

# Municipal Policy and Finance



## **Policy Reforms for the New Millenium**

David Jones; Center for Urban Development Studies  
Cambridge, MA; September, 2000

## **Guidelines & Rules for Improving Public Sector Service Delivery**

David Jones; Center for Urban Development Studies  
Cambridge, MA; September, 2000

## **Contracting Out of Public Services**

David Jones; Center for Urban Development Studies  
Cambridge, MA; September, 2000

## **Public Transit in Denver**

Elliot Sclar; The Century Foundation, Inc.  
New York, NY; 2000

+ Future's Urban Transport

## POLICY REFORMS FOR THE NEW MILLENIUM

### NEW PARTNERSHIPS

Between

CENTRAL AND LOCAL GOVERNMENT

And with

PRIVATE SECTOR AND NON-GOVERNMENTAL ORGANIZATIONS

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### INTRODUCTION

1. The introduction of new, decentralized, systems of government for the transitional economies of Eastern Europe and the Former Soviet Union decisively changed the role of the central government. Hitherto, what is now a "central government" was the hub of a vertically-integrated governmental system, partially de-concentrated but with no effective legal autonomy at the local level. In South Africa, the abolition of apartheid engendered massive changes in structures and participation within governmental systems at all levels.
2. Coupled closely with these governmental changes has been the evolution of much more market-based and market-friendly economies, including somewhat faltering attempts at the creation of capital markets. These are necessary steps in the transition to new democratic and political systems.
3. However, as many nations struggle to move in the direction of market economies, progress has often been slow, particularly in the Commonwealth of Independent States. One of the key elements of the transition is privatization. Countries whose economies were dominated by state-owned enterprises (SOEs) under communism are moving – some slowly and some more quickly – to privatize those enterprises and to restore, or to initiate<sup>1</sup>, functioning market systems.
4. Many comments are made and heard about the alleged extensive corruption in these countries. This is, apparently, one of the biggest obstacles to the building of confidence in the very necessary partnership between public and private sectors of the economy and community. Moreover, the various governments' seemingly uncertain and vacillating record with respect to privatization also lessens confidence. This, of course, includes the confidence of the private sector, including possible foreign investors.
5. Many of these countries, moreover, are still suffering from some kind of delayed shock. This is not so much the trauma of the demise of the socialist state, as the after-shock. It is the realization that, after all, the oft-asserted "magic of the market place" is not going to completely do

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<sup>1</sup> It is important to note that some nations, notably the Russian Republic, have very limited prior experience of market economies, as currently understood. Before communism, for example, Russia was, to a significant extent, a feudal system.



away with government, nor is privatization going to be a magic potion that automatically improves efficiency.

6. This creates a new dilemma. Virtually everything was being handled in the public sector only about a decade or so ago and far too much remains. Thus, the issue is not whether to privatize more. Clearly, this is necessary. The concern, in many other places formerly under command and control regimes, is to try to avoid "throwing out the baby with the bath-water." In other words, to achieve as many of the benefits of the "magic" of the market-place, while avoiding as much as possible of its "tragic." Thus, concerns on which there is clearly a need for additional guidance are as follows:

- (a) Markets are fallible<sup>2</sup> and do not always represent a clear alternative to the public sector in the delivery of public services;
- (b) Even with maximum participation of market-driven entities in the economy and in the delivery of some public services, there is still an important role for government, albeit more constrained and focussed than hitherto;
- (c) Local government and other public and quasi-private entities have their own legal and institutional status, including taxing powers or the autonomy to charge for public services, in contrast to being merely branches of a centralized government;
- (d) Many costs and benefits are not necessarily earned or borne by the private or public sector institutions that engender them, but are economic externalities, falling outside the discipline of market economics;
- (e) There is an important distinction between, on one hand, the acquisition of money and the making of monetary profits (the symbols of the economy) and, on the other hand, the efficient, effective and economic delivery of goods and services (the real economy).

7. Those working in the newly-emerging nations are typically very interested in systems of taxation used in western countries, especially those in the USA. They often find it difficult to grasp the concept that in the USA, for example, each of the fifty states and the District of Columbia operated under separate constitutions, giving a wide range of taxing powers and financial management responsibilities. Moreover, they learned that each separate local government or utility unit, of which there are tens of thousands, had their own powers to tax or to charge, albeit constrained by law.

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<sup>2</sup> Market activity will range between the *unattainable* (perfect market competition, which does not exist) and the *unacceptable* (fraud and corruption, which is only too common)! Indeed, fraud and corruption is sometimes just a worse-case scenario from business tactics based on guile, opportunism and monopolistic power, especially in situations of bounded rationality and information asymmetry.

8. Elsewhere in the world, especially in Western Europe and the USA, local government units are, typically, legally autonomous, albeit within the enabling framework of national legislative authority. They are entitled to exercise the powers – and required to perform the duties – bestowed upon them by law. Until about 1980, the public sector and private sectors of these economies were distinctly separate. Each respected its own domains of concern, which were thought to be well understood.

9. Within the most recent twenty years, however, these distinctions have become increasingly blurred, with significant overlapping between the public and private sectors. Moreover, the command and control principles, common in public sector activities, have given way to practices that are much more market-driven than hitherto. It is now much less clear whether public services will be provided by public or private sector entities or even by non-governmental institutions, often community-based.

10. What is needed therefore, is a careful re-assessment of this theme, by selecting, in specific circumstances, what is to be private and what is to be public. Some things are very clear, such as (say) retail and wholesale trade in the private sector and (say) defense and foreign affairs in the public sector. Beyond that, the issues are to be determined on the basis of: matching economic benefits and costs; Improvement of economic efficiency; availability and cost of financial resources; and, social equity.

11. Very little is now a black and white issue. Much more common than hitherto will be “privately provided public services” (e.g. solid waste collection) or “publicly provided private services” (e.g. water supply). There are, however, very few guiding rules to which these matters accord. In the USA for example, in one of its most affluent, yet conservative and efficient, counties, close to Washington DC, water is supplied by a public entity with very little chance of it being privatized. In that same locality, hard liquor, hardly a basic necessity, is sold only in stores of a state monopoly.

12. This constrains the role of central governments<sup>3</sup>. They are now often not entitled, nor do they, usually, wish, to direct the day-to-day activities of the local government units, on matters within their own local jurisdictions. They also increasingly recognize that the manner in which the local units carry out their powers and duties is increasingly for them to decide for themselves. Greater community participation has emerged.

13. Central Governments must now perceive of themselves much more as partners of the local government units. Each central government is in a separate legal relationship with every one of the local governments, individually. Naturally, central governments still wish to retain significant powers of control and supervision. This is standard practice in any decentralized system. However, these powers must be exercised only within the framework of the legislation that permits and requires this. Central governments no longer exercise unlimited powers, simply because they are “the government.”

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3 In connection with the recent inauguration of President Vladimir Putin, several commentators postulated that the Central Government of the Russian Federation had now yielded too much power to the republic, regional and local governments. Whether this stems from a reasoned view of Russia's new democracy or nostalgia for its tradition of strong central power is not yet clear.



14. Just as important, in the new circumstances, is that central governments fulfill a facilitating role. This means that they should provide, at the center, guidance and support, without which the effective operation of robust and evolving local government will be difficult, if not impossible<sup>4</sup>.

15. Many, though by no means all, of the supervisory and support functions will likely be exercised at a "Ministry of Local Government"<sup>5</sup>. This ministry is expected to be the principal interlocutor with the local government units. Its minister, or secretary, in addition, is expected to be the advocate for the interests of local government, within the cabinet and with other ministries and departments.

16. The Ministry of Local Government commonly serves as an important conduit in relations between the central government and the various local government associations and lobbying groups, including, for example, "associations of cities." Because of the overwhelming importance of finance in the administration of local government systems, the link between a Ministry of Local Government and a Ministry of Finance will be paramount. Sometimes, indeed, a Ministry of Finance will exercise very direct control over local government financial management, effectively usurping the mandate of a Local Government Ministry in this respect.

17. Two other matters are of major importance in the re-definition of the local government systems. These are:

- a. the expected increase in access to capital markets, as they become better established, by individual local government units, to borrow for capital expenditure, in contrast with the earlier system of financing capital expenditure from centrally-administered budget allocations; and,
- b. the total change in the perception, legal position and consequent market activity with respect to private property rights, especially as they affect real estate;

18. In the current political, administrative and economic discourse, there is a constant reference to "costs." This implies a need for a complete revolution in the way in which costs are determined for particular activities. Accounting systems will need to be enhanced and improved significantly. Though necessary, this is not sufficient, however. Training will be needed in how and when to use financial information, derived from accounts. Sometimes, this financial information will need to be modified, or even discarded, in favor of other (or additional) information, more of an economic nature.

19. None of this is very encouraging to those looking for simple rules to follow with their privatization and partnership efforts: also, as they continue to try to deliver basic public services as efficiently and equitably as possible. Unfortunately, there are no such rules. Consequently, technical assistance will be needed for some time to come, to facilitate rational choices.

20. Such assistance is also necessary to remedy and to re-stabilize situations created by those

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4 See the World Bank document "Beyond the Center: Decentralizing the State" by Shahid Javed Burki, Guillermo E. Perry and William Dillinger. Free copies are obtainable, for personal downloading, from the World Bank Web-site.]

5 The exact name is not so important as its facilitating role

who were enthusiastically waving the simplistic banner of “market fundamentals.” Somewhat recklessly, they rushed into the newly-emerging situations, creating considerable economic, social and political havoc in their wake. More cautious, if slower, considerations reveal that, there are very few “one size fits all” solutions. Much greater care is required than the mere pronouncement of economic slogans.

21. It would, of course, be easy to advise that, if a particular mode of service delivery: public, privately provided or contracted out, does not succeed or satisfy, it should be changed, modified or even reversed. Unfortunately, this is not so simple, either. Many of the activities are capital-intensive or else have very high (indeed, sometimes virtually irreversible) institutional implications<sup>6</sup>.

22. Consequently, there are often high entry or exit costs, making it difficult for potential competitors to compete against entrenched interests<sup>7</sup>. Moreover, the competition found in the delivery of public services is not like the competition among (or even inside) grocery stores. Usually, these are contests to obtain monopolies. Potential suppliers know this. Consequently, there is a very strong motive towards “directly unproductive profit-seeking” or rent-seeking, to reap monopoly profits.

23. Unfortunately, the “winner take all” nature of this kind of competition is a very strong incentive towards corruption. It is also an incentive to cut quality, or to use “loss-leading” so as to lower the bid price, in an effort to win. Moreover, it has implications for the equitable treatment of labor forces. Considerable training will be needed in the preparation and evaluation of choices and bids. Training will also be needed in contract management, and in monitoring the costs and benefits of outcomes.

24. There will also need to be a completely different approach to the management and control of land. Local governments will increasingly shift away from a role that emphasizes public ownership and total control. Instead they will move into a mode that will emphasize: spatial planning; regulation; property taxation; and building control. Many of these matters will alter the manner in which public revenues can be derived from land ownership, occupation and usage.

25. Standard practices commonly associated with local government systems in market economies, cover the main concepts of: local administration; central government supervision and support; financing of capital expenditure; and, land management. The roles of newly-emerging systems of governance are likely to be influenced by these principles and practices.

<sup>6</sup> A prime example is the establishment of a private company, to deliver formerly publicly-provided services.

<sup>7</sup> A theory of “contestable markets” implies that an in-place monopoly will keep prices down because of the potential *threat* of competition. This is hotly-debated among economists. It has, however, probably resulted in the sharpening-up and economizing of public sector operations, when threatened with contracting-out.

## MANAGEMENT AND ADMINISTRATIVE CONCERNS

### Policy and Administration

26. Local government, everywhere, is an ongoing and ever-changing activity. It will clearly need to be conducted within flexible and supportive national policies. Because of this, the Ministry of Local Government will need to have the services of staff and consultants who are familiar with local government issues. They will need to understand the requirements of local government for central support. In addition they will need to provide a public education forum for the local dissemination of (and support for) national policies.

27. There is little doubt that many issues between central and local governments will be both momentous and contentious. It is, therefore, important that the policy administrators be skilled negotiators with political maturity and acumen.

### Legislation and Regulation

28. Local government is mandated and empowered by parliamentary legislation. This concerns administrative, operational and financial matters. Under the enabling legislation, regulations will need to be issued from time to time to deal with matters of more detail. Clearly, these legal instruments will need to be kept constantly under review. In particular, they will need to be amended from time to time to address concerns collectively raised by the local government system. They will also require amendment to allow for changes in national government policy.

29. In addition to matters of legislation concerning the administration of local government generally, there will also be concerns arising in respect of particular services. For example, legislation may well be required to deal with matters relating to such services as: education; public health; environmental issues; water resources; and, transportation.

30. Although the required laws may well be most appropriately drafted and managed by the central government department with primary responsibility, they will almost certainly impinge upon the activities of local government. Therefore, it will be important for the legislative drafters within the Local Government Ministry to act in a coordinating role. They should be expected to provide advice as to the impact of this legislation on local government administration.

### Training

31. It is clear that the elected and appointed personnel of the municipal governments will require training in many disciplines. The primary responsibility for this training lies with the municipal governments themselves. However, there may well be matters that should be the focus of attention of the central government, to be dealt with on a nationwide basis.



32. One important training domain is that of the entire concept of partnership between central and local government. This would complement the lobbying activities of (say) "associations of cities" and similar organizations. It should be presented and coordinated by public administration specialists, including visiting experts.

33. Another domain of importance, where central training capability might be developed, is in the process of communication and working together at local government level. This is especially important with respect to the relationships among (and between) members of: municipal councils; executive boards; city management; department directors; municipal staff; community organizations; and, the general public.

34. Significant focus of such training should be on at least the following matters:

- a) the roles and responsibilities of local government units in the delivery of public services;
- b) accountability for stewardship of public funds and resources;
- c) accountability for the performance of efficient activities to fulfill the purposes of the local government mandates;
- d) the conduct of local government business, in both formal and informal activities;
- e) distinctions in the functions, activities and legal status of elected members, compared to those of the permanent staff; and,
- f) distinctions in the functions and power of (on the one hand) community groups and citizen participants and (on the other hand) a local government as an elected body, with specific and exclusive legal responsibilities<sup>8</sup>.

35. It is also essential to develop a greater capability for inter-action among operational, financial and administrative staff. This applies, especially, to: the management of budgets; internal financial control; and, the provision and use of financial information that can be used for effective decision-making.

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<sup>8</sup> This is especially true with respect to taxation, borrowing and budget approval, as well as regulatory authority over specific activities.

## OPERATIONAL CONCERNS

### National and Regional Strategic Planning

36. Individual local government units are primarily responsible for spatial, economic and social planning within their own local jurisdictions. However, there will need to be a capability at the central government level, to provide a national strategy and framework within which the local planning can be effectively accomplished.

37. In the same way as for municipal planning, locational decisions, relating to: population; commerce; industry; transportation; and, employment, will have significant effects upon the allocation of physical, economic and financial resources among regions and individual cities. These, in turn, will be affected by: location; exploitation; protection; or, cessation of use, of land areas and of natural resources.

38. All of these matters will affect national strategies and policies. These will impact on local government units, in a variety of ways. In addition to the need for national strategic planning, it will be important for the local government units to follow some established broad guidelines in carrying out their own planning functions. These will clearly need to be developed, amended and sustained at the national level.

39. There will likely be a need for the training of local urban planning specialists, in appropriate standards and practices, by officials established at the central level. Whether these are officials of the central government itself, or part of an independent unit, is less important than the fact that their skills are made available to all in need of them, at every level of activity, nationwide.

40. Another matter concerns the legal process relating to planning. Especially when dealing with property rights over real estate, planning decisions have the potential to generate a plethora of contentious issues. Where possible, these should be resolved at the local level.

41. Unfortunately, however, this will not always be possible. Firstly, local prejudices and practices may be coupled with, or frustrated by, a perceived need to move quickly on activities. In addition, developers may represent powerful lobbies, possibly undermining the objectivity and fairness of local decisions. Formal decisions may, thus, be made in peremptory fashion, leaving aggrieved parties.

42. Secondly, local planning decisions cannot always be taken without reference to broader regional or national strategies. These are matters on which individual local government units are unlikely to be either best informed or free from prejudice.

43. Thus, there will be a continued need for at least two kinds of secondary review. To deal with individual grievances, there will need to be an appeals process. To deal with broader regional or national issues, there will need to be established frames of reference against which these may, in appropriate circumstances, be submitted for review.

44. Planning matters, though affecting property rights, are often very technical. It will,

therefore, be necessary to decide the extent to which appeals and reviews will be handled by administrative tribunals or formal courts. The European practice tends towards the former. United States practice tends to admit the formal court system to the process at an earlier stage. It is virtually certain that the central government will need to employ, either permanently or on contract, officials who can examine (or advise on) in technical fashion, the earlier stages of planning disputes. They may well be empowered to hold public inquiries and to report to the convening authority. This might be a central government official, perhaps, even, the Minister of Local Government<sup>9</sup>.

45. After the technical issues have been disposed of, usually, though not exclusively, those that remain, to be resolved at the later stages of a dispute, are matters of law.

#### Valuation of Property

46. As already indicated, the local governments will now often operate under entirely new regimes, with respect to real estate activity. One important aspect of this is the need to develop a substantial capability in property valuation. Not only is this a new skill need, it is often to be developed in an economic environment where little evidence of property values, as understood for market transactions, is currently available<sup>10</sup>. For example, in Eastern Europe and the Former Soviet Union, virtually all property was rented, at administratively-set prices. In South Africa, the hopes, expectations and aspirations of the newly-empowered racial groups will substantially affect property values, as titles and locations substantially change.

47. Local government units must each develop this capability, probably using a combination of public officials and experts from the real estate industry. This will be needed for at least two principal purposes:

- a) valuation of property for purchase and sale in the market-place; and;
- b) assessment for the purpose of levying ad valorem property tax.

48. When valuations are established for property sales, these are usually ad hoc. They affect only a very small proportion of properties at any one time. Nevertheless, these valuations must be made promptly and accurately, if they are to serve as credible appraisals, to facilitate market transactions.

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9. It is sometimes a contentious issue as to whether the final decision should be made by a political figure or by an independent public official endowed with quasi-judicial status. In the U.K., for example, a government minister may be required to make a final decision on matters which are quasi-judicial rather than political. He is not required to have (and may even be constrained from) consultation with cabinet colleagues. Decisions are "ministerial" instead of "governmental." A recent well-publicized example was the role of Britain's Home Secretary in the "Pinochet" case. After the House of Lords (Britain's Supreme Court) had ruled on the general law, the Home Secretary ("Minister of Interior") exercised the judgement on the individual case.

10 Refer to "Cities Without Land Markets – Lessons of the Failed Socialist Experiment" (© The World Bank, 1994)



49. By contrast, assessments for property tax purposes must cover all taxable properties, all of the time. It is increasingly customary, among local governments worldwide, to use so-called "current market values" for the purposes of property tax assessments. However, it will be a considerable time before these will be fully credible in every situation. In any event, most property tax assessment systems are subject to a variety of rules and constraints, formal and informal, which mitigate against always producing values which are equal to full market prices.

50. In some respects, this is not so important as the fact that, within a particular taxation area, values are relatively consistent<sup>11</sup>. Thus, a consistently lower level of values can often (unless legally restricted) be compensated for by a somewhat higher tax rate<sup>12</sup>. Indeed, some public finance specialists would argue that the actual levy of taxes comes by the budgetary appropriation process. Property values, under this concept, serve to equalize the *expenditure* burden among individual taxpayers.

51. Indeed, in the newly emerging democracies, at the present time, property tax systems must often be operated with little or no accurate valuations. The system sometimes used is based on floor areas. However, this is far from ideal, because it cannot recognize locational variations, in either service delivery or ability to pay.

