION RESEARCH AND LOCAL FISCAL AUSTERITY: A REVIEW OF THE LITERATURE.

1. Does fiscal stress lead to innovation?

The literature presents sharply divided perspectives on this question. One stream emphasises the importance of environmental turmoil and performance gaps, both descriptions which would appear to characterise fiscally distressed local governments, as stimulants to innovation. Zaltman (1973, p.110) states that "changes in the environment create a situation of stress or pressure to which the adoption unit must respond if it is to remain in a relationship of "dynamic equilibrium" with the environment. Thus an adoption unit is more likely to innovate when its relevant environment is rapidly changing than when it is steady. March and Simon (1958, p.173) argue that innovation occurs when it becomes clear to the organisation that, as a result of environmental changes or other reasons, the present course of actions becomes unsatisfactory. Cyert and March (1963, p.278) remark with respect to business firms that 'failure induces search and search ordinarily results in solutions. Consequently, we would predict that...relatively unsuccessful firms would be more likely to innovate than relatively successful firms'.

Anthony Downs (1967, p.191) terms this situation a 'performance gap':

'The concept of a performance gap is essential in explaining what causes bureau to change. No bureau will alter its behaviour patterns unless someone believes that a significant discrepancy exists between what it is doing and what it "ought" to be doing'.

Downs emphasises (1967, p.275) that bureaus are likely to experience frequent and large performance gaps when they are forced to 'deal with rapidly changing external environments'.

Fiscally stressed local governments would appear to be classic examples of organisations facing performance gaps caused by environmental change. Environmental change frequently comes in the form of one or more of the following: a decline in the local fiscal base; a reduction in intergovernmental assistance; external imposition of tax or expenditure limitations; and increases in the demand for and/or cost of public services. The performance gap is immediately recognisable as a predicted budget deficit - a gap between projected expenditures and available revenues. If innovation is brought about by environmental turmoil and performance gaps, then fiscally stressed local governments can be expected to innovate more than non-fiscally stressed ones.

However, another stream of innovation research emphasises the availability of slack resources as the key to innovation. Cyert and March (1963, p.36) define slack as the "disparity between the resources available to the organisation and the payments required to maintain the coalition" (i.e. the organisation). Chan et al. (1983, p.96) distinguish between narrowly defined budgetary slack - the excess of available financial resources over required costs - and more broadly defined organisational slack - the excess of all forms of organisational resources (human, physical and financial) over actual organisational needs).

Thompson (1969, p.42) for example, argues that the psychological conditions for innovation are more likely to 'exist' when the resource picture is fairly lush, when there is slack in the organisation. By slack I mean uncommitted and unspecified resources of appropriate personnel, finance, material and motivation'. Clearly, slack resources, at least in the more defined budgetary sense, are just what fiscally stressed local government does not have.

Bozeman and Slusher (1979, p.349) argue that public organisations faced with resource scarcity will engage in 'maladaptive' rather than innovative behaviour, becoming more rigid and conservative in their actions. 'The essential message is that environmental stress...could be expected to breed structural rigidity, formalisation, habitual response and increasing interorganisational conflict'. These characteristics are, except perhaps for the last, generally found to be inversely related to innovation adoption.

Levine et al (1981, p.212) argue that the loss of slack resources reduces the potential for fiscally stressed local governments to innovate.

'Retrenchment reduces slack resources. If slack cannot be recaptured by moving funds from one account to another to allow factor substitution - such as equipment for labor or part-time employees for full-time employees - then retrenchment can mean immobility for the agency. The managerial prerogative of finding lower cost and innovative solutions for maintaining current operations will be lost... slack, on the other hand, allows factor substitution and innovation.'

Levine (1978, p.317) also contends that loss of slack reduces a local government's ability to fashion internal coalitions necessary to overcome resistance to innovation. 'Without slack resources to produce 'win-win' consensus building solutions and to provide side-payments to overcome resistance to change, organisations will have difficulty innovating and maintaining flexibility'.

Empirical research does little to help sort out this conundrum: is innovative behaviour, in fact, stimulated by performance gaps and environmental stress or by the existence of slack resources? G. Down's notes (1976, p.17) that there is little empirical research which actually attempts to operationalise the concept of performance gap and relate it to innovative behaviour. (Presumably various measures of fiscal condition could be used as indicators of performance gaps in local government, permitting extent of performance gap to be related to innovation adoption and/or implementation. If so, this would be a considerable contribution to the broader body of research on innovation.)

Research on the importance of resource availability or slack on innovation at first appears to be more conclusive. G. Downs observes (1976, p.95) that 'In research in both the sociological and economic traditions, the level of organisational resources (wealth, liquidity etc.) has proven to be one of the principal determinants of innovation'. The extent of slack, as measured by these variables, is positively related to innovation. However, the impact of this finding quickly dissipates when one examines the way in which resources or slack have been operationalised. Typically resources are measured by the size of an agency's budget without relation to demands for its use. Thus G. Downs, in his study of the adoption and implementation of juvenile de-institutionalisation policy by American states measures resources first by size of the agency budget and second by per offender expenditure per delinquents in institutions. He finds little correlation between resource level, using either of these measures, and innovation. Mohr (1969 p.119), however, using size of agency budget as a measure of resources, finds a strong relationship between expenditure and innovation in public health agencies.