52. Because of this, the general level of the tax rate must often be kept lower than optimal, so as to accommodate the ability to pay of even the poorest taxpayers. This, therefore, has some of the features of a "poll tax." By contrast, credible (relative) property assessments allow the taxes to be levied and collected with much greater equity among taxpayers. Then, with everyone adjusting to their own ability (and willingness) to pay, the likely overall tax take will be much greater. Since property taxes will probably be the mainstay of locally collectible tax revenues, these matters are of the utmost importance.

53. A related issue is that the socialist economies have typically allocated land much less efficiently than in market-based systems<sup>13</sup>. Thus, infrastructure and other services have been, relatively, much costlier. However, local equity, within a particular jurisdiction, is not the end of the matter. There is also a need for relative equity among valuations from one jurisdiction to another. This is because of the potential use of revenue-sharing allocations or central government grants for the purposes of equalization. Although still contentious as to application, various local government finance laws explicitly recognize the requirement to compensate for substantial differences in needs and resources among different localities.

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11 It is implicitly recognized, for example, that if a valuation roll is consistently under-valued, this is likely to limit the time, cost and frustration of appeals. There is a greater risk that the appellate process could result in low valuations being increased.

12 Because of disruptions caused by World War II (1939-45), Britain operated for a very long time after the war, indeed until 1956, using property tax valuations based on those of 1938. Because of inflation – and until current values were somewhat restored – tax rates had to be set at seemingly ridiculous figures, such as £1.5 for every £1 of rateable (assessed) value! This may seem to have been clumsy – but it worked. Indeed, it is a good example of "making the best of a difficult situation."

13 Again, refer to "Cities Without Land Markets – Lessons of the Failed Socialist Experiment" (© The World Bank, 1994)

54. Any proposed system of (say) matching grants for particular services will need to allow for assessment of the taxable capacity of a local government unit and not merely for its actual tax yield. This can be greatly facilitated by having a commonality among assessment standards, nationwide. The central government should, however, not be called upon to compensate for poor local collection efforts.

55. It is, therefore, likely that a central government will wish to establish guidelines and standards for property valuations on a national basis. If the actual valuations continue to be carried out by individual local government units, there will also be a need to establish a form of "valuation audit" procedure, so that the equalization features, for grant purposes, will be continuously credible.

56. One possibility, to go much further, would be to establish a national valuation service, run by the central government, to carry out all property valuations, for both tax assessments and sales. This would have the advantage of being independent of the taxing and revenue-seeking concerns of the local government units. Also, if provided as a free service, it would represent, in effect, an additional contribution (in kind) to the central government grant structure. Although there would be anomalies, the sharing would be roughly in proportion to the relative size of the property base in each locality.

57. This is the situation used for many years in the United Kingdom and which now continues to be used as (partially restored) property taxes are reinstated, after the cessation of the poll tax. However, much of the actual valuation work has been contracted to private valuers.

58. An intermediate system might be considered. This could, possibly, be modeled on the U.K. Local Government Audit Commission (not the valuation service) described elsewhere in this report. Under such a system, a "Local Government Valuation Commission" might be established, independent of both the national and local government. It would employ an administrative staff and also a limited number of staff valuers. In addition, it would recruit valuation specialists from the private sector, to provide both competition and additional specialized knowledge for the public officials.

59. In the same way as for planning decisions, property assessments for tax purposes can give rise to grievances. There must, therefore, be a formal appeals process. Also analogous to planning, property assessments are as much technical as legal concepts. The likely appeals process, up to the point that the dispute is settled or withdrawn, would therefore need to be:

- c. preliminary informal or formal review by a local government taxation department;
- d. technical review by formally constituted administrative tribunals, specializing in land valuations;
- e. (usually on matters of law) hearings before normal civil courts, of original jurisdiction or of appeal.

60. Usually, though not exclusively, matters of law are those that remain to be resolved at the later stages of a dispute, after the technical issues have been disposed of. It will be these that would normally be brought before the formal courts. Sometimes, on matters of important legal principle, cases may be taken all the way to a nation's Supreme Court. These review and appeal arrangements, to the extent that they extend beyond the jurisdiction of a particular local government unit, will need to be established and administered by the central government.

### Housing Management

61. A principal issue influencing municipal finance is that relating to the holding, acquisition and disposal of public housing. In particular, this is caught up in the current thrust for public housing to be "privatized." However, this is not really a single issue but at least three separate ones. First, there is the decision as to whether housing assets will be disposed of, by sale or otherwise, to private owners. This will, naturally, be influenced by market demand for the properties and by their current physical condition. These matters, closely inter-related, are themselves further subject to distortion by policies and previous practices regarding rents and management options.

62. The second issue, not so easily "privatized" is the extent to which local governments, as the "housing authorities" are able or willing to divest themselves of responsibility for the shelter of the poor and disadvantaged. In the economic fundamentalist's "ideal world," of course, this would be taken care of by market forces<sup>14</sup>. Yet, virtually nowhere in the world, even in the most capitalistic of societies, have public authorities found it possible to evade this responsibility. Thus, the issue of providing houses, cash allowances or vouchers is often politically contentious and economically perplexing. Finally, public housing may be the subject of claims for either restoration or reimbursement, to previous owners, prior to its seizure or nationalization, by earlier socialist regimes. The establishment of title to this ownership may be long and contentious administrative or legal processes.

63. In principle, housing can be regarded as a purely marketable commodity. Also, in practice, its public declaration as partially a "merit good" can result in significant mis-allocation of resources, together with inequity. This is often exacerbated by public authority mismanagement. However, even in relatively stable economies, impartial and objective remedies are hard to discern. The economies of many countries, in conditions of serious transition and disruption, can hardly be expected to come up with clever solutions that have so far evaded others.

64. On the assumption, therefore, that local governments would be encouraged to privatize all housing not required for social purposes, there will still be a residual welfare function. Moreover, the financial implications of this are formidable. At present, for example, such places as Eastern Europe, the Former Soviet Union, and South Africa are especially impacted.

65. Because shelter is considered a basic need, it is normally impossible to avoid central

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<sup>14</sup> This is not, really, correct. More truthfully, it is only too correct! Where the public sector is either unwilling or unable to deal with the housing of the poor and disadvantaged, the latter can sometimes end up living in substandard homes. Indeed, all they may be able to afford, in the "free" (in both senses!) market-place are dwellings made of such materials as cardboard, mud and sticks, corrugated iron sheets and plywood, in unsanitary conditions! This is a part the "tragic of the market-place." In other words, what cannot be afforded must be either scrounged or produced in a makeshift and ramshackle fashion.



government participation. This is because of central governments' much greater and ready access to public revenues, as well as their notable advantage in redistribution of public revenues and private incomes, through more progressive taxation.

66. It would therefore seem likely that a central government would need to allocate and to distribute national budgetary revenues towards one form or another of housing subsidy. This might be as either supply-side subsidies, towards appropriate low-cost house construction or as demand-side subsidies, towards rental allowances, leaving occupiers responsible for their accommodation selection.

67. Such subsidies might, conceivably, be granted to local government units, housing cooperatives and (in certain circumstances) private developers. Their administration will require the services of experienced housing management and finance specialists.

#### Other Specific Services

68. A number of other public services will inevitably need to be the subject of operational, administrative or financial partnerships between local government units and the central government. Sometimes, the operations will be at the local level, with the central government prescribing national standards and practices. In addition, the central government may need to provide supervision and guidance, as well as an appropriate level of financial support, by specific grants.

69. In other cases, the division of responsibility will be on operational or technical lines. In this case, the central government will perform services of a national character, with the remainder performed at the local level. Some services, with broadly the same characteristics, will be the legal obligation of one or the other level of government solely on the basis of the extent to which they are assessed to be dealing with concerns of "national" or "local" importance. A conspicuous example is the distinction among different categories of road - from major highways to minor urban streets.

70. Examples of services that are likely to be of joint concern are as follows:

- a) Education - where primary and secondary education may be carried out by local governments and tertiary (further) education by the central government. The financial impact on local governments will likely be formidable<sup>15</sup>, requiring a substantial level of grant support, or significant weighting in revenue-sharing formulae.

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<sup>15</sup> Decisions about where to place major expenditure responsibility for public education will likely overwhelm all other efforts at redistribution of financial resources. By contrast, these may seem like merely tinkering with the small change. Outside of defense, the total salaries of teachers is likely to be one of the highest single categories of public expenditure of any developed nation.

- b) Public Health and Environment - with particular reference to local control over: solid waste disposal; sewerage; water pollution; and, air pollution. The central government will need to establish and enforce standards, against which local governments, as well as the private sector, will be held accountable. It may also be necessary to require the levy of environmental (Pigovian)<sup>16</sup> taxes, or provide specific grants, to deal with concerns of particular complexity and urgency.
- c) Transportation - where it will be necessary for central government to promulgate highway safety standards, for both operation and construction. It will also be necessary to devise a system of classification within the road network, so as to provide for (say) substantial grant funding for major highways but (say) little or none for local streets.
- d) Water & Other Natural Resource Management - whereby (say) urban water supplies and (say) public parks will be largely a municipal responsibility but with the central government providing input on the national management of these natural resources. This will take care of overall conservation of shared resources, as well as avoiding, for example, the interests of a single locality usurping those of the nation as a whole.

### FINANCIAL CONCERNS

#### Capital Investment Planning

71. Many activities of local governments, in order to be effective and expansive, will require substantial investment in the construction and acquisition of physical infrastructure and other public assets. It will be important for the central government, within the framework of its overall strategic planning, to attempt to allocate the necessary resources and otherwise facilitate this objective.

72. Unfortunately, the availability of the necessary physical, economic and financial resources to the public sector in general, and to local governments in particular, are scarce. There is, moreover, competition for these resources among public sector entities. There will also be competition with the private sector. It will be especially important to ensure that the private sector is not denied the resources it needs to invest in economically productive activity, which will generate both private benefits and public revenues. It should not be forgotten that the private sector provides most goods and services needed by the public. However, publicly provided infrastructure often adds, indirectly, to the capital value of private sector entities, as well as enhancing their productivity potential.

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<sup>16</sup> "Pigovian" taxes (named after the famous British economist, Pigou) are levied, often indirectly, for example, upon outputs that cause environmental pollution. An example is vehicle fuel taxation. Because direct pricing of pollution outputs is often not possible, taxes serve as a rough and ready way to both limit the polluting output by indirect price rationing and/or to raise revenue. The latter help to pay the public costs imposed by the impact of the pollution, such as costs of industrial waste treatment or even health costs.

73. Moreover, at the margins, the public sector may find itself competing for urgent infrastructure funding against some very risky, silly and fickle expenditure by the private sector<sup>17</sup>. This, therefore, suggests a need for the central government to exercise a rationing or allocative function over public capital investment. The Ministry of Local Government could reasonably be expected to contribute to this, by prioritizing local investments within an overall national allocation.

#### Control and Monitoring of Long-Term Debt

74. It is to be hoped that a significant proportion of the capital investment needs of the local government units can eventually be financed by long-term debt. At present, this is often precluded by seriously fragile national economic situations.

75. In the future, however, as conditions improve, it is likely that the municipalities will be able to borrow more readily. Though this may first be possible only from a central funding agency, the ultimate goal must be for local governments to be active participants in the market for long-term bonds. A most important condition of ability to borrow, for the time-periods needed to support major infrastructure investments, is a significant lessening of monetary inflation. Without this, lenders will be unwilling to commit their funds for longer than very short periods, often no more than about three years or so.

76. However loans are to be raised, the transitional economies may well wish to follow the common practice, almost world-wide, for there to be some form of control over local government borrowing from outside of the unit intending to raise the debt. There are several reasons for this.

77. First, in connection with the overall strategy for capital investment, the use of borrowed resources will become the mirror image of the use of physical and spatial ones. Approval of a loan, therefore, will represent an appropriation of marginal funds in the financial market place, matched by their use for a particular public investment and denying them for the next alternative, public or private.

78. Where loan approval is denied, an important capital investment project may not necessarily be discarded, curtailed or postponed. However, it will mean that it will need to be financed by other (non-loan) methods, imposing much more stringent financial constraint over that decision and involving the reallocation of current financial and economic resources. It may also affect physical design of the project or the phasing of its implementation.

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<sup>17</sup> Economist Joseph Stiglitz (former Chief Economist of the World Bank) questions the efficient allocation of capital by the free market, explaining his concern through the mechanism of interest rates. If the demands of borrowers outstrips the supply of funds, banks will raise interest rates. But, absent well-appraised projects and complete information, the banks will then lend only to those willing to pay higher rates. These *might* turn out to be those investing in riskier (sillier or more fickle!) projects, because the investors in the safer ones, with lower expected returns, may have dropped out. Whether or not valid, it provides a good argument for sound project appraisal, rather than relying on investor speculation or even the crude judgement of banks.



79. The second reason for imposing control over borrowing is that it represents part of the national "public sector borrowing requirement." This will be a matter in which the Ministry of Finance will have a vested interest, in the management of the nation's fiscal policy. It represents, therefore, one of the important and necessary administrative links between the Ministries of Local Government and Finance.

80. Thirdly, to the extent that loans are raised in foreign exchange by local government units, an additional dimension is added with respect to national balance of payments management and the rate of exchange of the national currency.

81. It is most likely, especially when borrowing from an international agency (e.g. World Bank), that the central government will be required to give a guarantee of debt service. However, it is important to recognize that very little of the revenue (whether from charges or from taxes) generated from the debt-financed investment may be in foreign exchange. Indeed, to the extent that any foreign currency is generated at all, it will almost all be indirectly<sup>18</sup>.

82. As a result, the foreign funds needed by local governments for debt service will need to be purchased from the central bank, emanating from the economy's foreign exchange reserves. These, almost inevitably, will have been derived from private sector earnings. Consequently, both the Ministry of Finance and the Central Bank are likely to be involved in regulation or control of the borrowing.

83. This is not to claim that there will be no economic benefits to be derived from local investment in (say) infrastructure. Indeed, such investments will likely facilitate the generation of improved private business activity. Moreover, they may well substantially contribute, albeit indirectly, to the nation's foreign exchange earnings. It is just that the foreign currency will be almost impossible to capture directly, by local governments, either for the service of debt or for the purchase of any necessary foreign goods and services for operation and maintenance.

84. For example, a water treatment works or road construction project may both contribute to the more efficient manufacture and transport of (say) beer or soft drinks, for sale in neighboring countries. However, in the private market-place, the financial benefits will accrue either to the private companies (profits) or to the central government (corporate or income taxes). They will represent increases in foreign exchange, at the central bank, only if captured or repatriated through the taxation and profit-making process, or more indirectly recycled within the economy.

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18 For example, improving the water supply or sewer system in a seaside holiday town may generate significant tourism revenues and, possibly, sales of water to (say) foreign cruise ships. This could significantly enhance the nation's foreign currency reserves, but virtually none of the foreign currency would be received by the water enterprise.

85. A final reason for the involvement of central governments in local government borrowing relates to the credit-worthiness of the local units to incur the long-term debt. In principle, this should be the responsibility of the primary lender. In turn, the lender might rely on a credit-rating agency. However, for the immediate future, the central government will inevitably be involved, because:

- f. it will likely manage or control a primary source of local borrowing, pending full access to capital markets;
- g. it will probably be (implicitly, if not explicitly) a guarantor for foreign loans, as well as all or most of local loans;
- h. usually, financial reporting standards of local government units currently require substantial upgrading; and
- i. often, expected financial performance by local government units will continue to be precarious.

86. Examination of credit-worthiness will concern the ability of local units to accept risks in both local and foreign currencies. As already indicated, there will be concern about the ability of local borrowers to acquire the necessary foreign exchange for debt service. This will be exacerbated, in any period of declining exchange rates. There will likely be a potential lack of ability of borrowers to match their revenue-generation capacity with the rising local currency costs of the foreign debt service.

87. All this raises the fundamental question of the extent to which (and under what circumstances and conditions) the central government, on behalf of the local borrower, will assume (or indemnify) the foreign exchange risks. Present tendencies are for this to diminish, especially as it helps to ensure that local loans are constrained by the financial market-place, rather than by arbitrary judgements.

#### Capital Expenditure Funding

88. From earlier observations, it seems clear that there must be direct central government involvement, at least for the time being, in any capital-funding mechanism established to assist emerging local governments<sup>19</sup>. In the establishment of a central lending institution, it would be wise to separate out any activity related to grant-funding for individual projects. These are best handled on an ad hoc basis, by the appropriate central government ministries and departments. Because of the possible resource misallocation, the need to limit capital grant funding must also be addressed.

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19 One success model might be that of the British "Public Works Loan Board." (PWLb). After WWII, it assisted U.K. local governments in raising capital for many redevelopment and reconstruction requirements, when capital markets were not readily available to them. Reconstruction in many (bombed-out) British cities (e.g. London, Plymouth, Bristol, Coventry and Portsmouth) is testimony to the ability to raise the necessary funding. Even today, the PWLB provides a significant portion of local government loans.

89. The establishment of a Local Government Loans Fund (LGLF) for a transitional economy should be a matter for negotiation among the municipal governments and also between their representatives and the central government. What should be established is a set of principles and safeguards that will need to be incorporated into any system used in setting up such an institution. Following the establishment of these principles, and the restoration of a reasonable economic climate wherein borrowing may take place, a LGLF might be considered as an interim step toward the eventual admission of local government units to the national capital market-place.

### Financial Information Systems

90. Transformation of financial information systems for municipal governments will not be a trivial exercise. It will require a large measure of agreement among accounting professionals, in both the public and private sectors. It will also require inputs from other disciplines. These will likely include economists and statisticians, as well as the many and varied users of the financial information.

91. Substantial upgrading of financial information systems will also depend on the development of the necessary professional competence. This will require a combination of revised standard practices, practical training, internal and external supervision, judicious recruitment and the development of relevant educational programs at universities.

92. Much of this will need to be addressed nationally. It may well require legislation or some degree of regulation from the central authorities. This will clearly tend to conflict with the prevailing moods and practices, directed towards greater decentralization. However, decentralization should not mean fragmentation, especially where common standards and principles are obviously demanded.

### Auditing

93. One institution likely to make a substantial contribution to the development of national standards of financial reporting and control might be that of a regional local government audit system. It is difficult to speculate how effectively such a system might function or what its priorities will be. It might well have to be given some extensive powers, including a responsibility to adjudicate on municipal bond issues.

94. As a new local government audit service develops its capability, it might look for guidance to the U.K. Local Government Audit Commission. This organization, established only in the fairly recent past, replaced (or, more correctly, absorbed) the "district audit service." The latter operated under the control of the "Ministry of Local Government" and was responsible for the financial audits of virtually all local government accounts. Whilst the service still exists, and operates competently, it has now been incorporated within the Audit Commission. This is a corporate entity, operating independently of either the central government or the local government units to be audited<sup>20</sup>.

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20 The necessity for an external auditor to be (and appear to be) independent of the audited client is a generally accepted international auditing standard.

95. Moreover, the U.K. Audit Commission has a much broader mandate than the former government audit service. It has contributed to improved local government financial management in several significant ways, for example:

- j. expanding activities beyond financial auditing into operational and performance audits;
- k. using legal powers to determine whether particular local government units will be audited by private firms of commercial accountants, thus providing competition, incentives and alternative approaches to the government audit service; and, very significantly;
- c. establishing a research and feedback capability, but producing and publishing reports, engendered by its auditing experiences, which can benefit local government units, financial professionals and public sector managers as a whole; and,
- d. developing a trustworthy reputation for impartiality and objectivity in dealing with matters of joint concern to both central and local government.

96. The last-named capability would be a very useful model for the transitional economies to consider, because central-local government financial relationships are (and will continue as) a contentious issue. Indeed, in the U.K., the Audit Commission has, occasionally, taken the central government severely to task over a number of important matters, sometimes siding with local government.

97. It is essential that the Audit Service also contribute substantially to the preparation of a local government financial reporting system that is transparent, credible and in compliance with standards and principles. This can then set the stage for the negotiation of sensitive and contentious political issues, on the basis of trustworthy information.

#### Municipal Revenue Sources

98. Another daunting task which must be addressed, on a national scale, as a pre-requisite to responsible local government, is the establishment of stable and growing sources of recurrent municipal revenue. There are several aspects to this:

- a) development of an efficient "ad valorem" system of property tax, using market-valued assessments, as a basic source of local revenue for services that must be tax-borne;
- b) where possible and appropriate, use of economic efficiency pricing for delivery of customer-based public services, both to raise revenue and to manage the quantity and quality delivered;

- c) development of an economically-efficient and politically acceptable system of revenue-sharing and grant allocation, out of tax revenues collected by central government under parliamentary authority; and,
- d) systematic examination of local taxation and other revenue sources, with respect to financial, economic and administrative efficiencies, so as to enhance and refine those which are efficient, while eliminating or modifying those which are not.

99. In addition to a recurrent revenue regime, it is equally important to establish reliable funding mechanisms for the financing of capital investment programs. As already explained, current economic conditions often mitigate against the commonly-used method of long-term borrowing. Thus, for the time being, local governments are forced to compete, for capital funding, with sources that would otherwise – and perhaps more appropriately, in better times – be used for current operations.

100. The establishment of an efficient system of property tax will, by itself, require sterling efforts of political will and the development of new competencies, especially in valuation, tax administration and financial management. Experience shows, however, that there is little alternative, if the local units are to have access to revenues that are to be substantially under local legal and administrative control.

#### Grants and Revenue Sharing

101. The property tax, although the most likely primary form of local taxation, also has several (real or perceived) social, economic and administrative disadvantages. In the transitional economies, it is unlikely – at least in the near future – to provide the same proportion of autonomous tax revenue for local services as, for example, in the U.S.A. Indeed, the U.S.A. is almost unique in the extent to which this tax is used for local revenue. Thus, any revenues deriving from this source in newly-emerging systems will need to be supplemented, well into the foreseeable future, by a well-crafted system of grants and revenue-sharing from national sources.

102. In designing and implementing such a system, it is important that it not be seen as a "hand-out" or "subsidy" to local governments, provided only grudgingly and after tedious negotiation. Instead, as in many other parts of the world, it should be seen as a legitimate sharing of resources, consistent with the sharing of governmental and service-delivery responsibility.

103. The local government finance laws should provide for a common funding mechanism for local governments. This would typically be by the pooling of a large proportion of any national revenue-sharing allocations.

104. It is sometimes suggested that this pool should be supplemented by contributions from the recurrent budgetary surpluses of the local government units. The sharing of these resources might then well be administered by a board or committee, representing both central and local government interests. However, attempts have been made elsewhere to establish a common fund, in this way, for local revenue-sharing allocation and capital development financing. Unfortunately, they often result in a complex and contentious administration. Most importantly, these sums are of

insignificant magnitude.

105. A more common system is to have the relevant department of the central government administer the revenue-sharing and grant system. Unfortunately, this is often done almost exclusively following the policies and concerns of the central government, not least those of short-term fiscal policy or currently high-profile political issues. Thus, it may merely substitute unfairness and high-handedness for inefficiency.

106. To the extent possible, this should be alleviated, by the establishment of a set of standard practices and formulas, following negotiation between central and local representatives. It is important that the resulting distributions be based on credible and transparent information. It is also essential, for effective local budgetary management, that the local governments know the size and conditionality of their distributions, in advance, within narrow margins of error. Central governments frequently overlook the fact that local governments, especially smaller ones, have much less freedom of financial maneuver than do central governments themselves. Their working capital balances will also be very much smaller and more restricted.

107. As already indicated, a distribution formula must take account of a variety of concerns. It must also have the support of the local government units, though it will clearly be impossible to satisfy all of them equally. It is, therefore, inappropriate for outside advisors to specify any precise system. However, based on observations and experience of systems used elsewhere, it is likely that any chosen or amended system will seek to follow some or all of the following principles:

- a) Basic Amount - This is the overall sum, to be decided upon by parliament or government, as available for revenue-sharing distribution to local government units. In principle, it would be based on an overall assessment of macro-economic and fiscal conditions. In practice, it is likely to be, in the last resort, politically-driven and highly contentious.
- b) Basic Distribution - A major proportion of the basic amount will be distributed on a simple basis, to reflect the relative basic needs of each community. This will also give credence to the principle of common national citizenship, by not basing entitlements to basic services on accidents of birthplace or residence. Thus, it is likely that this will need to be based the on simple population numbers of each local government unit.
- c) Demographic Weighting - It is well understood that demographic biases in population will affect the needs for services of different characteristics. For example, fewer children and more elderly will lower education costs and raise social welfare costs. Thus, a supplementary distribution might be based on the four principal categories of population:
  - i. pre-school children;
  - ii. children of primary & secondary school age;
  - iii. adults of normal working age;
  - iv. adults of normal retirement age.



d) Equalization of Needs and Resources - Provision should be made to reflect, among recipient communities, their relative needs and resources, to the extent not captured by other aspects of the formula. This merely recognizes that some areas are inherently "poor" and others "wealthy."

[With respect to resources, one common measure might be the population per unit of assessed property value<sup>21</sup>. This would reflect the local taxing capacity and also provide some surrogate for the general level of prices payable for property and thus, incomes.]

[With respect to needs, one measure might be that of population density, based on population per area or per mile of road. There are, however, many others.]

e) Special Areas - However "objective" a distribution formula is intended, there will always be a necessity to redistribute some of the revenue to areas of very special weakness or distress. This might apply to (say) distressed mining or industrial areas, or to towns where (say) the shipyard or fishing industry has been devastated. Such distributions really offer little opportunity for the use of formulae and will, therefore, be arbitrary. Indeed they will often be based on political supplication and negotiation.

f) Capital Grants - Many local government systems suffer from severe shortages of funding for capital development programs. In the current absence of extensive borrowing possibilities, recourse may need to be to other, much more limited, options. Therefore, it is likely that some part of the revenue-sharing will be reserved for grants towards specific capital projects. This may be supplemented by grants from government departments for projects within their own domains of concern<sup>22</sup>.

108. Effective local government finance laws will take account of some of these concerns, especially with respect to weighted distribution formulae. They will, inevitably, need to be amended from time to time. Indeed, it might well be appropriate for the details of the distribution formula to be promulgated, on an annual or periodic basis, by subsidiary legislation or ministerial order. Basic enabling laws would then be used only to set the main guidelines and principles, together with the systems of administration.

109. Local government finance laws also need to have, at least as part of their purposes, the provision of funds for capital development projects. Some laws specifically provide for "targeted transfers" from the national budget to municipal governments, at least in part to finance investments. These, effectively, would be "capital grants," additional to the normal "revenue-sharing" allocations.

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21 The use of this kind of formula mitigates in favor of a nationally managed and/or audited property tax valuation system.

22 An example might be a capital grant, to construct or improve a major highway, clearly of national importance but under the legal jurisdiction of a local government unit. It might well be administered by the Ministry of Transport, not Local Government.

110. Although a fairly common practice, too liberal a use of direct central government grants to finance capital expenditures can result in serious misallocation of resources. This is because a central government grant represents a virtually free resource to a local government, for a new asset.

111. A more efficient option might often be for each municipality to be encouraged to assess the costs of keeping existing assets in better operation and repair. This, it could then compare with the annual costs of debt service against borrowing (or the costs of otherwise allocating scarce resources - such as reserves) to finance a new asset. Either alternative would use the total general resources under its control, including regular revenue sharing, either to service the debt or to replace the otherwise appropriated funds.

### Inter-Governmental Financial Relations

112. Coupled with the issue of "revenue-sharing" is the broader question of intergovernmental financial relations. This is a principal aspect of the work of (say) "associations of cities." Efforts to develop credible and reliable financial information systems should enhance the possibility of a definitive division, between issues that are administrative and technical and those that are clearly political.

113. The development of "negotiating positions" with the central government by such organizations as associations of cities would appear to be a wholly appropriate practice. However, this is substantially different from the misuse or misrepresentation of either information or administrative procedures in arriving at these positions.

114. This is not, necessarily, a criticism solely – or even principally – of local government units. Indeed, the impression sometimes gained is that they feel it necessary to adopt such practices to circumvent what are regarded as stifling and overly-pedantic practices by the central government. It seems necessary, therefore, for central governments to work with local government units to develop administrative and political climates in which these exchanges can occur, within frameworks of wholly transparent financial reporting.

115. Given the recent past political history and the inevitable trends towards decentralization, these matters will be politically sensitive for some time to come. Thus, technical assistance that can create and sustain a more comfortable and open preparation and use of financial, and related operational, information should be given high priority.

## TECHNICAL ASSISTANCE REQUIREMENTS

### Coordinating Adviser

116. In addition to placement of technical assistance advisers at individual local government units, it is important to have some technical assistance at central government level. A coordinating adviser would assist in addressing matters of common concern, for which action must be taken at the center.

117. Such an adviser should deal with all agencies of the central government which impact on local government administration. He or she should also be able to liaise with professional associations (e.g. accounting bodies) and with educational and training entities (e.g. training centers and universities).

118. The adviser should initiate and conduct workshops and seminars on matters of concern to all local government units. Similar activities should be instituted for technical (in contrast to political) concerns that affect officials of the central government, in their dealings with municipalities.

119. Emphasis should be placed on the need for the development of cooperation on intergovernmental financial relations, brought about through a better mutual understanding among officials at all levels, of relevant technical and professional matters.

#### Specialist Inputs

120. In addition to a coordinating adviser, it is clear that central governments can often use a variety of specialist inputs, either at the Ministry of Local Government or at other ministries or departments. These inputs could be provided by the employment of specialist advisers, as well as using appropriate specialist training workshops and seminars.

121. The national government should identify the types of technical assistance most urgently needed. Against this, foreign aid institutions and national specialist entities can make assessments of what can reasonably be provided. It is difficult for outside advisers to be specific on these requirements.

122. Among the specialist inputs that might be requested and provided are the following:

- a) policy analysis and municipal management;
- b) local government law;
- c) legislative and regulatory advice, together with formal legal drafting of parliamentary and subsidiary legislation;
- d) municipal accounting and financial reporting;
- e) municipal and public sector financial management;
- f) internal audit and financial control;
- g) financial and value-for-money audit;
- h) financial and economic analysis of capital development projects;
- i) capital market activity, including municipal borrowing and investments of surplus

funds;

- j) macro-economic and fiscal policy, related to the influence of local government and public utility activity to local business development;
- k) statistics and demographics;
- l) strategic planning, including spatial, economic, environmental and social planning;
- m) housing management, including technical and financial management;
- n) property valuation; and,
- o) civil, environmental, transportation and public health engineering.

LOCAL GOVERNMENT PRINCIPLES AND PRACTICES

AS COMMONLY APPLIED

TO

MODERN WESTERN DEMOCRACIES

-----  
A CONCEPTUAL FRAMEWORK  
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by

David C. Jones

I. BACKGROUND

Western Europe

1. In 1985, the Council of Europe promulgated a "European Charter of Local Self-Government. Its "Preamble" includes the following:

.....Asserting that this entails the existence of local authorities endowed with democratically constituted decision-making bodies and possessing a wide degree of autonomy with regard to their responsibilities, the ways and means by which those responsibilities are exercised and the resources required for their fulfillment,.....

2. The following articles are especially relevant to the establishment of an appropriate degree of autonomy for local government units:

Article 3

*Concept of local self-government*

1. Local self-government denotes the right and ability of local authorities, within the limits of the law, to regulate and manage a substantial share of public affairs under their own responsibility and in the interests of the local population.

Article 4

*Scope of local self-government*

1. The basic powers and responsibilities of local authorities shall be prescribed by the constitution or by statute. However, this provision shall not prevent the attribution to local authorities of powers and responsibilities for specific purposes in accordance with the law.



Article 8

*Administrative supervision of local authorities' activities*

1. Any administrative supervision of local authorities may only be exercised according to such procedures and in such cases as are provided for by the constitution or by statute.
2. Any administrative supervision of the activities of the local authorities shall normally aim only at ensuring compliance with the law and with constitutional principles. Administrative supervision may however be exercised with regard to expediency by higher-level authorities in respect of tasks the execution of which is delegated to local authorities.
3. Administrative supervision of local authorities shall be exercised in such a way as to ensure that the intervention of the controlling authority is kept in proportion to the importance of the interests which it is intended to protect.

Article 8

*Financial resources of local authorities*

1. Local authorities shall be entitled, within national economic policy, to financial resources of their own, of which they may dispose freely within the framework of their powers.  
.....
3. Part at least of the financial resources of local authorities shall derive from local taxes and charges of which, within the limits of statute, they shall have the power to determine the rate.  
.....
5. The protection of financially weaker local authorities calls for the institution of financial equalization procedures or equivalent measures that are designed to correct the unequal distribution of potential sources of finance and of the financial burden they must support. Such procedures or measures shall not diminish the discretion local authorities may exercise within their own sphere of responsibility.  
.....
7. As far as possible, grants to local authorities shall not be earmarked for the financing of specific projects. The provision of grants shall not remove the basic freedom of local authorities to exercise policy discretion within their own jurisdiction.
8. For the purposes of borrowing for capital investment, local authorities shall have access to the national capital market within the limits of the law.

The USA and Other Former Colonies

3. The United States of America, almost without question, has the most democratic and diverse system of local government in the world. Thus, it represents a virtual laboratory of local government, worthy of study by those interested in instituting or reforming their own local government systems. This does not mean that its local government systems are perfect. Far from it! Nonetheless, the extreme diversity, openness and democracy of America's local government system transparently exposes most of its strengths and weaknesses to public and academic scrutiny.
4. However, as a former colony, it still follows many basic local government principles inherited from its previous rulers. In this respect, it shares a common heritage with many other countries, world-wide, quite a number of which have also been under colonial rule of some kind or another.
5. Many of these gained independence after World War II. Others, including the transitional economies of EEFUSU, were effectively "colonized" after World War II and have gained virtual independence only very recently.

Sometimes, they have retained many of their earlier local government practices. In other cases, dramatic changes have been instituted. Almost everywhere, practices have gradually adapted to changing economic and social conditions and to other local circumstances.

6. The United States, along with many of the world's larger<sup>1</sup> and more populous<sup>2</sup> former colonies, adopted a federal form of government. Furthermore, in common with some (but not all) of these, it has a republican system. Significantly, it has a strong, executive, independently-elected presidency and a separate legislature. This is in distinct contrast, for example, to the British unitary (i.e. non-federal) prime ministerial and parliamentary system.

## II. LOCAL GOVERNMENT PRINCIPLES AND PRACTICES

7. Clearly, the European systems have evolved from long historical traditions. They are, however, far from homogeneous and uniform. The systems of the former colonies have adapted many of the same traditions to their own circumstances. Concurrently, they have incorporated their own unique features. Much of Western Europe, moreover, follows a system grounded in the "Code Napoleon."

8. There is, however, still a significant commonality. Among local government practices customary, worldwide, are many that would broadly conform to the precepts proclaimed in the "European Charter." Examples include the following:

- (a) local government is usually a creature of legislation, rather than having independent constitutional status<sup>3</sup>;
- (b) in unitary systems, local government law is enacted by the legislative body of the central government, whereas in federal systems, this is usually the prerogative of the state or province;
- (c) local government units are established as separate legal entities, each often described as having "perpetual succession and a common seal with corporate power to act, contract, sue and be sued in its own name<sup>4</sup>";
- (d) by virtue of their separate corporate status, local government units are not merely branches of a central or state government;
- (e) the enabling legislation usually requires local governments to fulfill certain mandatory obligations, with additional discretionary power over other matters;
- (f) it is unusual for local governments to have unlimited residual powers, beyond those specified in the law (e.g., in Britain and in some of the states of the USA, this is a severe legal restriction, under the "*ultra vires*" or "*Dillon's Rule*" principles);
- (g) despite their titles, local governments are often not primarily concerned with governance but with service delivery: principal civil and criminal law is enacted by federal (or central) and state governments;
- (h) within the limitations of national or state law, local governments typically regulate land use, building construction, public health, safety, traffic and other matters for the protection and welfare of the local community;
- (i) local government units usually comprise an elected or appointed council or board (councilors, selectmen, supervisors, commissioners, etc);

<sup>1</sup> E.g. Canada and Australia

<sup>2</sup> E.g. India and Pakistan

<sup>3</sup> In some states of the U.S.A., local government units are granted limited "home rule" under state constitutions.

<sup>4</sup> The quotation is an "Anglicized" version of the legal situation. Other systems will often follow similar principles, however.

- (j) there is usually a public personality - mayor, chairman or chief executive - who may be elected by the public at large (separately from the council or board) or by the council or board itself;
- (k) the mayor, chairman or chief executive may or may not have executive powers, independent of those of the council or board and may or may not manage the government's day to day operations, depending on the system and circumstances;
- (l) local governments have designated taxing powers, the principal of which is often that of levying a tax on real and personal property<sup>5</sup>;
- (m) in addition to taxation, local governments will raise revenues, as appropriate, from fees and charges for specific services – sometimes on the basis of full cost recovery, sometimes only as a contribution to cost;
- (n) local governments frequently share in the revenues collected by higher (federal and state) levels of government – notably from income and sales (or value-added) taxes – or receive grants from these revenue sources;
- (o) where suitable capital markets exist, local governments are permitted to borrow, usually under certain administrative restrictions, to:
  - (i) cover temporary shortfalls in normal revenue collection, because of seasonal conditions, with provision that the money be repaid within (say) a maximum of one year; and
  - (ii) finance the cost of capital expenditure, with provision that the money be repaid within the working life of the assets so financed;
- (p) where suitable capital markets do not exist, local governments are often permitted to borrow from state or federal governments – sometimes through special loan funds – for largely the same purposes as in (o);
- (q) long-term borrowing, and the capital expenditure related to it, is often subject to a formal process of approval from outside the local government – in parts of the USA this can be, for example, by a "bond referendum": elsewhere, formal central or state government approval is commonly required;
- (r) a central or state government will often have a special government department (e.g. ministry of local government) charged with the responsibility of overseeing local government activity;
- (s) through the designated ministry or department, and also through other agencies of the state or central government, there will typically be considerable interference<sup>6</sup> in the day-to-day operations of the local governments;
- (t) local governments will be required to prepare and submit for formal approval – almost always by the board or council, sometimes also by the state or central government – an annual budget of revenues and expenditures;

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<sup>5</sup> Britain itself, in the 1980s, attempted to substitute the seemingly notorious "poll tax" – now effectively abandoned – for taxes on residential property.

<sup>6</sup> This is a common practice, despite the strictures of the European Charter. Indeed, in the past, such interference has often been performed locally, by central government agents. Well-known examples were the French "prefect" and the British colonial "district commissioner." In Britain, as elsewhere, there is now a great deal of interference directly from the central government. It is likely that the current collective supervision systems of many national governments fall broadly into one or more of these categories.

- (u) local government departments and officials will be required to operate within the limits prescribed in the budget, with amendments, including transfers and reallocations, subject to a formal process of approval or review;
- (v) annual recurrent expenditures on services (operation, maintenance, administration and debt service) will be financed from general taxation sources (including grants from other governments) together with fees and charges for services; and
- (w) local governments will be required to keep proper financial accounts of their activities – analyzed under budget headings – and to prepare annual financial statements, typically subject to some form of audit or inspection.