Clearly, however, such measures are not adequate for determining the extent of resource availability or organisational slack. As noted above slack may be viewed either narrowly in budgetary terms - the excess of financial resources available over required costs - or more broadly in terms of organisational resources including human and physical as well as financial resources. In the former case (budgetary slack) valid operationalisation surely requires relating available resource levels to required costs or expenditure needs (through measures such as, for example, accumulated budget surplus as a percentage of expenditure) rather than measuring resource level in absolute terms. In the latter case (organisational slack) some measurement of "excess" resources is necessary. Chan et al. (1983, pp.98ff.) present a measure of organisational slack for individual local governments based on 1) the excess (or deficit) of a local government's manning levels over those predicted from a municipal manning level regression model, and 2) the difference between the local government's compensation levels per employee and average municipal compensation per employee. However, the results are not applied to an examination of innovation behaviour.

What are we to make of these two divergent sets of hypotheses and expectations regarding innovation in fiscally stressed cities? Cyert and March (1963, pp.278-279) were the first to identify and attempt to address the discrepancy. They note that despite their expectation, based on performance gaps, that unsuccessful firms would engage in innovation more than do successful firms, empirical research indicated that this was not the case. They explain this by suggesting that different kinds of circumstances promote different kinds of innovation. Slack-induced innovation is innovation which occurs when resources are plentiful. 'Slack provides a source of funds for innovations that would not be approved in the face of scarcity but that have strong sub-unit support. In the short run they contribute mostly to submit goals (professional status, sub-unit prestige and so forth)'. Problem-oriented innovations, on the other hand, relate to efforts to solve problems, i.e. to close perceived performance gaps. They conclude that 'Problem-oriented innovation will tend to be justifiable in the short run and directly linked to the problem. Slack innovation will tend to be difficult to justify in the short run and remotely related to any major organisational problem'. As Zaltman observes (1973, p.18) 'Under conditions of stress different kinds of innovation tend to be sought than under slack conditions'.

Rogers (1983, p.362) distinguishes between performance gap innovation which results from a search for a solution to a specific problem and innovation which occurs through constant 'environmental scanning' under conditions of slack. Under slack conditions, innovation may be 'supply-oriented' - i.e. solutions seeking problems - while under performance gap conditions they may be demand oriented - i.e., problems seeking solutions.

Elkin (1983, p.370) identifies three different types of innovation: 1) innovations which occur because some members of an organisation find it personally advantageous to support an innovation (corresponding most closely to slack-induced innovation); 2) innovation which occurs because members believe it will solve an organisational problem (performance gap innovation); and 3) innovation which occurs because members are subject to influence by outside actors. Each of these innovative types occurs through different innovation processes.

The burden of all of the above is that fiscally stressed local governments perhaps should not be expected to innovate more than non-fiscally stressed governments; instead they may engage in different kinds of innovation. Fiscally stressed local governments obviously have little "budgetary slack", a situation which makes it difficult for them to engage in costly innovation and, because it reduced the ability to make side payments, may increase tendencies towards rigidity. On the other hand, they are faced with a "performance gap" and must make some response so that revenues and expenditures balance. That response may be particularly at the onset of fiscal stress, to use up existing "organisational slack". As this suggests, not all fiscally stressed governments suffer from low organisational slack, at least not initially, i.e. low organisational slack is not a necessary concomitant of fiscal stress. Indeed, slack in terms of high manning levels relative to service delivered may provide these governments with a means of adjusting to fiscal stress without significant innovation. Thus, those fiscally stressed local governments which do possess sufficient slack may respond to stress through reducing slack, thereby avoiding both service reductions and tax increases and, if manning reductions can be accomplished through attrition, possibly even avoiding disruptive studies with municipal unions.

Zammuto (1985; 1986) suggests that organisations facing a performance gap brought on by reduced resources will engage in efforts to increase efficiency and operate with fewer resources -in short, will pursue production-process and structure innovations - but will also act conservatively to protect their existing set of core activities. This conforms roughly to Thompson's expectations (1969, p.44) that

'...managerial problem solving in response to stress [will] be internally directed and aimed at the de-specification and decommitment of resources and the recovery of slack. The more vulnerable, non-operational, high-rise activities will be discontinued or reduced. Short-run payoffs are badly needed. Such activities as training and research are likely to suffer'.

Thus , the literature can be read to suggest that, compared to fiscally healthy local governments, fiscally stressed local governments are more likely to pursue innovations directly related to performance problems, particularly production-process and technological innovations which increase efficiency and thus

contribute to the restoration of slack resources. They are less likely to engage in policy or service innovations which involve risk and resource commitment; instead they are likely to act conservatively to protect their existing domain.