9. Powers and duties of mayors (chairmen and chief executives) vary according to local law and custom. At least four possibilities will suffice to illustrate the range:

- (a) the mayor may perform ceremonial functions and/or act as the chairman of a council but have no greater executive power than any other council member;
- (b) the mayor may be the chief executive, responsible for implementing policy but deriving all powers from the elected council or board;
- (c) the mayor may have executive powers and duties quite separate from those of the elected council or board – indeed, powers that may bring him into direct conflict with it, such as a right to veto its decisions; or
- (d) the mayor may be all-powerful, with the council or board acting only in an advisory role.

10. To complicate matters, practice may be markedly different from law or custom. It is not uncommon for a mayor appointed under system (a) to behave as under system (d) because of the force of his/her personality and/or political support.

11. Under the general supervision of the chief executive – elected or appointed – a local government unit will typically have several primary domains of service delivery, organized into distinctive departments or divisions. These would include:

- (a) administration, legal and personnel;
- (b) finance, accounting and budgeting;
- (c) physical planning and public works;
- (d) public safety; and
- (e) human services.

12. The administration, legal and personnel domain will deal with the overall management of the entity, including the conduct of formal meetings. It will deal with legal matters, including those where the public requires licenses, approvals etc. It may also be responsible for a central purchasing operation. The finance and budgeting domain will be responsible for preparing, executing, analyzing and monitoring the budget, as well as for taxation, revenue collection, disbursements, debt and cash management, accounting, costing and financial reporting.

13. The physical planning and public works domain will be concerned with the construction, operation and maintenance of infrastructure. This will include roads, sewers and drains, water supplies, parks and open spaces, buildings and all types of permanent works. It will also have control over the layout and development of both public and private land.

14. The public safety domain will be concerned with police, fire and accident protection, ambulance and rescue services and the regulation of buildings and structures.
15. Finally, the human services domain will be concerned with education, health and welfare services, to the general public and (more specifically) to those who are, in some way, disadvantaged.
16. How these domains will be organized into departments and individual services will depend on local conditions. There are a great variety of systems and practices - all with their own traditions, advantages and disadvantages.
17. The above principles and practices assume the existence of a single local government unit, covering all services. Modern local government systems are usually not so simple. Typically, separate boards, commissions or committees will be appointed to run specific services. Sometimes, as for example with a water board, these separate units will have considerable financial autonomy, using their own revenues from service charges. By contrast, an authority such as a school board<sup>7</sup> may receive its funding from (and report its activity to) the principal local government unit.
18. In addition to the establishment of separate entities by individual local governments, there are two other important practices that should be mentioned - tiering and joint operations.
19. A most obvious example of tiering is where a "state" and a "local" government exercise overlapping jurisdiction. Tiering sometimes occurs, however, when more than one level of local government exercises jurisdiction over a particular land area. Common examples are small towns within larger counties, or parishes within districts<sup>8</sup>. In this case, the "senior" unit may provide the more strategic services - e.g. regional planning and education - together with sewage and solid waste disposal. The "junior" unit would provide more minor or local services - e.g. refuse collection, car parking and street lighting. Again, however, much will depend on tradition, custom or happenstance.
20. Both governmental units will have claims against the local "tax base" of the area and may sometimes levy separate taxes. Otherwise, a common practice is for one of the units to levy and collect all the tax revenues, with the other "precepting" upon it for its agreed share. An alternative might be where the "junior" entity retains all of its legal powers over certain services but contracts with the "senior" unit to actually provide these services. Both entities are thus claimed to benefit from economies of scale.
21. A system somewhat similar to tiering is that of a "special tax district," "special revenue district" or "special assessment area." This may be set up where only the residents of a particular area enjoy a service - e.g. street lighting - not available to the local government area as a whole.
22. The local government then collects a tax surcharge - levied only on the residents of the special tax district - and retains it in a separate fund for that specific purpose. In this case, however, there will not, normally, be a separate "junior" local government unit. Governance of the special district will remain with the main local government unit.
23. Joint operations occur where, for a variety of physical or economic reasons, it is deemed more efficient to provide a service covering the areas of several local government jurisdictions. Examples in metropolitan areas include urban transport systems and joint water and sewerage systems.

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7 In the U.S.A., however, school boards and other service-management entities are quite commonly directly elected, with separate taxing powers.

8 A very common tier of "local government" in the Former Soviet Union was - and often still is - the "Raion," (or its equivalent in other states and languages). This is an administrative sub-division of major municipal governments.

24. In addition to joint service operations, adjoining local governments may establish "councils of government" to provide forums to discuss and to reach consensus on common concerns. Sometimes, such councils may have legal power, ceded by the individual local governments or granted by legislation, to implement agreed decisions. Often, these councils can be only advisory, with implementation of decisions left largely to the separate local government units.

### III. FINANCING CAPITAL DEVELOPMENT

25. Capital development expenditure, for the construction and acquisition of community assets, is commonly financed by a mixture of borrowing and "pay-as-you-go." There is continuing discussion and argument about the optimal balance between these alternatives. This is typically of concern to almost every local government, world-wide, especially where borrowing is constrained by the lack of capital markets.

26. Under the "pay-as-you-go" principle, capital expenditure is financed in exactly the same way as recurrent operating expenditure – immediately from regular, annually prescribed, taxes, fees and charges. Its claimed advantage is that it imposes financial discipline upon the local government, by forcing it to stay within the financial limits of funds currently available.

27. Another significant advantage of "pay-as-you-go" is the avoidance of debt service obligations on future taxpayers. This will allow for a reduction in future taxes, fees and charges, otherwise needed to service the debt. It will also limit the administrative costs of debt management, which can become quite complex.

28. However, this future saving of costs is often somewhat illusory. Expenditure reductions on debt service will usually need to be replaced by actual capital expenditures, deferred from the years when they might otherwise have been financed by the debt. Also, current budgets may be balanced only because of cuts in expenditure. Thus, fixed assets are under-maintained or tardily replaced.

29. Thus, there are significant disadvantages to the "pay-as-you-go" system. In particular, its use means that capital expenditure must always compete for funding with current operating expenditures. The latter, however, being of immediate concern for service delivery, are likely to take priority.

30. Furthermore, however urgent and important is the new capital expenditure, financing it only from current revenue may mean that much of it must, inevitably, be curtailed or postponed<sup>9</sup>. Even that which is actually carried out may suffer from serious budget stringency, which could result in projects of lower than optimum quality. This might well compromise sound principles of design and construction, especially with respect to safety and durability. Furthermore, the process could, ultimately, be more costly.

31. For example, a water-main might be limited – by budgetary restrictions – to a specified maximum diameter, suitable to carry the flow only for a very few years. After this limited period, a costly repeat excavation might be required, to lay a twin line. Added to the construction costs could be the (albeit temporary) costs of traffic disruption<sup>10</sup>, together with possible additional costs for rights over land, either through purchase or easement.

32. In very specific terms, an 18" pipe (at constant velocity) will carry about 2.25 times the flow of a 12" pipe. If the latter is duplicated, some time after initial installation, the new trenching costs are likely to greatly exceed any earlier excess costs of initially laying the (larger) 18" pipe. Also, the twin pipes are likely to require (through purchase or easement) control over about 1.5 times the surface land area - even if laid parallel. However, engineering design standards might dictate that the new line follow a separate route - opening a new set of concerns about land access.

33. The same rationale would often apply to the design and construction of a road. In this case, there would be a choice between the immediate construction of (say) a two-lane road, versus a four-lane road. Not only would there be

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<sup>9</sup> Clearly, there are exceptions, as in the case of some small, wealthy, suburbs.

<sup>10</sup> This raises an interesting socio-economic issue. The local government may "save taxpayers' money," from its budget only by imposing costs – effectively taxes – on the travelling public, through delay, disruption and (possibly) pollution from idling engines and potential hazard. Moreover, there is now increasing reference to the physical and psychological stress of driving in heavy traffic, sometimes leading to "road rage!" These can, quite easily, cause illness or even untimely death.



resultant costs relating to later reconstruction and traffic disruption. It would also be necessary to purchase the land needed for the entire right-of-way immediately - or at least to restrict its use. This would prevent the need for subsequent demolition and acquisition of the adjacent property. The latter can often be politically and economically disruptive, in addition to the financial costs.

34. The issue is further clouded by inflation. Money borrowed now will be repaid with cheaper currency later. To the extent that it is unanticipated (and therefore excluded from nominal interest rate calculations) there may be some cost advantages, in real terms, by building sooner, rather than later. Many communities, moreover, including the U.S.A., have observed capital costs to have risen faster than the general level of inflation.

35. The examples should not give the impression that it is always most economic to incur the higher costs as early as possible. They are intended only to indicate that under a rigid "pay-as-you-go" system, the severe financial constraints might entirely rule this option out - even when clearly of long-term economic benefit.

36. The financing of capital expenditure by borrowing is an important means of mitigating this concern. Furthermore, the levying of taxes, fees and charges - to cover the expenditure on interest and debt redemption - ensures that both the present and subsequent users of services provided by the assets contribute a proportionate share of their installation or acquisition costs, as well as of their operation and maintenance.

37. Although raised to finance permanent assets, it is rather unusual for the service of municipal debt to be secured against a mortgage of those assets. There are two main reasons for this. First, many public assets (e.g. storm drainage, sea defense works) have no utility to a private user, making them relatively worthless in the market-place. Second, public policy normally demands that community assets (e.g. schools, roads, and parks) not be denied to public use, merely for financial reasons.

38. Thus, it is common for municipal debt service to be secured against the revenues of the borrowing public entity. These debt service obligations might be legally pledged against specific revenues from the users of a particular service, such as a public utility. In this case they are sometimes known as "revenue bonds" - a U.S. term. Otherwise, the bonds will be pledged against general revenues - taxes, grants, fees and charges - then known (in U.S. jargon) as "general obligation bonds."

39. These are the fundamental procedures. In practice, bond issues may appear to be secured in a variety of other ways. Sometimes this is claimed to be "creative financing." Typically, however, the distinctions are as much for public image or political presentation, as for financial principle. For example, certain taxes may be deemed as specially "earmarked" and (often arbitrarily) referred to as "service fees."

40. Sometimes, loans are made directly, to state or local government units, by higher levels of government, such as federal or central governments. Sometimes, such loans may be from special loans funds, established specifically to make them, under central or federal control. In either case, it is not uncommon for the interest rates to be below the normal market rates.

41. The higher level of government is then effectively subsidizing the cost of the state or local capital expenditure. Though often not economically justified, such practices are influenced by political considerations. Higher levels of government often use these lending operations as a means of prioritizing what are considered to be important or urgent projects. Thus, scarce subsidized loan funds are rationed, administratively, instead of by the market-place.

42. In the U.S.A., direct loans of this type are uncommon, with most borrowing taking place in the commercial market-place. However, the subsidy practices still apply, though in a somewhat different way. Interest on bonds issued by state or local government units will normally be free of federal income tax. This facilitates a lowering of the interest rate, below the taxable rate otherwise payable. It will normally be set at a level at which bondholders will still earn about the same net income.

43. The saving of interest cost to the issuing government is therefore, a federal subsidy. Unfortunately, it is not a very efficient one, economically, nor particularly equitable. These loans are more advantageous to rich lenders than to poor ones, because the former can take fullest advantage of the tax breaks, whereas the latter cannot. However, richer people are more likely to have money to lend.

#### IV. LAND MANAGEMENT

44. Financial complexities may arise for local governments because of their rights and duties with respect to land. Some of these may result in revenues – others in costs. Typically, local authorities will have rights to: buy and sell land; lease land to and from other parties; provide infrastructure, on, above or under land; and, regulate the use and occupation by others of land, buildings, waterways and forests.

##### Land Transactions

45. An important feature of land management, by many public sector entities, is their right of "eminent domain." This establishes the sovereignty of public over private interests, by asserting that land required for public purposes may be expropriated and acquired from private landowners, if necessary without their consent. Clearly, this "compulsory purchase" procedure would normally be used only as a last resort, because it is legally tedious and frequently results in bad publicity. Often, the public sector entity will be perceived as heartless or the property owner as obstructive.

46. Most land transactions for public purposes will, therefore, initially seek to be in the open market. Even where land is acquired compulsorily, the vendor is typically<sup>11</sup> entitled to "just compensation". Whether this definition accords with that of "fair market value"<sup>12</sup> depends upon the legal system and the politics.

47. In general, local and public authorities are not in the business of buying and selling land for profit. Normally, a public sector entity will buy land only to fulfill its statutory functions and will sell any land that becomes surplus to its requirements. However, routine land transactions may sometimes be considered as part of the responsibility of (say) an urban development authority, housing board or new town corporation.

48. Where land is purchased in advance of, or in excess of, requirements, its value may have substantially increased by the time it is used. If this increase in value exceeds the holding costs, there will be a financial gain for the authority, which will equate to revenue. For land retained, its current market value, minus acquisition and holding costs, will represent a financial saving. For any land disposed of, the excess will be in the form of a net inflow of cash revenue.

49. Often, even where advance purchases make economic or financial sense, budgetary limitations and other pressing needs may prevent them from being fulfilled. This will sometimes, in retrospect, prove to have been a false economy, imposing higher real costs on later budgets<sup>13</sup>.

50. Land values can be considerably enhanced by the provision of development infrastructure, such as roads, footpaths, drainage, water supply and sewerage. Such infrastructure normally comes under the jurisdiction of the public sector. Thus, opportunities exist, in appropriate circumstances, for a public entity to acquire land, install the basic infrastructure and then re-sell all or part of it back to the private sector for further development. Private sector purchasers can range all the way from commercial developers to individual residential plot-holders.

51. Some plots may be reserved for specific target groups, such as low-income families. There are sometimes opportunities to "cross-subsidize" the sale prices of these plots, from the profits on sales to higher-income residential and commercial interests. Some of the land may, of course, remain with the public sector, including the road and footpath areas, and that required for public buildings and public open spaces.

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<sup>11</sup> In the U.S.A., for example, this is specifically provided for under the Constitution.

<sup>12</sup> This has been resolved, in the USA, by the Supreme Court.

<sup>13</sup> Sometimes, there may be costly and disruptive unintended consequences. For example, undeveloped land, left vacant for a long period, may attract illegal squatters, whose presence may become either too costly or too politically burdensome to resolve.

52. For cash-strapped public authorities, opportunities sometimes exist for the acquisition of land without up-front monetary payments. The system typically used is known as "land exchange" or "land adjustment." The public authority will initially acquire land (voluntarily or compulsorily), install the infrastructure for the entire site and then hand back some agreed or adjudicated proportion of the area to the original owner. The cash expenditures are then only for the infrastructure, not the land.

53. Thus, the cost of land used by the public sector will be, in effect, the development costs on the land handed back. The private developers may then use the share returned for their own (profitable or other) purposes - subject, of course, to planning (zoning) permission and any conditions attached to it.

54. In deciding whether to buy and hold land in advance (or in excess) of requirements, account must be taken of holding costs. The most important of these will usually be interest. Although this may not explicitly appear in the books of account, any investment in the purchase of land will incur a payment or loss of interest, depending on how it is financed.

55. One way of looking at this is to assume a plot of land, costing (say) \$10,000, which doubles in value to (say) \$20,000 after 8 years. However, if the original sum expended on the land had been invested at (say) 10% per annum (or, if borrowed, had accrued interest at 10%) it would have amounted to \$21,426 over the same period. Thus, the public entity would have lost \$1,426. It might have been better (financially) to have invested the money and purchased the land, when required, at its then market value. Additional costs of holding land, to be added to the interest, could include temporary fencing and drainage, security, grass-cutting, tree-trimming and administrative overheads.

56. Unfortunately, land management is not so straightforward. Each parcel of land is unique - as to location, if nothing else. So, it may be necessary to purchase land when available - or else see it lost for ever, for another purpose. Alternatively, the timing of its purchase may be affected by a variety of influences - such as the actual or intended occupancy or activity on adjacent land; possible inundation by water; squatter occupancy; and potential compensation for displacement.

43. Indeed, a public authority may make advance land purchases, even at a financial loss, just to prevent activity upon it which may be assessed as not to be in the long-term public interest. In any case, no-one can forecast, with certainty, either interest rates or land values. Moreover, expected or actual inflation of land values and other related costs will inevitably bedevil the calculations. Thus, at the time it is taken, the decision is only a speculation.

44. As well as revenue that may result from the buying and selling of land, a public authority will often be in a position to derive revenues from rents, of either land or buildings. Sometimes, the rents will relate to the temporary occupancy of land or property, pending its substantive use. By contrast, the renting or leasing of property may be fully consistent with the exercise, by the authority, of its legal duties and powers.

45. At first sight, a good example is the provision of public housing, to employees or to low-income families. However, this provision has almost always been on a subsidized basis, so that every additional rental unit will represent an incremental net financial cost, rather than net revenue. The same principle often applies to the renting of space in a municipal market. Sometimes, public entities will derive genuine profits from renting. This could occur, for example, when leasing commercial property, such as shopping centers, bus stations and offices.

60. A common error, in assessing the potential financial viability of rented properties, has been to forecast the rental income against only the operation and maintenance costs. Capital development costs have typically been ignored, especially where these have been financed from concessionary funding sources - such as grants from other governments. Thus, potential loss-making operations appear to be profitable, sometimes encouraging sub-optimal investment decisions.

61. The same mistakes have also been made for other revenue-generating operations. This sometimes includes placing too much reliance on accounting information. This may not only be out-of-date, it may reflect values of a deteriorating and badly-maintained system, soon needing substantial replacement or extension. Water supply systems are particularly vulnerable, because replacements may be vastly more expensive than the existing systems. Moreover, extensions, especially of sources of supply, may sometimes be orders of magnitude more expensive than the present intakes or treatment plants<sup>14</sup>. Pricing will need to be based on *future economic* values, rather than on historical accounts.

#### Land Regulation

62. In addition to engaging in land transactions, many local and public authorities will have the legal duty to regulate the public and private use of property. This is in the interests, for example, of: sensible town-planning and balanced development; controlled growth; public health and safety; aesthetic and environmental considerations; and harmonious community behavior. In other words, whereas the market-place engenders competition for individual private space and activity, the public authority must be concerned with the good order and discipline of the community as a whole.

63. An urban area will often have a "town plan", which will broadly indicate which areas have been set aside for various kinds of occupancy and use. This is sometimes known as "zoning". Typical zones would be for agricultural, horticultural, residential, commercial or industrial use. In addition, provision would be made for public offices, libraries, museums and theaters and for public open space. Land will also be designated for roads, railways and footpaths.

64. Usually, any development - even on a single plot - will require planning (zoning) permission from the local government. An examination will determine whether the intended use is consistent with that prescribed for the area. If not, application will be made for a designated change of use - sometimes called a re-zoning - of the area. Planning approvals, especially those which will permit a more lucrative use of the property, can clearly be very valuable, creating a temptation for corruption. Indeed, it is not unknown for considerable sums of money, paid by developers, to find their way into the pockets of politicians, political parties and public officials, in return for assistance in gaining planning approvals.

65. However, this willingness to pay, by intending developers, need not be a source of potential corruption. Instead, the law may permit the public authority to urge, in exchange for planning permission, that the developer make a material contribution to public facilities. For example, the developer might be encouraged to provide, as part of (or adjacent to) the proposed development, additions to (or upgrading of) roads, footpaths, public parks or cultural facilities - such as libraries or museums.

66. Sometimes, the developer will make a cash contribution for some laudable public purpose, such as low-cost housing or worker re-training. In addition, developers may offer to operate and maintain the facilities, such as being responsible for street cleaning.

67. Where such a contribution can legally be demanded of the developer, it is sometimes known as an "exaction". Where the law does not permit such demands - but allows developers to make offers of public improvement - this may be known as "proffering". In either case, it represents revenue-in-kind.