2. What are the determinants of innovation for fiscally stressed local governments?

Why is it that some fiscally stressed local governments adopt innovations and others do not? Research into determinants of organisational innovation has identified three different kinds of factors which may be at work (in addition to performance gaps and resource availability discussed above): factors related to an organisation's 1) environment, 2) structure and 3) individual member characteristics.

a) Environment

Political Factors The literature on determinants of policy outputs, most of which is concerned with fiscal outputs such as tax or expenditure levels, typically yields findings that political variables explain relatively little of the variation in policy output compared to economic and demographic variables. In reviewing studies concerned with non-fiscal outputs (such as 'innovations') G. Downs (1976, pp.70-71) found

'The results of previous studies that have employed non-fiscal output measures are equivocal on the issue of the extent of independent association between political variables and these outputs. Both Booms and Halldorson (1973) and Fry and Winters (1970) found several moderate zero-order and partial correlations (controlling for socioeconomic variables) between their respective redistribution indices and political variables (specifically, legislative professionalism and voter turnout). Nonetheless, the majority of political variables in both studies had only a negligible effect. Walker (1969) looked at a number of political variables (malapportionment, party competition, turnover in office and legislative professionalism) but although the zero-order correlations ranged from .26 to .65, all the relationships declined dramatically when controls were introduced for socioeconomic variables, with the single exception of malapportionment. LeMay's (1973) study of the determinants of legislative activity in the area of urban problems also produced significant zero-order betas between political variables and his output measure, which eroded completely when socioeconomic variables were introduced into the regression equation. While not entirely contradicting the expectations of the critics of determinants studies, such results have been much less positive in revealing the independent impact of political variables than was hoped.

In his own study, G. Downs found very low correlations between a variety of political variables (party competition, party of Government, Party control of legislature, and interest group activity) and innovation as measured by the extent of state

juvenile offender de-institutionalisation (percentage of juvenile offenders in a de-institutionalised setting). Walker (1969), in a study of adoption of 88 different innovations by American states, devised an innovation score consisting of the portion of time elapsed between the first state to adopt and the last state to adopt that it took a state to adopt each innovation. He found that a variety of measures of party competition or party control were not related to innovation scores, when controlled for socio-economic variables, but that turnover in office (i.e. a change in party control) did have a modest correlation. This last finding supported Lowi's hypothesis that 'new departures in policy are more likely at the beginning of a new administration, especially when a former minority party gains control of the government'.

Findings of a low correlation between political variables and policy output in American state and local governments may, of course, reflect the peculiarities of the non-ideological American party system. Sharpe and Newton, for example, conclude that in the British context party control has an important effect on local expenditure; they find (1984, p.214) that 'the left party (Labour) tended to spend more on the ameliorative and redistributive services and the party of the right (Conservative) tended to spend less on such services and more on the non-distributive services'. They also found that changes in party control have an important impact on local authority spending (p.200). However, they do not extend their analysis to non-fiscal or innovative outputs.

Socio-economic Factors: Unlike political factors, socio-economic environmental factors have been consistently found to play a dominant role in the determination of policy outputs, both fiscal and non-fiscal (see Wolman, 1980, pp.27-48 for a review of the literature). They thus could be expected to have a major effect on propensity to innovate as well. In studies directly concerned with innovation, Walker (1969, pp.883-7) found zero-order correlations in the vicinity of .60 between innovation scores and % urban, per capita income, and value added per capita by manufacturing. Gray (1973, p.1182) also produces findings supportive of the impact of these 'economic development' variables. G. Downs (1976, p.73) however, found that most socio-economic variables - including the core economic development variables of urbanisation, industrialisation and per capita income - were unrelated to state government innovation as measured by extent of juvenile offender de-institutionalisation.

The rationale for the relationship between economic development and fiscal outputs appears straightforward: areas with greater resources can afford to spend more. The rationale for a possible relationship between economic development and innovation is less obvious. Why should we expect organisations in wealthier, more urbanised and industrialised communities to be more innovative than others? One possibility is that to the extent innovation is related to resource availability (see above discussion) organisations in wealthier community environments (or governments in wealthy communities) may be more predisposed to engage in

slack-induced innovation. This assumes that organisations in wealthy communities are themselves wealthy and have slack resources available. Obviously, a wealthy community does not necessarily imply organisations (or governments) with slack resources, but, at least with regard to governments, the relationship is probably strong.

Community Attitudes: Mohr (1969, p.112) contends that innovation should be more likely 'when the social environment to which an organisation or individual belongs has norms that favour change' (indeed it is possible that there is a positive relationship between socio-economic variables such as wealth and/or urbanisation and liberal attitudes towards change). As a consequence, he hypothesised that innovation in public health agencies would be related to community attitudes, which in turn would be related to community education levels and occupational structure. He found a modest correlation between community occupation level and public health agency innovation.

G. Downs (1976, p.115) also found that community attitudes bore a relationship to innovation as measured by extent of de-institutionalisation,

'A number of socio-economic indicators and determinants of states' probable tolerance of deviancy and receptivity toward innovative social programs were found to be related to de-institutionalisation specifically, liberality as indicated by two presidential elections, Eleazar's index of political culture, and five indicators of social and economic heterogeneity are all correlated with the dependent variable at approximately .4'.

However, Downs found heterogeneity to be negatively related to innovation, whereas most innovation research has found heterogeneity related to innovation because of the greater variety of inputs and new ideas to which the system is open. Downs explains (p.115) the negative relationship between social heterogeneity and innovation by noting that it was

'...consistent with the hypothesis that where class and racial differences are deep, there tends to be less community tolerance of - and a more punitive approach toward deviance, at least partly (it was reasoned) because there is a high probability that the deviants will belong to a stratum of the population that is not fully accepted by the majority and that tends to be excluded from the decision-making process. Conversely, the more homogeneous a state's population is with respect to social class, income and race, the more likely an environment will exist that is conducive to the integration and treatment of delinquents within the community'.

The emphasis on the importance of community attitudes and political culture is consistent with the findings of Clark and Ferguson (1983) who identify four types of urban political cultures

in the U.S. (p.33) and contend that cities vary in their response to fiscal stress according to their political culture (p.254) (see Table 1).

Other Community Characteristics: Community size frequently is associated with organisational innovation, although it is likely that size is simply a proxy for more liberal attitudes towards change or greater diversity resulting in greater generation of innovative ideas. Aiken and Alford (1970, cited in Rowe and Bose, 1974) note that the same factors which are likely to promote innovation within an organisation (see below) are also likely to promote organisations in a community to innovate if they are present in the community at large. Thus they concluded that innovation in the development of public housing policy was more likely to occur in communities which were structurally differentiated, i.e. had diverse organisations, had accumulated experience and information, and had developed stable and extensive interorganisational networks.

TABLE 1: Retrenchment Management Strategies by Type of Political Culture (Clark & Ferguson)

	Democrats	Ethnic Politicians	Republicans	New Fiscal Populists
Adopt low visibility revenue-raising devices	Yes	Yes	No	Sometimes
User charges	No	Slowly	Yes	Selectively
Publicise services	Yes	Yes	Sometimes	Yes
Make visible efforts to improve productivity and fiscal management	Low	Low	High	High
Privatisation	No	Little	Yes	Selectively
Use volunteers	No	Little	Somewhat	Yes
Public versus separable goods as services	Separable	Separable	Public	Public
Contracting out	Little	Little	Yes	Selectively
Capital versus labor tradeoff	Labor	Labor	Capital	Capital
Compensation versus number of employees	High com- pensation high numbers	Low com- pensation High numbers	Market compensation Low numbers	

General Characteristics Generating Four Types of Political Culture

	Policy preferences		Legitimate sources of input to the political system	
	Fiscal liberalism	Social liberalism	Individual citizens	Organised groups
New Deal Democrats	+	+	-	+
New Deal Republicans	-	-	+	-
Ethnic Politicians	+	-	-	+
New Fiscal Populists	-	+	+	-

SOURCE: Clark and Ferguson, 1983, pp.254 and 33.

Interorganisational Relations: Finally, the extent and nature of interaction with other organisations in the environment has been found to affect innovation. At one extreme are what Zaltman (1973, p.19) refers to as a power strategy innovation in which an innovation is forced on the adopting agency by another organisation. Thus, as a condition for receiving emergency financial assistance to prevent bankruptcy, New York City was forced to adopt a series of fiscal policy and process innovations imposed upon it by the New York Emergency Financial Control Board. Less drastically, receipt of federal grants has frequently carried with it the requirement for the recipient to make innovative changes, particularly in planning, budgetary, or accounting processes.

In the U.S. the federal government also has taken a role in encouraging technology innovation in local governments (see Roessner, 1979; Bingham et al. 1981). Several studies (see Bingham et al, 1981, p.4 for a review; also Walker, 1969) also stress the importance of professional associations in the innovation diffusion process. This suggests that those local governments with more frequent communication contacts with professional associations or other relevant external organisations (federal and state government agencies etc.) may be more likely to adopt technological innovations.

b) structural characteristics

Various structural characteristics of organisations have frequently been utilised as independent variables in efforts to explain variation in organisational innovation behaviour. Although these findings often exhibit the instability referred to by Downs and Mohr (1976) in terms of contradictory findings, reviews of the literature by Zaltman (1973), Downs (1976) and Rogers (1983) find several structural characteristics which are more often than not found to be related to innovative behaviour. Decentralisation (the extent to which power and control are dispersed in an organisation), flexibility or the lack of formalisation (the extent of rigidity of job rules and procedures) and complexity (the extent to which an organisation includes a variety of occupational specialities and has a differentiated task structure) all appear to be associated with innovation adoption. The rationale is straightforward: all of these factors promote a greater flow and diversity of innovative ideas. Likewise, A. Downs (1967, p.202) argues that an organisation's rate of personnel turn-over at high level positions is related to its capacity for innovation, since personnel turnover opens the organisation to new ideas.