68. The extent to which a local government can derive revenue from the exercise its planning or zoning powers is not unlimited. It is constrained by - and may vary with - the revenue/cost ratios associated with different types of development. Also, the non-financial leverage available to a local government, with respect to new developments, will depend on their profit potentials.

69. As a result, a local government may be faced with difficult choices. On the one hand, it may maximize revenues, from (say) more financially lucrative development schemes. On the other hand, it may exercise greater regulatory control, to encourage schemes that may be less financially attractive but considered more socially beneficial.

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<sup>14</sup> For example, an existing groundwater system, using minimum treatment, may need to be augmented by a river intake, perhaps involving a dam or tunneling. In such a case, the treatment works will also need to be more complex and therefore more expensive.

### Development Charges

70. When a site is developed privately, for almost any purpose, the owner or developer will normally pay the costs of provision of all on-site infrastructure. This will include roads, footpaths, drains, sewers, water-mains, power-cables and telephone lines. Also included will be on-site public open spaces. Public authorities, to facilitate connection to the public networks and to ensure safety and public acceptability, will regulate building and plot development. Regulation will include that of internal plumbing and wiring.

71. Plot-owners or developers will normally pay the costs of connection to the public systems. Furthermore, on-site infrastructure will usually become vested in the appropriate public-sector entity, for subsequent operation and maintenance.

72. These are all tactical matters, relating to individual plots or sites. However, taken together, developments will affect the planning and operational strategy of the community. Most particularly, each new development will impose an additional load on the overall systems for traffic management, drainage, sewerage, water supply and other public utilities.

73. This will eventually trigger the new construction of: main roads; trunk water-mains, sewers and drains; power and gas transmission systems; and major expansions of telephone lines. In their turn, these will engender the need for additional: power stations, treatment works and telephone exchanges; pumping and transformer stations; and traffic signals.

74. Many specialists in public sector management will argue that the classical and logical solution to these problems is for the expanded strategic facilities to be provided as community (public or private) capital expenditure, financed by long-term loans or other capital funding sources. The growing community would then contribute, periodically, to the use of these facilities, through their regular payments of taxes and service charges, set at a high enough level to cover the debt-service, or other capital- cost recovery, together with costs of operation and maintenance.

75. This classical approach is usually the one adopted, or at least attempted, for the expansion of education, health, welfare, recreation, cultural and social services. However, for public utility network systems, there is a school of thought that asserts that owners or developers should pay an "up-front" charge towards the potential costs of expanding the strategic networks. Thus, so-called "hook-up" charges are levied, sometimes known as "consumer contributions".

76. This approach seems based upon the perception that every new development is an unwelcome intrusion into the "status quo", with the potential to create an overload. This may be so, but it is also true that each new development may be as much a contribution to the community as existing ones. A commercial development will add facilities needed by the public, in the form of goods and services. A residence will, very often, house productive and income-earning workers.

77. Except where exemptions apply, all new developments will potentially increase the property-tax base, paving the way for the provision of future funds to operate and maintain new or expanded public facilities and to cover debt-service costs on them.

78. Nonetheless, there may be convincing reasons why public authorities may wish to expand their facilities without incurring further debt. First, the overall indebtedness of the authority may be at or approaching an unsatisfactory level, for a variety of reasons. One of these might be failure or difficulty in updating the property tax base or in increasing service charges or tax rates. Another might be the outcome of earlier, imprudent, debt management.

79. In developing country situations, another important reason for not borrowing is that there are just no loan funds available. There may either be no capital market or else the market may not be accessible to local or public authorities. The alternative, borrowing from the central government, may be constrained by budgetary limits or overly-burdensome controls.

80. Thus, the only source of capital may be from the owners and developers. They, of course, might have financed themselves from private sector sources, such as banking or mortgage institutions. If this method is adopted, its effects will be virtually the same for the public authority, which will, conceptually, have borrowed funds by proxy. However, the debt-service will fall only upon the final purchasers of the properties against which the development charges have been levied. This fails to eliminate the equity question of whether, and to what extent, the strategic financial burdens created by new developments should be borne only by them.

81. This becomes an exceptionally vexed question where plot charges are levied upon newcomers who are from disadvantaged (e.g. low-income) groups. This is sometimes exacerbated when the charges are, perhaps, made under new policies, which did not apply to earlier (perhaps better off) residents. In such cases, it might be that newcomers would eventually pay off the full costs for their own plot charges, as well as contributing (through general taxes) to the debt service on facilities provided for earlier developments.

82. To illustrate the anomaly, take the example of a new grocery-store which is connected to the public water-supply system, to which it will expect to pay metered water charges for future supplies. It might seem to be an acceptable practice for the grocery store to be asked for an up-front contribution to the costs of water-supply facilities. However, it would be inconceivable for the store owners to seek capital contributions, from its future retail customers, towards the increased costs of their wholesale delivery network!

83. Despite logical arguments, there is usually one over-riding concern, mitigating strongly in favor of consumer contributions. This is the severe shortage of public funds, from taxation or borrowing, together with the almost insatiable demands upon them. Anything which can shift the burden earlier, and more directly, to private funding sources is surely welcome, however pragmatic the system.

#### CONCLUSION AND SUMMARY

84. In modern western societies, government is carried out at both national and local level by independent and legally autonomous authorities. Often, separate corporations, sometimes public, sometimes private, will carry out utility functions. Either central or local governments may own public corporations, depending on the circumstances.

85. Land is normally owned privately. It is purchased as required for public purposes. Very occasionally, purchase is by coercion, using the principle of eminent domain. Even here, however, it is normally the practice to pay proper compensation.

86. Goods and services are purchased from the private sector. Public revenues are raised either: from taxation levied on private sector property or activity; or, fees and charges for services, sometimes recovering full cost, otherwise not.

87. Funds required for capital expenditure (and sometimes for temporary working capital) are typically borrowed from the private financial markets, at commercial interest rates. Sometimes, central governments will make institutional or legal arrangements to facilitate borrowing at subsidized interest rates. This, however, has usually been assessed to be economically inefficient.

88. Finally, *central* governments control an overwhelming proportion of the public revenue sources, as well as usually retaining all or most of the residual legislative power. Thus, in relationships with local governments and other public entities, central governments have the opportunity for an immense variety of: delegation of service responsibility; regulatory supervision and control; and, transfer of revenues in the form of grants. There is often, moreover, considerable scope for political disagreement and contention.

89. It might be argued, therefore, despite strictures of the Council of Europe, and others, that the "Golden Rule" prevails: "Whoever has the gold makes the rules!"







### **Twelve Rules for Improving Public Sector Service Delivery<sup>1</sup>**

- **Carefully Delineate and Distinguish the Output of Any Service Considered for Reorganization**
- **Use Activity Based Cost Accounting (ABC) for Service Delivery**
- **Compare the Costs of Contracting Out (to the Private Sector) by Using Avoidable Cost Accounting**
- **Fully Address the Reality and Extent of Transaction Costs**
- **Recognize that Public Sector Contracting is Different from Private Sector Contracting**
- **Always Compare Three Choices:**
  - **Service Delivery by Public Sector as it Now Exists**
  - **Service Delivery by Private Sector as it is Likely to Exist, allowing for Probable Contingencies**
  - **Service Delivery by the Public Sector as it can Feasibly be Improved, Including Appropriate Public-Private Partnership**
- **Make Meaningful and Early Employee Participation Possible**
- **Remove Politics from Contracting**
- **Establish Sound Management Controls and Audit Procedures**
- **Recognize that Outcomes Cannot Wholly (or Even Mainly) be Evaluated by Profitability or Other Financial Criteria – but by Incorporating Economic and Social Externalities**
- **Rely on Analysis, Evidence and Reasoned Argument - Not on Ideological or Political Assertions**
- **Allow Time for Experiment and Evaluation**

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<sup>1</sup> Adapted from: “You Don’t Always Get What You Pay For” by Eliot D. Sclar – The Century Foundation, Inc. Copyright © 2000, New York.

## **GUIDELINES FOR IMPROVING PUBLIC SECTOR SERVICE DELIVERY<sup>1</sup>**

- **Overview**

The issue is not what to privatize and what to keep public. It is how to reorganize the entities that provide public services and, within that context, improve, enhance, or even reduce, the use of contracting, through effective public-private partnership.

- **Carefully Delineate and Distinguish the Output of Any Service considered for Reorganization**

A public service is typically far more complex than any private sector comparator. Unless the complete mission is fully understood, a hasty plunge into contracting stands a large risk of creating the wrong product. Much of this has to do with the high value placed on the informal parts of the public mission by citizens. Moreover, isolating a specific activity from the overall public mission, just for purposes of privatization is a mistake not easily reversed. Functions with significant asset specificity or specialist skills may be difficult to reclaim if later found unsatisfactory

- **Use Activity Based Cost Accounting (ABC) for Service Delivery**

Most governmental accounting systems are notoriously inefficient at delineating costs, as contrasted with, for example, "expenditures" or "payments." Justification for either privatization or in-house operation mandates that cost-based decisions call for cost-based accounting. Virtually all products, especially public services, are delivered as clusters of activities. This distinguishes *activities* as basic units of cost. Moreover, *costs* can be distinguished only as consolidations of operation, maintenance, administration, taxes, depreciation and return on investment – all adjusted for inflation. Costs are also essential (though not sufficient) for effective management.

- **Compare the Costs of Contracting Out (to the Private Sector) by Using Avoidable Cost Accounting**

Although ABC is an essential feature of satisfactory accounting, it cannot, alone, reveal the cost savings from change. This is because it includes *overheads* as well as *direct* costs. Thus, the unadjusted use of such a fully allocated cost-accounting system can lead to significant over-statement of savings. If used incompetently, (or even in wanton pursuit of ideological goals) it may engender privatization that actually increases public expenditures, yet still permit claims of savings. There is widespread professional agreement that cost comparisons in situations of potential privatization should be made on the basis of immediately avoidable costs<sup>2</sup>. The more remote are the costs from the immediate activity, the more likely that their reduction or elimination will be gradual and convoluted. If there are no avoidable cost-savings in the short run, it is unlikely, though not impossible, that there will ever be any long-term savings. The realities of public-contracting dynamics will probably obviate this.

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<sup>1</sup> Adapted from: "You Don't Always Get What You Pay For" by Eliot D. Sclar – The Century Foundation, Inc. Copyright © 2000, New York. This paper is fashioned by its author, for educational purposes only. He takes full responsibility for its contents and adaptations. However, there are extensive quotations from the text of Dr. Sclar's book, because these largely reflect the author's views, expounded here and elsewhere.

<sup>2</sup> This is fully consistent with economic analysis based on marginal costs and benefits.

- **Fully Address the Reality and Extent of Transaction Costs**

The economics of organization teach that when a service is frequently or regularly used, providing it internally is often more economic. This is because the transaction costs generated by contract administration, including the supervision of outside providers, are often higher than the internal costs of management of directly provided services. This is especially true if the service requires highly specialized equipment and/or especially skilled labor. Once these specific assets are controlled by outside service providers, the public entity loses the ability to bargain effectively for a more efficient price or a more effective service. Furthermore, by yielding control (or ownership) of specialized assets, the public entity is in a disastrous situation for providing alternative essential services, should the contractor fail to meet even minimum obligations. The more uncertain the service environment, the more difficult it is to create a contract with low transaction costs. Where risk is a factor, it is almost impossible for government to avoid paying a risk premium, as a contingency built into the contract, to obtain competent work. It is essential, therefore, that all factors and possibilities be scrutinized when making decisions, based on transaction costs.

- **Recognize that Public Sector Contracting Differs from Private Sector Contracting**

Public contracting is always tightly constrained by accountability rules designed to ensure that public money is spent on its intended purposes. Without tight regulation, money spent in the name of the public is easily diverted into the pockets of public officials, power brokers or contractors, instead of adding value for citizens. Thus, public entities are not free to pursue “deals.” They must always be prepared to justify contracts. Even if this should seem like “red tape” this inflexibility is part of the price to be paid to avoid moral hazards and to give all potential qualified bidders a fair opportunity to win public contracts. Public contracting for services is always a second-best option that is more problematic than in the private sector. These constraints have costs, which should be honestly evaluated.

- **Always Compare Three Choices:**

Too often it is claimed that privatization as a policy choice is a straight comparison between an “imperfect” governmental activity and an “ideal” private market. The reality is that private contracting is often at least as imperfect as existing public service<sup>3</sup>. Thus, privatization is almost never a simple either/or decision. Instead, at the very least, three possibilities should be considered:

- **Service Delivery by the Public Sector as it Now Exists**
- **Service Delivery by the Private Sector as it is Likely to Exist, allowing for Probable Contingencies**
- **Service Delivery by the Public Sector, as it can Feasibly be Improved, Including Appropriate Public-Private Partnership**

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<sup>3</sup> Joseph E. Stiglitz, formerly Vice President and Chief Economist of the World Bank, states “...I argue that the first fundamental theory of welfare economics – asserting the efficiency of competitive economies – is fundamentally flawed. Quite contrary to that theorem, competitive economies are almost never efficient (in a precise sense to be defined below)” [Reference is then made to famous passages from “The Wealth of Nations” by Adam Smith, the oft-claimed foundation for the “fundamentalist economics” of privatization.]

- **Make Meaningful and Early Employee Participation Possible**

If “best practice,” as the preferred alternative, is to add to productivity or to cut costs, employees must be integral to the reorganization process. Although employee empowerment may be achieved in several ways, in an era of the popularity of privatization, it is most likely done through the competitive bid. In the United Kingdom, for example, employees may bid on public service contracts. This is typically done by the use of Direct Service Organizations (DSOs). These are operated under the provisions of the Local Government Planning and Land Act 1980 and the Local Government Act 1988. The financial objective for all DSOs is that they must break-even in each financial year, having first allowed for capital financing charges. In other words, they must cover their overheads, using Activity Based Costing. The accounts of DSOs are prepared in accordance with the accounting profession’s Code of Practice for Compulsory Competition and are subject to a separate audit. The law requires an Annual Report on DSOs to be sent to the Central Government. Copies of this are available to the public. In this way, employees are brought into the managerial decision-making process that genuinely respects their knowledge and experience. By contrast, a “sink-or-swim” approach, used by many entities, in many countries, leaves employees, essentially, on their own to construct bids. It is, ultimately, a sham. It does not build collaboration in the pursuit of efficiency and high quality. It is, at best, a war of attrition, which no one wins. Among the most important of the losers, moreover, are the recipients of uncertain and shabby services, together with the long-suffering taxpayer.

- **Remove Politics from Contracting**

It is important that, to the degree possible, public contract markets are made as efficient as is feasible. A most important step in this regard is the separation of public contracting from politics, as much as possible. One of the worst maladies of modern contracting is the corrosive impact of influence peddling. The potential for gain through shortcuts never abates. Thus, there is a special burden on those who espouse privatization to ensure that they are an equally strong voice in the battle against corruption. A simple first step should be to require that any firms and their principals who engage in public contracting are not free to contribute money to politicians who can influence contract policy or who may be involved in the process of contract approval. Moreover, these same private sector entities should be forbidden to buy gifts or to provide favors to officials who are important to contract decisions<sup>4</sup>. It is, after all, a free choice for private sector entities to engage in public contracting as a means or livelihood. That, indeed, is what the proponents of a free market ardently assert. This free choice also implies a moral – and legal – obligation by contractors to keep the contracting system above board. If contractors feel that reasonable restrictions on influence peddling are violations of their rights to free speech, they are free to get into another line of work and not continue to pollute the public discourse.

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<sup>4</sup> This addresses the issue of contracting. On the broader concern of public integrity, public officials should be forbidden, by law, from accepting any rewards and benefits, other than their lawful salaries and other employee compensation, which are in any way related (or perceived to be related) to their activities as public officials. Violation should be grounds for dismissal and, if appropriate, prosecution or civil suit.

- **Establish Sound Management Controls and Audit Procedures**

As potential models of honesty and integrity, governmental service-delivery entities are especially accountable to the public for stewardship of funds and resources and control over activities and assets. They are also accountable for performance of their activities – with economy, efficiency and effectiveness. To this end, they must always follow the most exacting standards of accounting, coupled with sound management controls. Moreover, all of their activities should be subject to internal and external audit, making available, for the public record, all financial and other information that is relevant to their mission. Unless this is consistently done, on a fully transparent basis, there will be a lack of trust and confidence on the part of the public that “best practices” are being followed, that “best value” is being obtained, and that high standards of integrity and public morality prevail.

- **Recognize that Outcomes Cannot Wholly be Evaluated by Profitability or Other Financial Criteria – but by Incorporating Economic and Social Externalities**

The competition found in the contracting bids for delivery of public services is not like the competition among (or even within) grocery stores. Usually, they are contests to obtain monopolies. Potential suppliers know this. Consequently, there is a very strong motive towards “directly unproductive profit-seeking” or rent seeking, to reap monopoly profits. Unfortunately, the “winner take all” nature of this kind of competition (in addition to being a strong incentive to corruption) is an incentive to cut quality, or to use “loss-leading,” so as to lower the bid price, in an effort to win. Many would argue, therefore, that in these circumstances, there can be no meaningful “head-to-head” competition. This seriously diminishes the most important argument for “privatization.” Thus, if the service is to be what is sometimes known as a “natural monopoly” many assert that the monopoly profits should accrue to public revenues.

Others claim that because natural monopolies are, by definition, operating within a regime of declining average costs, setting prices at marginal costs, to maximize service delivery at minimum prices, should be the normal rule. That, however, is not the most profitable option. Thus, it might require a public subsidy, to compensate for lost profits.

Unfortunately, this is a principal reason why supporters of the privatization of natural monopolies can point to so-called “efficiencies.” For example, new *private* (monopoly or oligopoly) companies, as in the UK, now pay large taxes to government, while under *public* ownership they were subsidized. However, demand for their services is relatively insensitive to price-changes. Thus, even if there were to be *no improvements in operating efficiency*, increased profits could easily have been engendered, merely by charging increased prices for smaller supplies. This diminishes macro-economic and social efficiencies by eliminating marginal consumption, for which users were willing to pay “economic-efficiency” prices (in the socio-economic sense) but not “profit-maximizing” prices (in the business sense).

Unfortunately, such computations are, typically, too arcane for the average public to comprehend, making them vulnerable to slogan, advocacy and advertisement. However, the public does see large increases in executive compensation, as well as in dividends and retained earnings. These, in economic terms, may be mere appropriations of monopoly profits and *need not* depend upon any degree of improved management efficiency. Thus, some degree of this “market failure” derives from information failure, as well as monopoly power<sup>5</sup>.

This is neither as an argument for public subsidy, nor that privatization may not engender efficiencies. It merely seeks to discredit simplistic, incomplete and incorrect presentations of unsubstantiated claims of success. Many public services provide significant social benefits that are not necessarily measured by corporate profits. Good examples are those of solid waste or sewage disposal. To the extent that wastes can be efficiently measured – which they usually cannot be – polluters should (in fairness) pay the market prices for removal of the wastes from their premises<sup>6</sup>. Unfortunately, there are at least three provisos. First, pollution of the public space, through careless or deliberate littering, dumping or incompetent treatment of wastes, imposes costs on a general public that did not create them. Second, although littering and pollution regulation will probably be in force, it is difficult and costly to make this effective. Finally, because the services are usually virtual monopolies, the free-market economic system creates perverse incentives. It motivates contractors to maximize profits by attempting to provide as little of the service as is legally possible and at the lowest level of private (not, necessarily, public) cost and acceptable safety.

It also encourages the seeking of the highest level of profit, even if this is economic rent appropriated from public benefit. Because of this, public services provided under monopoly conditions are typically regulated. Profit-maximizing behavior, however, can sometimes engender the diversion of time, money and effort to avoiding, contesting or evading these regulations, if the net cost<sup>7</sup> of doing so is less than the cost of either compliance, or better service delivery<sup>8</sup>.