As Rogers (1983, pp.358-359) points out the literature appears to suggest a tension between innovation adoption and innovation implementation. Thus, as he notes, 'Although the initiation of innovations in a centralised organisation is less frequent than in a decentralised organisation, the centralisation may actually encourage the implementation of innovations, once the innovation decision is made'. Similarly, 'complexity encourages

organisational members to conceive and propose innovations, but it may make it difficult to achieve consensus about implementing them' and 'formalisation acts to inhibit consideration of innovation by organisation members, but encourages implementation of innovations'.

Interestingly, the size of an organisation frequently emerges from the literature as an important determinant of organisational innovation. However, this finding is less than persuasive. Rogers (1983, p.359), for example, asks

'Why do researchers consistently find that size is one of the best predictors of organisational innovativeness? First, size is a variable that is easily measured, and presumably with a relatively high degree of precision. So size has been included for study in almost every organisational innovative-ness investigation'.

Second, size is probably a surrogate measure of several dimensions that lead to innovation: total resources, slack resources, organisational structure and so on. These unidentified variables have not been clearly understood, or adequately measured in most researches. Undoubtedly these unmeasured variables are a fundamental, and intellectually deceiving, reason for finding that size and innovativeness are related. Few scholars have much theoretical interest in size as a variable, but it is a convenient stand-in variable for other variables of interest. Its effects on innovativeness through the yet-unidentified intervening variables should be isolated and understood.

Zaltman (1973, p.13) points out that research suggests different kinds of organisational structures may be relevant for different kinds of innovations. Slack-induced innovations may not be promoted by the same kind of organisation structure which promotes performance gap innovations. Levine et al (1981, p.215) argue that under conditions of fiscal stress where performance gap innovations are required, political structure is an important factor in determining the extent to which a local government will be able to adopt and implement effective innovations and that centralised political structures promote such innovations. Thus they contend that city-manager and strong-mayor political structures will be more effective in responding to fiscal stress than will weak mayor or council-dominated political structures. They conclude (p.216)

'The crux of the retrenchment problem comes down to a fundamental trade-off, one that faces strong elected-executive localities as well as council-manager cities: centralise and limit representative, responsive government or leave authority more or less fragmented but open to access, thereby limiting the ability of government to prioritize and target cutbacks'.

This suggests that the extent of executive power may be a critical variable to investigate in studies of innovation and fiscal austerity. However, other structural variables may be

important as well. In general, the impact of urban political structure on public policy is an under-researched area of political science, particularly cross-nationally. A modest yet useful first step would be simply to attempt to identify political structure characteristics which might affect local government propensity to adopt and implement innovations.

c) Characteristics of Individuals in Organisations

The characteristics of organisation executives have also been investigated as a determinant of organisational innovativeness. In general, education level, social status, professionalism, cosmopolitanism, attitudes towards change, ideology and activism in relevant communications networks have all been linked to an organisation's propensity to innovate (Mohr, 1969, p.113), although again the findings reflect instability (Downs, 1976, p.105).

Individual executive characteristics appear quite important, although many of the studies exhibit potentially severe methodological problems (e.g. measuring executive attitude towards an innovation after the innovation has already occurred). G. Downs, for example, finds (1976, p.117) that, with respect to the policy innovation of juvenile deinstitutionalisation, 'the principal determinant...within the bureaucracy was the ideology and priorities of the director - at least where the agency has been granted considerable decision-making discretion'. Rainey and Kline (1979), in a study of small community adoption of innovative community development strategies conclude that 'political leaders' receptivity to innovations in policy is a prior condition for the adoption of comprehensive strategies for development'. In their study of (mostly technological) municipal innovation, Bingham et al (1981, p.112) conclude 'The chief executive's rating of innovation importance is the single most consistent correlate of innovation adoption'.

The stress on chief executive attitudes and ideology may appear at one level to be idiosyncratic and a-theoretical. On the other hand, this may be the way the world is. In addition, it may well be that chief executive characteristics are themselves related to broader environmental or organisational characteristics and that the executive attributes are primarily intervening variables.

3 and 4: Innovativeness and the Diffusion Process among Fiscally Stressed Local Governments

In this combined section, we turn to the systemic rather than organisational definition of innovation and ask what are the characteristics of innovativeness - those who are first to adopt new innovations - and how do these innovations spread throughout the system? Most of the studies of innovativeness, defined as early adoption, relate to individual innovation within a social system (see Rogers, 1983, ch.7) and yield little useful about organisational behaviour in general or local government behaviour specifically. However, the studies do stress the importance of

opinion leaders, reference groups and communications networks in the process by which innovations spread from early adopters to others throughout the system (Rogers, 1983, pp.307ff.).