<sup>5</sup> The “Economist” magazine (one publication which should surely know better!) has earlier promulgated this incomplete and incorrect argument, thereby (incorrectly) insinuating that net *private* and *public* benefits of utility privatization are necessarily the same. Unfortunately, the fine reputation of the Economist provides more than justifiable credibility for even its more dubious or questionable arguments. This is also true of the fine reputations of many economists (with a small “c”)!

<sup>6</sup> Many water and sewerage authorities impose sewerage charges, as surcharges on water consumption. This is a convenient way of collecting additional funds. However, because sewage cannot be efficiently measured, controlled or restrained, the charge is, in effect, a sales tax on water. Only to the extent that water use is a complete function of sewerage use does the sewer charge serve as a surrogate for economic-efficiency prices. Otherwise, it is a tax, imposed on water for administrative convenience rather than economic-efficiency. Thus, it suffers from the “hit-and-miss” defects of taxation. It shares financial burdens among those who should not necessarily bear them, either at all, or in the proportion that they do. [Technical arguments support the sewage surcharge: a significant cost of sewerage is for pumping water].

<sup>7</sup> The net cost will include any damage to the company’s reputation as a responsible “citizen”.

<sup>8</sup> This is *NOT* a morality argument. It merely is an explanation of how the free-market economy operates!

- **Rely on Analysis, Evidence and Reasoned Argument - Not on Ideological or Political Assertions**

One of the shortcomings of economics is that what is obvious is not necessarily true! Indeed, economists, often with great justification, are often accused of making simple things too complicated for “ordinary people” to understand. Of course, subjects like science and mathematics are also complicated to non-specialists, but these are usually kept within academic or scientific communities. By contrast, economics is a subject that affects the daily lives of everyone, in what they earn, buy, save or invest. Moreover, it is a central theme of governance, taxation and public spending, as well as of the redistribution of wealth and income. Thus, it is a predominant topic of politics. Indeed, in the hands of politicians, who control and manage public services, it can be a source of much exaggeration, misinformation, half-truth and rhetoric. Much of this, unfortunately, is based on contesting economic ideologies.

However, there is probably much more agreement than disagreement among mainstream economists about the effects of policies and actions. Moreover, these central themes tend to move steadily with the times, as more is learned from experience or discarded from the knowledge base. Indeed, disagreements are often not about the *effects* of policies as about the *extent of the effects* of their applications and about perceptions of *equity or fairness*.

What all this means is that on the surface of public discourse, there is great scope for the advocacy of “half-baked<sup>9</sup>” ideas. Beneath the surface, however, there is a great deal of serious, sincere, competent and reliable work that can be, and is being, done by accountants, economists and other financial professionals to craft economic and financial policies that are sound and sensible, irrespective of political bias. Moreover, the majority of these officials are well compensated, highly motivated and talented. They try to do good work and usually succeed. To the extent that they may not, this is partially because the politicians do not trust them. Not infrequently, this is because they do not come up with the answers that the politicians would like! The politicians then, sometimes, attempt to constrain the officials with bureaucratic rules that the officials are often accused of using to engender inefficiencies.

In democracies, it is appropriate that elected *politicians, and NOT officials*, govern and decide. It is, however, a responsibility of politicians ensure that competent officials are employed, to provide them with well-crafted advice and then to implement political decisions “without fear or favor, malice or ill-will.” Each group of the public service has a serious responsibility to the other and to the wider public they both serve. If this is not possible to fulfill and if the purpose of public office or employment is merely to line one’s own pockets, there are plenty of other jobs where there is often more tolerance – and even encouragement – of such talent. That public officials are incompetent there can be no doubt. Far less likely is the fact that they go to work every day intending to do incompetent work. The converse is likely true.

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<sup>9</sup> Sir Alan Walters, a notable and competent economist on the personal staff of UK Prime Minister Margaret Thatcher, was forced to resign as a result of stating that some publicly-promulgated ideas, in Europe, had been “half-baked.” The incident also engendered the resignation of the Minister of Finance.

- **Allow Time for Experiment and Evaluation**

In keeping with the “all-or-nothing” approach to privatization or contracting out of public services, it is often done with far too much haste. This is sometimes because it has been a major political theme at election time. Once elected, the politicians want to show that they are able to “get on with it”<sup>10</sup>. Ironically, as has been demonstrated in many situations, failure – and the resultant political disillusionment – may result not so much from the ideas, which may well be sound, as from their implementation, which is, quite commonly, flawed.

Privatization is often pushed as an ideological proposition with little or no basis in good management principles. Yet, the management of public services should be separated from political arguments about the size of government. These are, properly, two separate issues. The issue of size is separate from that of good management. A simple separation of the two can be mandated by requiring that before a privatization or outsourcing arrangement be entered into, it must pass muster as a cost-effective, comparable-quality alternative to in-house service provision. One piece of state legislation intended to achieve this is a Massachusetts Law (Chapter 296 of the Acts of 1993) Known as the Pacheco-Maynard Act. It requires that all proposed privatization be subject to a cost analysis. The Office of the State Auditor carries out the work.<sup>11</sup> The law has permitted many privatizations to proceed, but it has stopped some others that would have been costly errors. The law forces decision-making officials to move beyond the notion that privatization might work or that they thought it would be a good idea. It requires officials to do some real managerial homework. It also permits employees to submit proposals for work reform. In general, it forces privatization out of the realm of the ideological and into that of the practical.

All of these reviews and analyses take time. Moreover, even if they initially support the concept of privatization, there is no guarantee that it will work as well – or indeed as poorly – as predicted. Consequently, wherever possible, it should be introduced carefully, step-by-step with a watchful eye on interim results and outcomes. Enough leeway should be allowed for the experiment – for that is what it is – to be terminated, reversed or modified. One way of ensuring this is for the public sector entity to maintain some degree of control over situation-specific assets. Unless this is done, a flawed activity may be locked in to a contracting arrangement, largely because the asset control has passed too far into the private contractor’s hands<sup>12</sup>.

<sup>10</sup> Perhaps one of the most dramatic examples of haste was when President Reagan, during his first inaugural address, publicly signed a document putting a freeze on all government hiring. It was, of course, the President’s privilege, indeed his duty, to use the occasion to emphasize immediate attention to one of his major political themes, on which he had been elected. It was subsequently known, however, to have caused a great deal of administrative disruption and personal distress. Whether this is a reasonable price to pay for making an important political point is mainly for the public, or political analysts, to decide.

<sup>11</sup> Notably, for the purposes of cost comparison, the state auditor in Massachusetts requires the use of avoidable cost accounting. Interestingly, although the state auditor handles the work, it is not really auditing work, in the more narrow sense of reporting on financial activity or statements. It is, instead, a form of financial analysis or appraisal, commonly required as a precursor to capital investment projects.

<sup>12</sup> In the UK, a major political contention has been around the extent to which the privatization of public utilities should be implemented in ways that would make them virtually irreversible. Right from the start, the Thatcher Government made considerable efforts to ensure that privatization was, indeed, irreversible.



- **Conclusion**

These guidelines summarize a broad range of initiatives that must be undertaken if genuine public sector reform is the goal: all are feasible but not equally probable, at least in the short term. Politics and economics always constrain the possible. Nonetheless, one should take heart from the experience of the progressive reformers who, at the dawning of the twentieth century, helped to fashion a workable if not perfect public sector. The reformers who carry out the work of building a responsive and responsible public sector in the twenty-first century always need to think just one step beyond conventional wisdom about what is possible and practical.

Managers and reformers should, indeed, be considering the well-known tests of economy, efficiency and effectiveness. Economy deals with procurement of goods and services at the lowest cost for acceptable quality. Efficiency deals with the issue of cost benefit analysis – do the provided services render value for money or, more broadly, provide the greatest benefit for the lowest cost. Finally, effectiveness is the measure by which all else should be judged. Do the intended activities produce the expected and demanded outcomes, in terms of improved quality of life to all those intended to be – or even unintendedly – affected, rather than only to a mean and greedy small group?

# PUBLIC - PRIVATE PARTNERSHIP

Issues Relating to Contracting Out  
of  
Public Services

# **PUBLIC TRANSIT IN DENVER**

**What might be some of the implications of the information and issues in this case for the work that I currently do?**

# Privatization or Contracting Out

- Privatization:
  - An explicit or implicit, politically-motivated, economic or social decision that the supply of particular goods or services *inherently belongs to the private sector* and should not (or need not) be provided by, or at the risk of, publicly-funded entities.
- Contracting Out:
  - A policy or management decision to have *specific public services* - for the time being - provided by contracting with suppliers of economic outputs (e.g. complete public service delivery packages) as contrasted with suppliers of economic inputs (e.g. capital, labor, materials & management).

## Contracting-Out Conditions (1)

- Credible and comprehensive cost accounting systems - public and private.
- Mitigation against private financial savings becoming additional public costs, economic externalities or inequities.
- Contract evaluation that ensures acceptable quality.
- Contract covers all costs of the contractor, including overheads, return on capital and a reasonable profit.

## **Contracting-Out Conditions (2)**

- Service subject to meaningful competition and potential for exit - not actual or near monopoly.
- No potential for crisis conditions, in the event of contractor or supervisory shortcomings.
- Relatively swift, easy and inexpensive recovery in the event of contractor failure.
- Relatively easy administration of contracts, including cost accounting for this.

## Contracting-Out Conditions (3)

- Contractor employment practices that are decent, fair and dignified.
- Inability to conceal or obscure long-term costs, not obvious from accounting or information systems nor from reasonable observation.
- Avoidance of fragmentation in strategic delivery of public services, creating costs exceeding those saved by contracting out.
- Resulting outcomes compatible with prevailing political, economic and social discourse.

# Economic Incentives to the Private Sector Providing Public Services

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Attempting to Provide as Little of the Service as is Legally Possible and at the Lowest Level of Cost and Acceptable Safety or at the Highest Level of Profit.



## CONTRACTING OUT OF PUBLIC SERVICES

### Conditions Likely to Facilitate Economic, Efficient and Effective Implementation

1. Credible and comprehensive accounting systems, which ensure that comparison of alternative in-house costs (including administrative overheads) with contracting-out (including regulatory costs) is meaningful, reliable and useful.
2. Economic overview, mitigating potential for private contractor financial savings to become additional public costs (e.g. welfare payments to compensate for meager employee benefits or economic externalities or inequities resulting from less effective or efficient service standards).
3. Bidding and contract evaluation which ensures that selection based on price is also consistent with acceptable quality.
4. Fees paid by the government to cover all business costs of the contractor, including return on capital and reasonable profit.
5. Service not a natural, actual or near monopoly and therefore subject to meaningful competition and a potential for exit.
6. Service not potentially prone to crisis conditions, in the event of contractor or supervisory shortcomings, causing:
  - a. breakdown of security, safety, law, order and government;
  - b. conspicuous and immediate public dissatisfaction;
  - c. disruption or distortion of public policy goals; and
  - d. potential political threats to declared mandates of key elected officials.
7. Relatively swift, easy and inexpensive recovery in the event of contractor failure to deliver, including withdrawal from contracts and reinstatement of alternative delivery systems.
8. Relatively easy and inexpensive execution, administration and supervision of contracts, including cost accounting for this.
9. Willingness (or requirement) of private contractors to follow employment practices which are decent, fair and dignified.
10. Inability of contractor to conceal or obscure long-term costs, including those of depreciation and maintenance, which may not be obvious from accounting or management information systems nor from reasonable and customary physical observation.
11. Avoidance of fragmentation in the overall strategic delivery and management of public services, creating administrative or economic costs exceeding those saved by contracting out.
12. Resulting overall economic and social outcomes which are compatible with the prevailing political discourse.

FINANCIAL ANALYSIS AND COST RECOVERY

An Urban Transport Case Study

by

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Case Study  
Urban Transport  
Financial Analysis & Cost Recovery

Introduction

Set out below is a simple case study of a municipally-owned transport company. The study is intended to illustrate the basic principles of financial analysis, cost recovery, pricing, affordability and subsidy.

Financial analysis includes an examination of the current financial situation of an enterprise and the preparation of financial forecasts. The preparation of forecasts is based upon currently available information, together with judgment about expected operational performance. This judgment, in turn, makes assumptions as to expected physical activity and a choice of financial policy options, usually with emphasis upon pricing and the financing of capital investments.

The choice of financial policies is directed at satisfying a number of political, economic, social and operational objectives. The validity or otherwise of these objectives will not be further considered in this case, which will concentrate upon financial analysis only. However important these various objectives may be (and they are all very important), a transport enterprise cannot operate effectively or efficiently, on a day-to-day basis, unless there is a continuous flow of funds from operations or from external sources, which will enable the it to make payments, as they fall due, for operational, maintenance and administrative expenses, debt service and capital investment requirements.

This basic "cash-flow" requirement has little, directly, to do with either "profitability" or "economic efficiency." It is concerned only with financial solvency.

The Role of Financial Analysis

Financial analysis can only provide one viewpoint of a transport company's operations. Indeed, a healthy financial situation does not necessarily signal a well-operating organization. For example, a transport enterprise may be making apparently adequate profits and generating substantial flows of funds. Concurrently, it may be giving poor service to too few potential customers, whilst allowing the physical plant and equipment to deteriorate through lack of adequate maintenance.

Accounting Ratios

An important feature of financial analysis is the use of accounting ratios. These are helpful, but they must be used with caution. Rarely will a single ratio provide an adequate basis for analysis. The examination of several ratios together is much more useful. Furthermore, ratio analysis will rarely provide complete answers to questions relating to the adequacy or otherwise of financial

performance. More likely, it will often pose further questions, directing attention as to what matters to focus upon to gain further insights into financial and operational performance.

### The Period of Analysis

Financial forecasting often extends over several years<sup>1</sup>. This case study will examine one or two years only. In order to provide credible financial analysis during such a short time-span, we shall assume that additions to the system can be provided by capital investment in assets which can become operational within one year. In the case of a bus company, this would mean additional buses or other equipment of limited life, such as that used for maintenance. For a rail company, it would mean additional cars and maintenance equipment, rather than extensions to the lines.

This raises an important distinction. Buses and similar vehicles run on roads. These, together with the traffic signals, they share with other traffic, notably automobiles and trucks. Streetcars (tramcars) typically run on rails embedded in the normal road surface. Thus, they partially compete for a right-of-way with other traffic, whilst having exclusive use of the actual track. Also, in common with trolley-buses, they will need electrical conductors. These are usually overhead wires or (sometimes, in the case of streetcars) live rails between the tracks. These conductors will be dedicated to the public transport operation and not shared with other traffic.

### Rights of Way, Roads and Track

Light and heavy rail systems will normally run on exclusively dedicated rights of way, including track, signaling systems stations and depots. If, as is usual, systems are electrified, there will be overhead or third rail conductors. Stations may or may not be multipurpose, sharing space with other forms of transport, such as cars and buses.

There may also be a sharing with commercial interests, as shops and offices. Indeed, urban rail systems may own valuable air rights, over the top of stations (or tracks) which may be leased to commercial interests. These distinctions raise important questions as to the financing and property rights with respect to the various rights of way and energy transmission systems.

Almost inevitably, road systems will be built as part of the public infrastructure, financed from local, state or national taxes. Rail systems, on the other hand, would - in principle - be expected to be financed and owned by the transport enterprises, including the tunnelling for any parts which are underground. This would imply that the systems are to be run as commercial ventures, with no subsidy from taxes.

Between these two extremes, a likely scenario for streetcars and trolley-buses would be for the basic roadway to be part of the public infrastructure, with the additional rails and electrical

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<sup>1</sup> However, after the first year or so, individual numbers become increasingly speculative. Forecasts for subsequent years, therefore, focus mainly upon broad strategic patterns and relationships, rather than individual numbers.

conductors being financed and owned by the transport companies. Again, this would imply that the companies would expect to operate on a commercial basis, with fares recovering the costs.

Actual practice has been very much at variance with these principles. First, complete commercial viability of urban transport systems may not be consistent with the principles of economic efficiency of integrated urban transport systems (indeed, overall urban management systems) as a whole. This raises any number of questions, relating to economic externalities<sup>2</sup>, which may suggest that a system might need to be subsidized, so as to achieve optimal economic benefits, even if this causes financial loss to the transport company itself.

For example, it might be considered appropriate to charge public transport riders lower than market prices for fares, so as to entice some (marginal) commuters out of their cars. The financial costs of this might be offset by economic benefits relating to the externalities, not directly captured from the price-system.

Second, provision, financing and ownership of rights-of-way, roadway, track, electrical conductors and signaling will be highly dependent upon the technical aspects of the transport delivery network. It could be argued, for example, that it is unfair - and economically distorting - for the costs of these to fall directly upon railway companies, when for streetcar, trolley-bus and bus systems they are partly or wholly provided from taxes<sup>3</sup>, as part of public infrastructure.

Third, if a decision is made that an addition is needed to urban transport systems, the choice of technology is not easily determined. For example, tunneling, to provide underground rail, will clearly be very costly and exceedingly disruptive<sup>4</sup>. However, once construction is completed, street traffic will be entirely unimpeded, which will likely be a significant economic benefit.

Fourth, complex questions arise as to the use of tax revenues (including vehicle, sales and income taxes) from transport companies. For example, to what extent do vehicle taxes on buses represent a rent of the right-of-way, analogous to the use of track by rail systems? Alternatively, do these taxes merely represent the normally assessed contributions to general public revenues?

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<sup>2</sup> These may include: pollution; physical and personal hazard; congestion; and, urban sprawl. It also includes issues of social equity and effects on infrastructure.

<sup>3</sup> Although transport companies may pay vehicle, property, corporation and income taxes, these payments will depend upon their status and assessments within the tax laws. There will normally be no direct connection with recovery of infrastructure costs. This may be more readily apparent - though not completely accurate - in the case of gasoline taxes. Also, there can be arguments against the "earmarking" of gasoline taxes specifically for roads.

<sup>4</sup> An example from the London (UK) "Underground Railway" offers an interesting dilemma. To effect major reconstruction, close to Trafalgar Square, in the central business and government district, one station was completely shut down for three years, passengers having to walk to the nearest alternatives. This raises a question of whether, if the station use could be foregone for such a lengthy period (hardly a temporary inconvenience) it is needed at all.

Finally, transport companies must make public declarations to adhere to specific time schedules, whether or not there are always enough passengers to substantially occupy all the available seats. This raises important issues about optimum use of cars and track.

For all of these reasons, as well as related political and other matters, it has been very common for track and road systems for urban transport to have been constructed and installed from huge central, state or local financing contributions. Sometimes there is economic rationality, sometimes not. Often, in any case, only assessments can be made, based on points of view. Not even all economists agree, let alone administrators and politicians!

As already indicated, this paper will not consider the economic and other questions raised here. Instead, to provide a common approach to different kinds of transport technologies, the financial analysis will concentrate on a bus company.

This will have an analogy to streetcars, trolley-bus and rail systems, which can be deemed to pay (wholly or partly) a "rent" for the exclusive use of their track systems. This, to fully cover costs, will need to include: (a) depreciation; (b) return on investment (cost of capital); and, (c) adjustment of (real or nominal) values to allow for inflation and/or real changes in opportunity costs. To the extent that it does not - and this is very common - there will be a tax-borne subsidy.

Because of the issues relating to road and track systems, already discussed, this "rent" element will be omitted from the following analysis. It does not apply, directly, to bus systems.

### THE TRAMBUS TRANSPORT COMPANY

#### Initial Financial Position

Assume the "Tram bus Transport Company" to serve a population of 3,000,000. On January 1, 20\_1, its balance sheet was as follows. It is expressed in millions of US dollars (\$m).