Walker's study of policy innovation in the American states is an important exception to the emphasis on individual innovation. Walker found that among American states early adoption was related primarily to socio-economic characteristics. He concluded (p.887) 'Given the results of...correlational analysis, we might conclude that New York, California and Michigan adopt new programs more rapidly than Mississippi, Wyoming and South Dakota because they are bigger, richer, more urban, more industrial, have more fluidity and turnover in their political systems, and have legislatures which more adequately represent the cities'. However, Walker then subjected state innovation scores to a factor analysis in an effort to determine whether a more persuasive pattern could be imposed on the diffusion process. He found that a few states - New York, California, Massachusetts and Michigan - were consistently among the early adopters and could be considered 'national' innovation leaders. Innovations diffused among the other states in reasonably consistent patterns related to state reference groups which were usually regionally defined.

Walker's conclusions (pp.896-97) are worth quoting at length:

'The likelihood of a state adopting a new program is higher if other states have already adopted the idea. The likelihood becomes higher still if the innovation has been adopted by a state viewed by key decision-makers as a point of legitimate comparison. Decision makers are likely to adopt new programs, therefore, when they become convinced that their state is relatively deprived, or that some need exists to which other states in their 'league' have already responded. Before states may respond to new programs adopted in other states their political leaders must be aware of these developments so interstate communications are an important factor in the process of diffusion...

'Emerging from this study is the picture of a national system of emulation and competition. The states are grouped into regions based on both geographical contiguity and their place in the specialised set of communication channels through which flow new ideas, information and policy cues. Through this nationwide system of communications a set of norms or national standards for proper administration are established. This system links together the centers of research and generation of new ideas, national associations of professional administrators, interest groups and voluntary associations of all kinds into an increasingly complex network which connects the pioneering states with the more parochial ones.

'During the last thirty years many new professional associations have been formed and more inter-state and federal agencies have begun facilitating communications and encouraging national uniformity. The older, established modes

of communication and evaluation, based on traditional ties of region and common culture, are persisting, but there are indications in these data that the system is slowly changing. Decision makers in the states seem to be adopting a broader, national focus based on a new lines of communication which extend beyond regional boundaries'.

Bingham et al (1981) echoes Walker's finding that professional associations play an increasingly important role in the diffusion process. Also following Walker's study, Gray (1973, p.1179) found that policy innovations diffuse based on patterns of communication and interaction between users and non-users. However, unlike Walker she found no stability in innovativeness. States which are first to innovate with respect to one policy are not necessarily first in other policy areas, and states which are first to innovate in a policy area during one time period are not necessarily first to innovate in the same policy area during another time period.

Roessner (cited in Bingham et al 1981, p.21), in a review of studies on technological innovation reinforces Gray's findings:

'Evidence is increasing that there are no such things as 'innovative cities' or 'innovative states' with respect to technological innovation generally. 'Opinion leaders' -persons whose advice tends to be sought by their peers -exist in the informal communications network, but their leadership is specific to narrowly-defined problem areas such as the use of computer modeling in air pollution, and is not concentrated in certain cities or states'.

Nonetheless, the innovation diffusion process does appear to proceed in a patterned fashion. Rogers (1983, p.11) observes that many studies have found an S-shaped curve for the cumulative adoption process whereby an innovation will spread slowly through the first 10-25% of the units of a system, but then, after some threshold point at which knowledge becomes widespread, will spread quite quickly to encompass between 85% and 90% of the system. Walker, in his study of innovation diffusion in the American states (1969, p.896), notes that the rate of adoption has shortened over time as knowledge is more efficiently communicated particularly through the growth of professional associations. As a consequence, 'the diffusion process is operating much faster today than ever before, especially in those states which have traditionally lagged behind in adopting new ideas'.

Studies of the types of fiscally stressed cities which are the first to adopt different kinds of innovations, the process by which these innovations spread among other local governments, and the rate of adoption for different kinds of innovations, would fit usefully into this research tradition.

5: What kinds of innovations are fiscally stressed governments most likely to adopt?

What are the attributes of innovations which affect their adoption? G. Downs observes (1976, p.24) that in the literature of economics expected profit or return on investment is usually highly related to an innovation's likelihood of adoption. However, he notes that return to investment is an exceedingly difficult concept to apply to public sector organisations. Zaltman (1973, p.37) observes that the degree of risk or uncertainty of an innovation succeeding is negatively related to adoption: Rogers (1983, p.289) reviews the literature and finds a variety of innovation characteristics related to adoption in the majority of studies including:

-trialability: the degree to which an innovation may be experimented with on a limited basis. Zaltman (1973, p.41) also finds reversibility - the degree to which the status quo can be reinstated if the innovation is deemed a failure - related to adoption;

-relative advantage: the degree to which an innovation is perceived as better than that which it supersedes;

-compatibility: the degree to which an innovation is perceived as consistent with existing values and past experiences of potential adopters;

-complexity: the degree to which an innovation is perceived as relatively difficult to understand and use. (This is negatively related to adoption);

-observability: the degree to which the results of an observation are visible to others;

Rogers's review of the evidence with respect to those innovation characteristics, drawn primarily from studies of innovation adoption and diffusion among individuals on a social system, emphasises the instability problem (See Table 2).

The cost of an innovation and its expected impact on an organisation's efficiency are frequently cited as important attributes of an innovation's likelihood of innovation (Zaltman, 1973, pp.33-36; Downs and Mohr, 1976, pp.702-704; Weiler, 1985, p.175). It seems likely that these attributes will be of particular importance to fiscally distressed local governments which will be attracted by innovations designed to reduce immediate costs or to increase efficiencies through relatively low cost technological improvements.

Table 2: A Summary of the Research Evidence Supporting and Not Supporting Generalisations about the Rate of Adoption of Innovations

Support of the Generalisation	Research Studies Generalisation (No. of Research Studies)		Percentage of Supporting the Generalisation
	Supporting	Not Supporting	
The relative advantage of an innovation as perceived by members of a social system is positively related to its rate of adoption	29	14	67
The compatibility of an innovation, as perceived by members of a social system is positively related to its rate of adoption.	18	9	67
The complexity of an innovation as perceived by members of a social system is negatively related to its rate of adoption.	9	7	56
The trialability of an innovation, as perceived by members of a social system is positively related to its rate of adoption.	9	4	69
The observability of an innovation, as perceived by members of a social system, is positively related to its rate of adoption.	7	2	78

Source: Rogers, 1983, p.239.

6: How do Organisations Innovate?

March and Simon (1958, ch.7) and Cyert and March (1963, pp.120-123) develop a theory of 'problematic search' as the way in which organisations innovate. Cyert and March state (p.121) that 'search is stimulated by a problem (usually a very specific one) and is directed toward finding a solution to that problem'. Thus, search is motivated and will continue until the problem is solved. Search is also 'simple-minded' and based on two rules: (i) search in the neighbourhood of the problem symptom and (ii) search in the neighbourhood of the current alternative... The neighbourhood of existing policy rule inhibits the movement of the organisation to radical new alternatives (except under circumstances of considerable search pressure' (pp.121-122).

Finally, search is sequential and solutions are satisficing rather than optimising. March and Simon (1950, pp.179-180) elaborate:

'In a search for programs of activity to achieve goals, the focus of attention will tend to move from one class of variables to another in the following general sequence.

- (1) Those variables that are largely within the control of the problem-solving individual or organisational unit will be considered first. There will be a serious attempt to elaborate a program of activity based on the control of these variables.
- (2) If a satisfactory program is not discovered by these means, attention will be directed to changing other variables that are not under the direct control of the problem solvers; for example, the program will be enlarged to include activities to be performed by other, independent, organisational units, or to include securing permission for courses of action not presently within the area of discretion of the problem solvers.
- (3) If a satisfactory program is still not evolved, attention will be turned to the criteria that the program must satisfy, and an effort will be made to relax these criteria so that a satisfactory program can be found.

In the search for possible courses of action, alternatives will be tested sequentially. That is to say, there will be no attempt at the first round of search to exhaust 'all possible alternatives'. Instead, as soon as a few possible alternatives have been found, these will be evaluated. If one proves satisfactory, when tested against the problem criteria, it will be accepted as a solution to the problem, and search will terminate. If all the alternatives discovered on the previous round of search prove unsatisfactory, this will initiate a new burst of search activity. If persistent search still fails to secure a satisfactory alternative, then the propositions listed above apply'.

In his study of local government response to fiscal pressure in Britain and the United States, Wolman (1983, p.247) explicitly adopts the framework of problematic search. He argues that local governments behave as organisations concerned with maintaining an equilibrium relationship with their environment and when that equilibrium is disturbed a search process is instituted in order to find means of returning to stability. The search process follows the broad pattern described above and results in the following kinds of activities, more or less in order of descending preference (Wolman, 1983, p.261).

"(1) Buying time, thus disturbing neither external nor internal equilibrium.

(2) Increasing local revenues if unconstrained by referenda requirements, propinquity of a general election, or formal limitations. (This reflects the tendency for service recipients as a group to be more likely to disrupt the environment than taxpayers as a group, except when an election is near.)

(3) If spending is to be reduced, reducing first through means which do not disturb the external environment by resulting in service reductions (such as efficiency measures or reduction in administrative costs rather than service delivery).

(4) If public employee unions are willing (and if the institutional structure permits, as it does in the USA) reducing personnel costs through reducing real wages rather than reducing personnel, thus permitting services to be maintained (and preventing disruption of external equilibrium). If employment must be reduced, minimizing disruption to internal equilibrium by reduction through attrition rather than layoffs.

(5) If services must be cut, minimising disruption to the internal environment by reducing capital spending and services in invisible and marginal activities."

However, problematic search cannot serve to explain how innovations occur in all situations. As Cyert and March note (p.279) problematic search is characteristic of problem-oriented (i.e. performance gap) innovation, but not of slack-induced innovation. March and Simon (1958, p.183) note that 'some innovation will result from accidental encounters with opportunities' and March, writing in 1981, observes that, rather than problematic search, innovations 'often seem to be driven less by problems than by solutions. Answers often precede questions'.