<u>Balance Sheet</u>					
<u>As at January 1, 20_1</u>					
<u>Capitalization</u>			<u>Fixed Assets</u>		
	\$m	\$m		\$m	\$m
Equity	400		Gross Cost	1,250	
Debt	<u>480</u>	880	<u>Less Depreciation.</u>	<u>380</u>	870
<u>Current Liabilities</u>			<u>Current Assets</u>		
Payables	<u>10</u>	10	Inventories	10	
			Receivables	6	
			Cash	<u>4</u>	<u>20</u>
		<u>890</u>			<u>890</u>

"Equity" represents contributions from Trambus Municipality<sup>5</sup> and other public sources, together with accumulated net earnings. The municipality does not expect to receive cash dividends on its investment, so all net earnings are retained by the company.

The "Debt" is a loan from the state government, at an interest rate of 11%. It is repayable, by equal annual installments of principal, over 20 years.

Before the beginning of FY 20\_1, a forecast is made of operations as follows:

	m
Transported passengers	190
Uncollected fares and free rides	<u>10</u>
Transported fare-paying passengers	<u>180</u>
Average fare (per ride)	\$2.8
	\$m
Sales revenues (gross)	504
Allowance for uncollected debts	<u>4</u>
Net Revenues	<u>500</u>

Assume that the forecast Income Statement (Profit and Loss Account) based on these figures, is as follows:

TRAMBUS TRANSPORT COMPANY  
Income Statement for Year Ending  
December 31, 20\_1

		\$m
Revenues from Sales		500
<u>Less</u> Cash Expenses:	\$(m)	
Personnel	100	
Fuel and Lubricants	85	
Maintenance	45	
Other Operating Expenses	25	
Administration & Taxes	<u>40</u>	<u>295</u>
Net Income Before Depreciation		205
<u>Less</u> Depreciation (12% of \$1,250)		<u>150</u>
Net Operating Income		55
<u>Less</u> Interest (11% of \$480)		<u>53</u>
Net Income		<u>2</u>

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<sup>5</sup> Use of the term "Equity" is consistent with the terminology used in the capitalization of corporations. It is used here in response to the likelihood that the company, even though publicly owned and operated, will have a quasi-autonomous legal structure. The contributions will, likely, be government grants.

New acquisition and construction of fixed assets during 20\_1 is initially estimated to be \$250m. On this basis, a Statement of Sources and Applications of Funds can be prepared as follows:

TRAMBUS TRANSPORT COMPANY  
Statement of Sources and Applications of Funds  
For Period Ending December 31, 19 5

		\$m
Net Operating Income		55
<u>Add Depreciation</u>		<u>150</u>
Total Internal Sources of Funds		205
<u>Less Debt Service</u>	\$m	
Amortization	24	
Interest	<u>53</u>	<u>77</u>
<u>Net Internal Funds</u>		128
(Available to Finance Investment)		
New Acquisition and Construction		<u>250</u>
Funds Required from External Sources		<u>122</u>

The proposed capital investment cannot be carried out without an additional \$122m, at present assumed to be from an external source, as yet undefined. Until this is decided, a projected closing balance sheet cannot be prepared. Capital investment and its financing represent important financial policy decisions, which should be based on further analysis of the numbers and also on a review of underlying operating and capital investment policies.

Financial Ratios

As a prelude to this analysis and judgment, it is possible to examine a number of financial ratios, based on currently available information, obtainable from the statements already prepared.

1. Balance Sheet Ratios

(a)     Working Capital = Current Assets - Current Liabilities  
                               = \$m20 - \$m10  
                               = \$m10

This represents the excess of current assets over current liabilities and is based on an assumption that the current assets could be fairly quickly (i.e., during one year) turned into cash. If this cash were then used to pay off current liabilities (debts due within one year)<sup>6</sup>, the company

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<sup>6</sup> In some accounting systems, debt amortization due within one year is included as a part of current liabilities. This practice has not been followed here. If it were, current liabilities would increase by \$24m. Working capital would then be negative.



would have \$10m in cash remaining. This is only a definition, for purposes of comparison. The probability of such action being actually taken by the company (as a going concern) is exceedingly remote.

$$(b) \text{ Current Ratio} = \text{Current Assets} : \text{Current Liabilities} \\ = 20:10 = 2:1$$

This ratio shows the relative relationship between current assets and current liabilities, which is probably more meaningful than the absolute figure shown above. A ratio of 2:1 (as shown here) is often considered "satisfactory"<sup>7</sup>. However, as stated earlier, such ratios should be used with caution. For example, assume that half the creditors had pressed hard for settlement of their debts. To pay off \$5m of debts with only \$4m in cash might mean incurring a short-term bank loan of \$1m. The working capital position might then appear as:

Current Assets:		
Inventories	10	
Receivables	<u>6</u>	16
Current Liabilities:		
Payables	5	
Bank loan	<u>1</u>	<u>6</u>
Working Capital		<u>10</u>

The working capital (\$10m) is the same as before but the current ratio is now:

$$\begin{aligned} &\text{Current Assets} : \text{Current Liabilities} \\ &= 16 : 6 \\ &= 2.67 : 1 \end{aligned}$$

The transport company has run out of cash and incurred a bank loan. Although it has paid off some of its creditors, it is almost certainly in a tighter working capital situation than before. Yet the current ratio has "improved" dramatically, from 2:1 to 2.67:1.

$$\begin{aligned} (c) \quad \text{Quick Assets Ratio} &= \text{Quick Assets (Current Assets less \\ \text{(Acid Test Ratio)} &\quad \text{Inventories): Current Liabilities} \\ &= (20 - 10):10 = 1:1 \end{aligned}$$

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<sup>7</sup> If the "debt amortization due within one year" (\$24m) were included as a current liability, the ratio would fall to 0.6:1.

This ratio recognizes the fact that inventories are much more difficult (and slow) to turn into cash than should be receivables. If there is good control over debt collection (see below), there will be a constant settlement of outstanding debts by cash. However, other credit will probably be granted, although transport services cannot be sold on credit, except in small quantities.

Inventories, in a transport company, are not a part of the retail cycle at all. They are held as materials available for system repair and sometimes for extension or improvement. Thus, they could be turned into cash mainly by allowing them to be used up in the course of repair and maintenance and not replacing them<sup>8</sup>. The only alternative would be to sell them off, as used items, surplus to requirements, probably at a loss.

$$\begin{aligned} \text{(d) Debt: Equity Ratio} &= \text{Long Term Debt: Equity} \\ &= 480:400 \\ &= 55:45 \text{ (or 1.22)} \end{aligned}$$

This ratio shows that the transport company has been provided with its long-term financing by about 55% debt and 45% equity. Debt financing is about one-and-one-fifth times equity financing (1.22). Equity financing provides a margin of safety, both with regard to capitalization and to earnings.

Many public bodies finance their capital investment entirely by debt, including bond issues and government loans. This often has considerable merit. However, consider what would happen if this were the case for the Trambus Transport Company. If all of the capitalization were from debt (\$880m) annual interest would be \$97m and the annual repayment would be \$44m. The relevant portions of the income and funds flow statements would then appear as follows:

TRAMBUS TRANSPORT COMPANY  
Income Statement (Part)  
For Period Ending December 31, 20\_\_1

	\$(m)
Net Operating Income	55
<u>Less Interest (11% of \$880)</u>	<u>97</u>
Net Income	<u>- 42</u>

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<sup>8</sup> In commercial and industrial management, increasing attention is given to the fact that inventories are costly to store and to administer. This is leading to greater cooperation with suppliers, to deliver materials based on the "just in time" principle. However, it is easier to plan for materials requirements for regular production or service delivery, such as vehicle fuel, lubricants and maintenance spares, than for emergency repairs.

Statement of Sources & Application of Funds (Part)  
For Period Ending December 31, 20 1

		\$(m)
Net Operating Income		55
<u>Add Depreciation</u>		<u>150</u>
Total Internal Sources of Funds		205
<u>Less Debt Service:</u>	\$(m)	
Amortization	44	
Interest	<u>97</u>	<u>141</u>
Net Internal Funds		<u>64</u>

In this case, with exactly the same pattern of operations and with the same revenues from transport sales, the transport company would incur a loss (equal to over twenty times its earlier profit)<sup>9</sup>. It would still be able to service its debt, albeit with a lower margin of safety. This would be, to some extent, because the average life of the debt (20 years) is considerably in excess of the average life of the fixed assets. A depreciation rate of 12% implies that fixed assets are being written off over an average life of just over eight years.

For a transport company, a significant proportion of these fixed assets will be passenger vehicles - usually buses. Thus, in order for the company to continue its operations at a consistent level, even with no inflation, it will be necessary, on average, to spend the cash retained from depreciation charges on new equipment. Replacing this equipment at current costs, as well as expansion of operations, will require further outflows of cash, in excess of the depreciation provisions.

As a result of all this, the prediction of debt service coverage creates a false sense of security<sup>10</sup>. Although the debt service is being covered, debt will still be outstanding by the time the related fixed assets are no longer in operation. At that time, control over operations could very easily be more dictated by the requirements of lenders rather than those of the owners, the municipality, representing the public interest. Furthermore, it might make future debt more difficult to raise.

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<sup>9</sup> In this respect, the accounting principles used in most "capitalistic" systems are decidedly unhelpful and misleading. This is because they are based on legal contracts and property rights. Thus, interest - the cost of debt - is contractual and is properly considered as an expense. By contrast, the cost of equity - shown in the books as dividends and retained earnings - is recognizable only out of profits and not as an expense to be allowed for in computing them. The risk that there may be no profits is borne by the holders of the equity interest, the stockholders. Although legally correct, it is inconsistent with an economic perspective.

<sup>10</sup> This is a situation which is typically endemic in public sector finance. Budgets are balanced on paper: concurrently, assets and service to the public are steadily deteriorating.

In the case of the Trambus Transport Company, the lender is the state government, not likely to be so hostile to the public purpose. Indeed, it is not uncommon for public transport companies which are subsidized to be financed by loans channelled through the constituent governments, secured against their tax capacities. However, if the company was to consider the issue of (revenue) bonds, the potential bond-holders would view the situation as more precarious. This would be even more the case if the company was to be considered for privatization.

Thus, the use of equity allows for greater flexibility. It might be that in certain years it would be reasonable to allow for earnings levels which are lower than optimal. This could occur, for example, after a rapid expansion of service delivery capacity, before all new potential services were able to be sold. The equity also provides for a degree of flexibility in raising prices in stages to overcome political objections and to mitigate against customer resistance.

Unfortunately, the use of too much equity (often in the form of grant financing by governments) in the capitalization can lead to sub-optimal prices. A lower proportion of debt in the capitalization leads to lower debt service. Thus, a company (especially a publicly-owned one) with a low debt:equity ratio can survive with a lower price level than one which has more debt in its capitalization. This is because there are often no cash dividends payable by the company to its parent governments.

One way of minimizing this difference is by the use of a rate of return as a measure of performance. This is considered below. For public transport utilities, a reasonable proportion of debt in the capital structure might well range from 50% to 80%.

$$\begin{aligned} \text{(e) Debt Collection Ratio} &= \frac{\text{Outstanding Receivables}}{\text{Sales Revenue}} \\ &= 6:500 = 1.2\% \end{aligned}$$

Another way of stating this ratio is to express the percentage as an average number of days during which bills remain uncollected. Thus, 1.2% of 365 days = 4.4 days, indicating that, on average, bills take about 4.4 days to collect.

For a transport company, however, this ratio is relatively meaningless, because almost all of its revenue will be collected in cash, at the farebox or by conductors. Billing would be confined to special contracts for (say) passes for schoolchildren or other public sector activity. It might also include purchases, on credit, of "multiple journey" passes by companies for their employees.

To calculate a more relevant billing ratio, it would be more appropriate to separate out the amounts collectible during the year only from the credit customers. Assume this to be (say) 10% of total revenue, equal to \$50m. This would give a collection ratio as follows:

$$\text{Outstanding Receivables: Credit Sales Revenue} = 6 : 50 = 12\%$$

The average collection period would be 44 days, calculated as 12% of 365. If the company billed its credit customers monthly, this would not be an unreasonable period, allowing for about 2 weeks to prepare and dispatch bills and about 1 month of credit.

## 2. Income Statement Ratios

$$\begin{aligned} \text{(a) Rate of Return} &= \text{Net Operating Income: Assets in} \\ &\quad \text{Operation} \\ &= \text{Net Operating Income: Fixed Assets} \\ &\quad \text{plus Working Capital} \\ &= 55: (870 + 10) \\ &= 55/880 \\ &= 6.25\% \end{aligned}$$

Earlier, reference was made to the problem of different levels of potential earnings for different capitalization structures. This can be neutralized by the use of a rate of return as a performance measure. Here, the principle used is to identify the operating income before any allowance is made for the costs of capital. This would be in the form of interest (the cost of borrowing) or net income (the reward for equity investment). This is then expressed as a percentage of the value of assets invested in the system.

If working capital is included, asset values would be equal to the value of the capitalization. Often, public utility companies express their rates of return on fixed assets only, because in year-to-year comparisons, these values are less susceptible to temporary fluctuations than are those of the working capital components.

If the rate of return for the Trambus Transport Company were calculated only on fixed asset values, it would be  $55/870 = 6.32\%$ . With a rate of return of slightly over 6%, the Trambus Transport Company would clearly not be able to support a cost of capital of 11% on its capitalization, which would be the necessary return if the company were entirely financed by debt. This situation is supported by the evidence in the revised income statement and funds flow statement. With full debt finance, these would show net losses. Furthermore, if assets continually going out of service are to be replaced from depreciation retentions, there would also be cash deficiencies.

$$\begin{aligned} \text{(b) Operating Ratio} &= \text{Operating Costs: Sales} \\ &= 445/500 = 89\% \end{aligned}$$

This is another ratio which is neutral to the capitalization situation. It shows what proportion of the sales revenue is used to cover operating costs (including depreciation), leaving the remainder (in this case 11%) to cover the costs of capital (interest and profit).

The operating ratio is not however, indifferent to the capital-intensive nature of the operating technology. For example, assume that buses of the Trambus Transport company could be replaced by trolley-buses<sup>11</sup>. Suppose a claim is made that this will save on fuel costs and also create less pollution from the burning of diesel or gasoline. Assume a fuel saving of \$70m. This is offset by the installation of \$400m of overhead electric power conductors, together with ancillary equipment, financed by 11% debt and depreciated over 20 years.

The comparative income statements would be as follows:

<u>Trambus Transport Company</u> <u>Income Statement for Year Ending</u> <u>December 31, 19 5</u>		
	Buses	Trolley Buses
	-----	-----
	\$m	\$m
Revenues from Sales	500	<u>500</u>
<u>Less</u> Cash Expenses:		
Other than Fuel & Lubricants	210	210
Fuel & Lubricants	<u>85</u>	<u>15</u>
	<u>295</u>	<u>225</u>
Net Income Before Depreciation	205	275
<u>Less</u> Depreciation (12% of 1,250)	<u>150</u>	(+5% of 400) <u>170</u>
Net Operating Income	55	105
<u>Less</u> Interest (11% of 480)	<u>53</u>	(+11% of 400) <u>97</u>
Net Income	<u>2</u>	<u>8</u>
Operating Ratio	(445/500) 89%	(395/500) 79%

The contrast between the different operating ratios has less to do with the operating efficiency than with choice of technology. Because of standard accounting practices, the interest portion of the "rent" of the system is excluded from the calculation - to be covered by the remaining percentage. The interest portion is further distorted by the use of "interest free" equity in the capital structure. This, however, will be indifferent to the technology. As already shown, it is left out of the operating ratio calculation, anyhow.

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<sup>11</sup> To focus upon the fuel technology, assume that motor-buses and trolley-buses (for equivalent passenger loads) cost the same.

An important conclusion (more correctly, a non-conclusion) is that although the trolley-bus option shows a lower operating ratio, this is no indication that they should be preferred to motor-buses. The ratios are affected by operating characteristics and NOT by overall economic efficiency.

Subject to these distortions, experience tends to suggest that a reasonable level for an operating ratio is a maximum of about 60%. Thus, the Trambus Transport Company shows a ratio which, in normal circumstances, could be considered as "too high." This is a further indication that the company would be in serious financial difficulty without its equity (governmental grant) support.

$$\begin{aligned} \text{(c) Net Profit Ratio} &= \text{Net Income} : \text{Sales} \\ &= 2/500 = 0.4\% \end{aligned}$$

This ratio indicates what proportion of the sales revenue remains, after all expenses have been covered. It is the proportion of the sales revenue which can be claimed by the owners.

In this case, the Trambus Municipality has no wish to withdraw the net income as a return on its equity. Instead, it would remain in the transport company as a very small addition to its equity, a tiny strengthening of the portion of capitalization controlled by the municipality (as opposed to lenders) and only very slightly increasing its flexibility over financial policy decisions.

However, for all practical purposes, it represents a break-even position. This is an important distinction for public utility services, because political leaders (and their opponents) are prone to claim this to be a "right" result<sup>12</sup>. Even though based on accounting distinctions which can be seriously misleading - and do not represent full cost recovery such positions are espoused as fulfilling a concern that the utility "cover its costs but does not make a profit out of the public."

Whatever the credibility of the finance or economics, this is an attractive political position if a bus service is largely used by the poor and disadvantaged. It is, therefore, an important and highly visible number, especially when subsidies are considered.

### 3. Funds Flow Ratios

$$\begin{aligned} \text{(a) Debt Service coverage} &= \text{Internal Sources of Funds} : \text{Debt Service} \\ &= 205 : 77 = 2.66 \text{ times} \end{aligned}$$

This ratio indicates that the Trambus Transport Company (with its present capitalization and debt repayment structure) can cover its debt service from internal funds with a reasonably substantial margin of safety. Analysts often look for a coverage in excess of 1.5 times before it is considered satisfactory. A coverage of less than 1 means that debt service cannot be covered.

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<sup>12</sup> More broadly, the net income (profit) is the number most commonly referred to, in the public discourse on commerce and industry, as "the bottom line."

The ratio would have been less satisfactory if the Trambus Transport Company had been wholly debt-financed. Then, the debt service coverage would have been  $205:141 = (\text{approx}) 1.45$  times, which is consistent with lower funds surplus revealed in the revised funds flow statement.

(b) Contribution to Capital Expenditure

$$\begin{aligned} &= \text{Internal Sources of Funds less Debt Service: New Capital Investment.} \\ &= 128:250 \quad = 51.2\% \end{aligned}$$

This ratio shows that, after meeting its debt service, the Trambus Transport Company will be able to contribute just over 50% towards the cost of proposed new capital investment during the year. This means that slightly less than half of the cost must come from external sources, by additional debt or equity. However, the ratio is highly sensitive to the capitalization structure, because of the influence of debt service.

Because of the support of its equity, the Trambus Transport Company would cover its debt service and make a respectable percentage contribution to capital investment, even though its earnings performance, judged by the rate of return, would be relatively modest.

When used for a single year, this ratio can often be somewhat unstable. Consider, for example, that \$100m of the proposed capital investment represented (say) 10% of the costs of a capital investment project expected to begin late in 19<sub>5</sub> and to be completed in 19<sub>6</sub>. The capital expenditure in 19<sub>6</sub> would then be \$900m. Application of the 19<sub>5</sub> figure for internal funds to a capital expenditure of this magnitude would give a contribution to capital expenditure of  $128:1,050^{13} = 12.2\%$ .

Mitigation of this instability is sometimes possible by averaging the capital investment over 2 or 3 years, often the immediate past year, the current year and the next year. In this case, if the two years (current year and next year) were averaged, the contribution would be  $128:1,300 = 19.7\%$

Whether this is "reasonable" or not, it is impossible to judge, unless one is aware of how much the immediate capital expenditure program varies from the long-term trend. For example, investments might be in larger, indivisible schemes (such as maintenance depots and garages - for rail, even track, signals and stations) constructed over several years, followed by perhaps relatively minor activity, such as the acquisition of additional or replacement vehicles.