Rogers (1983, pp.352-363) notes that, even in the absence of a performance gap triggering off search, 'most organisations engage in an opportunistic surveillance by scanning the environment for ideas that might be beneficial to the organisation... Most organisations face many problems...if one begins with a solution, there is a good chance that the innovation will match some problem that is facing an organisation. Consequently, most organisations continuously scan for innovations, and match any promising innovation found with some relevant problem'. Mohr suggests (1969, p.122) that this kind of innovation is motivated primarily by a

desire on the part of organisational members or units for prestige and professional status, and is likely to occur particularly under conditions of substantial organisational slack.

Cohen et al (1972, p.2) posit a model which encompasses both kinds of innovative process. They see an organisation as 'a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer and decision-makers looking for work'. The organisation can thus be conceived 'as a garbage can into which various kinds of problems and solutions are dumped by decision-makers as they are generated'.

As Cohen et al explain (pp.16-17):

'The garbage can process is one in which problems, solutions and participants move from one choice opportunity to another in such a way that the nature of the choice, the time it takes and the problems it solves all depend on a relatively complicated intermeshing of elements. These include the mix of choices available at any one time, the mix of problems that have access to the organisation, the mix of solutions looking for problems and the outside demands on the decision makers.

'A major feature of the garbage can process is the partial uncoupling of problems and choices. Although decision making is thought of as a process for solving problems, that is often not what happens. Problems are worked upon in the context of some choice, but choices are made only when the shifting combinations of problems, solutions, and decision makers happen to make action possible. Quite commonly this is after problems have left a given choice arena or before they have discovered it (decisions by flight or oversight).'

Thus, at some points a problem finds a solution in the garbage can (performance gap or problem-oriented innovation), while at other times a solution latches onto a problem (slack-induced innovation through environmental scanning).

V: Conclusion

The foregoing review leads to the conclusion that studies of innovation and local fiscal austerity can be usefully informed through a review of the existing literature on innovation research and that such studies can potentially make an important contribution to the broader body of knowledge concerned with innovation.

In particular a review of the innovation literature strongly suggests that studies of innovation and local fiscal austerity must clearly define what is meant by innovation. While there obviously is no 'correct' definition, it would be extremely useful to the development of a coherent body of research if one single definition were accepted and pursued. I would argue strongly for the systemic

definition - that is, the introduction of new practices or activities into the system of local government - rather than the organisational definition - that is, the introduction of new practices or activities by a local government regardless of how many other local governments have already adopted these. Thus, innovation would be clearly distinguished from simply organisational change; research would focus on the early adopters in the local government system, and the process by which innovations diffuse from early adopters to others in the system. Within this context, the questions posed in Section III of this paper comprise a useful and interesting research agenda: are fiscally stressed local governments likely to innovate (i.e. be early adopters of innovations more than non-fiscally stressed local governments) and, if so, with respect to what kinds of innovations? What are the determinants of innovation for fiscally stressed local governments (i.e. what distinguishes fiscally stressed local governments which innovate from those which do not), what kinds of innovations are most likely to be adopted by innovative fiscally stressed local governments, where do innovative ideas come from, what is the process by which fiscally stressed local governments learn about new ideas, how do innovations diffuse throughout the local government system from early adopters to others, and is there a stable pattern to the innovation diffusion system?

The potential research agenda is indeed a rich one. However, a review of the existing literature strongly suggests it is of vital importance that innovations and organisations be sorted out into relevant categories for research rather than treated as generic terms. The determinants of technological innovations are not likely to be the same as those of policy or service innovations. The first step, therefore, may be to classify the different kinds of innovations fiscally stressed local governments are apt to engage in. The same process can usefully be applied to organisations. What are the different types of local governments, or rather, along what dimensions might we expect local governments to behave differently with respect to innovation behaviour? In the US, for example, do county governments innovate differently from municipal governments? Do strong executive governments differ from weak executive ones? Appointive executives from elected ones? Does party control make a difference? And does the cause and/or extent of fiscal distress affect a government's attitude and behaviour towards different kinds of innovation? Such a sorting out permits research questions to be posed in meaningful terms: How do different kinds of fiscally stressed local governments behave with respect to different kinds of innovations?

As the literature on innovation discussed in this paper suggests, there are no end of questions. As it also demonstrates, however, unless some care is utilised in devising and pursuing research strategies there will be no end of answers as well.

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FOOTNOTES

1. It should not be assumed, of course, that all local governments are facing resource scarcity. Indeed, Wolman and Goldsmith found that between 1979 and 1982, a period of very slow national economic growth, central government grant to local government nonetheless increased in real terms in four of nine advanced western countries and local government tax revenues increased in seven. In only one country was there a real decline in total local revenues and in six of the nine countries local revenues increased at a rate in excess of GDP (Wolman and Goldsmith, 1985).
2. As previously noted, some researchers definitionally exclude minor or routine change as innovations.