Interim Conclusion

Because of the fairly large proportion of (public sector) "equity" in its capital structure, together with the significant mis-matching of the loan repayment period with the fixed asset life-cycle, the Trambus Transport Company at present operates in a barely financially viable manner.

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<sup>13</sup> The \$900m for the construction project, plus \$150m for normal replacements.



In a purely accounting sense, it breaks even - but financial performance is not spectacular. It expects: to earn a net income; to cover its debt service; to contribute about 50% towards new capital investment; to collect and pay its debts promptly; to have adequate working capital; and, to be recovering its costs as defined by standard accounting rules.

Yet, although it earns a modest 6% or so on its assets, this falls considerably short of the cost of borrowing. This is an indication of a lack of flexibility in its capital structure. It also suggests that the customers are not paying the full economic<sup>14</sup> costs of the transport - though other evidence would be necessary to determine this. Its present financial situation is vulnerable to negative changes in its operating environment or to financial or administrative constraints. This will now be considered further.

### Fixed Asset Revaluation

The fixed assets of the Trambus Transport Company are shown in its books at their original costs, less the accumulated charge for depreciation. This is consistent with the most commonly-applied accounting principles. These principles assert that annual depreciation charges represent the regular recovery for the costs invested in the system, which must be covered from annual revenues.

During the last two decades or so, accountants and economists have focussed increasing attention<sup>15</sup> upon the effect of inflation on the values of non-monetary assets - such as buildings, civil works, plant and equipment. In particular it is asserted that, with the passage of time, fixed asset values shown in the books (at cost) bear an increasingly lower relationship to the current cost of replacing them. Thus, the stated values become increasingly meaningless. Funds generated by depreciation provisions are therefore no longer adequate to replace the existing assets at their current (inflated) prices.

The problems of accounting for inflation have been under discussion by the accountancy professions, worldwide, for a considerable time and yet remain largely unresolved. The difficulty of dealing with fixed asset values is only one of many matters to be dealt with under a comprehensive solution. This should not, however, deter managements of companies from attempts to assess the impact of inflation upon their current and future operations. The Trambus Transport Company is no exception.

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<sup>14</sup> The determination of economic costs, such as by the use (or modification) of marginal (average incremental) unit cost pricing is beyond the scope of this document. These concepts are, however, very important.

<sup>15</sup> Professional interest seems to wax and wane in parallel with prevailing inflation rates. It increased notably during earlier periods of "double-digit inflation," because taxes were being paid on higher nominal profits than there would be with lower inflation.

Assume, therefore, that for management purposes, the Trambus Transport Company has made an assessment of the current value of its fixed assets. The method for doing this will not be considered here. However, it could be done by using the services of engineers and/or valuers or by the application of statistical techniques. Whatever method is used will produce only approximate values, considered by many to be unsuitable to include in books of account.

Assume that a revaluation of the fixed assets of the Trambus Transport Company shows that current values are 30% in excess of those shown in the books. The results might be as follows:

Gross Current Value	\$1,625
<u>Less Accumulated Depreciation</u>	<u>\$ 495</u>
Net Current Value	\$1,130

An immediate consequence of such a revaluation would be to lower the rate of return as a measure of performance, as follows:

Rate of Return on (revalued) Fixed Assets:

$$\begin{aligned}
 &= \text{Net Operating Income/Fixed Assets} \\
 &= 55/1,130 \\
 &= 4.9\% \text{ (interim figure)}
 \end{aligned}$$

However, if the gross fixed asset values are increased by 30% (from \$ 1,250m to \$1,625m), it would be appropriate to increase the annual depreciation charge by the same percentage, from \$150m to \$195m. This would reduce the net operating income from \$55m to \$[55m - (195m - 150m)] = \$10m, so the rate of return would be:

$$\$10/1,130\text{m} = 0.9\%$$

Thus, the rate of return becomes negligible, less than 1%. Also, if these principles were applied to the income statement, the transport company would make a net loss of \$43m<sup>16</sup> instead of its earlier net income of \$2m. Thus, by this one simple, but important, adjustment, there would be a net loss equal to more than twenty times the previous net income. Fortunately, because depreciation is not a cash expense, the funds flow would not be affected. Debt service could, therefore, still be met, even though the income statement would show that interest charges could no longer be covered by the net operating income.

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<sup>16</sup> By coincidence, this loss would be approximately the same as that arising if all capitalization were financed by debt. There is, however, no direct connection.

The revised statements would show:

<u>Income Statement</u>	
	\$ (m)
Net Income Before Depreciation	205
<u>Less Depreciation</u>	<u>195</u>
Net Operating Income	10
<u>Less Interest</u>	<u>53</u>
Net Income (loss)	<u>-43</u>

<u>Funds Flow Statement</u>	
Net Operating Income	10
<u>Add Depreciation</u>	<u>195</u>
Total Internal Sources of Funds	205

(remainder of Funds Flow Statement unchanged)

In this situation, part of the funds generated by the depreciation charge will be used to pay interest. It is not the purpose of the depreciation charge, however, to provide funds for interest payments. As already indicated, these are primarily to be used for the replacement of the relevant fixed assets.

Unfortunately, the operational priorities are at odds with the legal and contractual priorities. It is necessary for the company to first honor its debt service obligations, before purchasing replacement buses. Thus, effectively, the depreciation provision will be diverted towards interest payments, notwithstanding the finer points of accounting. Then, the buses will either be replaced partially out of borrowing or else they will be allowed to deteriorate beyond their operational optimum, through lack of adequate funding.

The problem of how to revalue the fixed assets creates uncertainty in the calculation of a rate-of-return. If calculated on a consistent basis from year to year, the rate-of-return can be a very useful performance indicator. However, when a rate-of-return is used as a performance requirement (such as in a covenant imposed by a lender or a regulatory body) it becomes very vulnerable to the way in which the fixed asset revaluations are calculated. Given the relatively wide margins of potential error, the less scrupulous (or more careless) managers may well be tempted to (say) undervalue the fixed assets, to demonstrate a better performance than is really justified<sup>17</sup>. Alternately, accounting rules may prohibit or limit fixed asset revaluation, again resulting in an unjustified overstatement of performance.

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<sup>17</sup> This is an extension of what is known as "Goodhart's Principle." Named after Professor Charles Goodhart, of the London School of Economics and adviser to the Bank of England, it claims that any statistical measure will cease to be reliable whenever it becomes a target for policy purposes.

The difficulties of fixed asset valuation, outside of the USA, have often led to formal covenants (including those for World Bank projects) which emphasize "cash generation" instead of "operational performance." Unfortunately, while "cash generation" measures are exceedingly accurate in addressing the specific concerns upon which they are focussed, they are usually very feeble indicators of overall performance. For example, they do not focus attention on such unacceptable practices as (effectively) paying interest out of depreciation provisions, arising because of inadequate earnings.

### System Growth

The revalued fixed asset figure may be sometimes used as a rough starting point to measure the need for fixed asset growth.

Assume, for example, that the volume of passengers for the Trambus Transport Company is expected to increase by 5% per annum. If the existing (peak) capacity is fully utilized, it might be reasonable to assume that its plant and equipment would need to increase at the roughly the same rate.

The following rough scenario is, therefore, postulated:

Growth of Sales	= (say) 5% per annum
Fixed Asset Base (Gross - revalued) <sup>18</sup>	= \$1,625m

Capital Investment Requirements:

	\$m
(a) Replacement (12% of \$1,625m)	= 195
(b) Expansion (5% of \$1,130m)	= <u>55</u>
	<u>250</u>

Revised Fixed Asset Values (at end of 195)

	\$m
Current Value (net)	= 1,130
<u>Less</u> Depreciation	= <u>195</u>
	= 935
<u>Add</u> New Assets	= <u>250</u>
Closing Value (net)	= <u>1,185</u>

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<sup>18</sup> Arguably, the use of the gross value would be appropriate here, representing the original total (in current values) of past capital investment expenditures. For this figure to be most useful, care would be needed to ensure that the values of fixed assets taken out of service, together with their accumulated depreciation provisions, were deducted from this total.

With the same funds flow, the contribution to investment would still be:

$$128:250 = 51.2\%$$

In this case, for simplicity, it has been assumed that the capital investment requirements of the Trambus Transport Company would be met in small installments. As already indicated, transport service investments do not always happen like this, making the percentage "Contribution to Capital Expenditure" a somewhat less than totally reliable measurement.

However, because of the "free equity" in the capitalization and the fact that long-term debt is being repaid over a much longer period than asset life, the company is able to contribute over half the cost of its immediate capital investment requirements.

One ratio which has been used, more experimentally, to overcome this difficulty, is an "Internal Cash Ratio." In the case of the Trambus Transport Company, it would be calculated as:

$$\begin{aligned}\text{Internal Cash Ratio} &= \text{Internal Sources of Funds/ Fixed Assets} \\ &= 128/1625 \\ &= 7.88\%\end{aligned}$$

Its relationship to a "Contribution to Capital Expenditure" ratio can be demonstrated as follows:

Growth plus replacement expressed as a percentage of fixed asset values:

$$\begin{aligned}&= 250/1625 \\ &= 15.4\%\end{aligned}$$

Average contribution to capital investment = (say) 51%.

Thus, the internal cash ratio equals the average expected rate of addition to fixed assets to be financed from internal funds:

$$\begin{aligned}&= (15.4\% \times 51.2\%) \\ &= 7.88\%\end{aligned}$$

## Revision Of Financial Analysis

Assume now that the Trambus Transport Company does decide upon capital investment during 19\_5 amounting to \$250m. Further assume that the Municipality (its legal owner and sole stockholder) makes the following stipulations:

- (a) not more than \$50m can be raised (or will be available) from external sources;
- (b) that the Municipality will not (or cannot) make further equity contributions to capital investment, so that the external funds must be borrowed; and
- (c) the transport company should increase its prices to ensure a rate of return of 6% on its fixed assets expressed in current values.

Funds requirements will be calculated as follows:

		\$m
Capital Investment Requirements		250
<u>Less</u> External funding		<u>50</u>
Internal funds required	\$m	200
<u>Add</u> Cash Operating Expenses	295	
Debt Service	<u>77</u>	<u>372</u>
Net Revenues Required		572
<u>Add</u> Provision for uncollectibles		<u>6</u>
Gross Revenues Required		<u>578</u>

Earnings requirements will be calculated as follows:

Cash Operating Expenses	295
Depreciation (12% of \$1,625m)	<u>195</u>
Operating Expenses	490
Rate of Return (6% of \$1,130m)	<u>68</u>
Net Revenues Required	558
<u>Add</u> Provision for uncollectibles	<u>6</u>
Gross Revenues Required	<u>564</u>

The transport company would then submit to the Municipality its calculation showing that, to achieve the required cash-flow, prices will need to be raised (for the same sales level - see below), on average, by about 15%, calculated as follows:

$$\frac{\text{Increase in Gross Revenues}}{\text{Old Gross Revenue}} = \frac{\$578\text{m} - 504\text{m}}{504\text{m}} = 14.7\%$$

It is apparent, from a comparison of the funds forecast with the income forecast, that the funds-generation requirements could not be greatly lowered without creating an earnings shortfall.

In the real world, if the proposed increase were to be announced at this stage, there might well be a public outcry!

The Municipality might then well ask for an economic analysis of the effect of a fare increase on ridership, as well as on public affordability. The two concerns are interlinked. First, riders who may no longer be able to afford to ride the public transport system will be driven to take less convenient transport, sometimes even including walking or cycling. Others, more affluent, may choose to shift their mode of transport to the motor-car. Both reactions have the potential to cause public (external) economic costs, as well as social inequities.

In some countries, indeed even in some towns of the USA, public bus service monopolies are resented or discouraged. Thus, such alternatives as mini-buses or "jitneys" come into operation. In Manila, Philippines, for example, there are hundreds of such vehicles, privately owned, causing significant congestion, pollution and physical hazard, though clearly delivering a needed public service. In Miami, Florida, private jitneys are also used.

Thus, the questions of whether to: use public or private services; allow open competition or regulate; and, recover full costs or subsidize, are highly complex and emotive issues. These will undoubtedly be affected by the prices charged for transport services by the major public or private providers.

Economic inefficiencies may arise because some people quit their jobs. They may also arrive at work late or tired from walking or cycling. The additional time taken to walk or cycle may require cancellation of work at a second job. However, if there is high unemployment, the jobs not done - or poorly performed - may readily be filled by others who live closer to the workplace or who are prepared to endure the inconveniences.

This may mitigate against the inefficiencies, perhaps leaving the economy largely unaffected, except for distributional changes, relating to who has work and who does not.

The addition of more cars - as well as pedestrians, bicycles and (in some poorer countries) bicycle or motorized rickshaws - to already overcrowded roads may add to pollution and congestion, as well as to physical and personal hazard<sup>19</sup>. There may be other, longer term, effects<sup>20</sup>.

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<sup>19</sup> It is thought, for example, that bicycle rickshaw drivers are frequent sufferers of diseases of the chest and lungs.

<sup>20</sup> In numerous cities of the former Soviet Union and Eastern Europe, for example, many people have neither private cars nor much money to pay for public transport. Until greater economic and social equilibrium is restored, highly subsidized buses, trolley-buses and trams continue to ply the streets, heavily laden with passengers throughout the day. However, without these services, albeit perhaps uneconomic and inefficient by normal standards, the life of these cities might completely shut down, especially for those (including those on fixed incomes) who have fallen behind, economically, in recent reforms.

These external costs may be partially offset by benefits accruing to (say) those who provide fuel and servicing for cars. In some (developing country) situations, jobs may be generated for (say) providers (and maintainers) of more primitive (and cheaper) forms of transport, such as bicycle rickshaws. In addition to these economic effects, those affected will likely vent their concerns through political means, by public protests or the lobbying of legislative representatives. Not infrequently, sound economic arguments will be drowned out by less than rational claims regarding the various costs and benefits. These concerns, nonetheless, will need to be addressed, with some form of politically acceptable compromise emerging.

Suppose the analysis, however carried out, arrives at the following conclusions:

<u>Fare Increase</u>	<u>% Loss of Ridership</u> <sup>21</sup>
5%	3%
10%	7%
15%	10%

This analysis, let us say, is accompanied by a variety of economic, social and political issues. The nature of these will significantly affect the deliberations of policy-makers. However, they need not further concern this financial exercise. Suppose, after all the iterations of information and discussion, it is decided that a 15% fare increase is unacceptable. A 10% fare increase is approved, with the municipal government prepared to provide an operational subsidy to cover the lost revenues, including those from reduced ridership.

The price requirements could then be calculated as follows:

	m.
Transported passengers	190
Uncollected fares and free rides	<u>10</u>
Transported fare-paying passengers	180
<u>Add</u> New passengers resulting from growth (5%)	<u>9</u>
Sub-total	189
<u>Less</u> Passengers lost by fare increase (7%)	<u>13</u>
Net passenger ridership	<u>176</u>
Average fare [\$2.8 + 10% (rounded)]	\$3.10

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<sup>21</sup> This may be merely an initial loss of ridership. Experience sometimes shows that after the original shift, some passengers may "drift" back to their earlier ridership patterns, after realizing that the alternatives are not as satisfactory as expected.



Sales revenues (gross)	\$546
Allowance for uncollected debts	\$ <u>6</u>
Net Revenues	<u>\$540</u>

### Debt Service

Before examining the revised financial analysis, one further point should be made, with reference to funds flows. Repayment of debt is at present assumed to be by equal installments of principal. For a debt of \$1000, repayable over 20 years, this gives the following:

<u>Repayment Number</u>	<u>Details</u>	<u>Amount</u>
1	Repayment (1000/20)	50
	Interest (11% of 100)	<u>110</u>
	Total	<u>160</u>
20	Repayment (1000/20)	50
	Interest (11% of 50)	<u>6</u>
	Total	<u>56</u>

There is, therefore, a difference of 2.9 times between the first payment (\$160) and the last payment (\$56). The outward funds flows under this arrangement are heavily skewed towards the early periods. These funds flows can be equalized by using the annuity system of debt repayment. In the case of the Trambus Transport Company, loan tables - or calculators/computers - can be used to determine that an equal payment of \$125,576 will redeem a loan of \$1m over 20 years at 11% per annum. Thus, the first year of debt service under this system, on \$480m would be \$60m instead of \$77m. However, the system of repayment used is normally the decision of the lender, not the borrower. It is assumed that the arrangement is not used in this case<sup>22</sup>.

### Revised Financial Forecasts

Having taken its decisions regarding pricing and capital investment financing, the Trambus Transport Company can now prepare revised financial forecasts, for 20\_1 and 20\_2. It will be assumed that for 19\_5, the small net decrease in passengers will not cause changes in operating costs, assumed as relatively fixed in the short run. Capital expenditure will be assumed at \$250m, with depreciation at 12% of gross fixed assets at the beginning of the year. A new loan of \$50m will be assumed to be raised, in each of the two years. Inventories will increase by \$2m in 19-6. However, receivables and payables will be unchanged.

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<sup>22</sup> This will create additional cash-flow pressure on the Trambus Transport Company in the earlier years. Because of the negative mismatch of debt maturity with the fixed asset life-cycle, this will probably be a worthwhile discipline.

The forecasts will, therefore, be as follows:

### TRAMBUS TRANSPORT COMPANY- FINANCIAL FORECAST

<u>INCOME STATEMENT</u>	20_1	20_2
	\$m	\$m
Original Transported passengers	190	200
Uncollected fares and free rides	<u>10</u>	<u>10</u>
Transported fare-paying passengers	180	190
<u>Add</u> New passengers resulting from growth (5%)	<u>9</u>	<u>10</u>
Sub-total	189	186
<u>Less</u> Passengers lost by fare increase (7%)	<u>13</u>	<u>11</u> <sup>23</sup>
Net passenger ridership	176	188
 Average fare [\$2.8 + 10% (rounded)]	 \$3.10	 \$3.10
 <u>Revenues</u>	 \$m	 \$m
Transport Revenues (gross)	546	583
Allowance for uncollected debts	<u>6</u>	<u>6</u>
Net Revenues from Fares	540	577
Operating Subsidy	<u>32</u>	<u>27</u>
Total Revenue	<u>572</u>	<u>604</u>
 <u>Expenses</u>		
Personnel	100	105
Fuel & Lubricants	85	88
Maintenance	45	47
Other Operating Expenses	25	26
Administration & Taxes	40	42
Depreciation	<u>195</u>	<u>225</u>
Total Operating Expenses	490	533
Net Operating Income	<u>82</u>	<u>71</u>
Interest	<u>53</u>	<u>56</u>
Net Income	<u>29</u>	<u>15</u>
 <u>Including Operating Subsidy:</u>		
Rate of Return	7.3%	6.0%
Operating Ratio	86%	88%
<u>Excluding Operating Subsidy:</u>		
Rate of Return	4.4%	3.7%
Operating Ratio	91%	92%

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<sup>23</sup> Assumes a "drift" back of some lost riders.

## SOURCES AND APPLICATION OF FUNDS

	\$m	\$m
Net Operating income	82	71
<u>Add Depreciation</u>	<u>195</u>	<u>225</u>
Total Internal Sources of Funds	277	296
Working Capital Needs (Additional Inventory - 20_2)	<u>2</u>	
Net Internal Funds Sources	<u>277</u>	<u>294</u>
<u>Less Debt Service:</u>		
Amortization	24	27
Interest	<u>53</u>	<u>56</u>
Total Debt Service	<u>77</u>	<u>83</u>
Net Internal Funds	200	211
Capital Investment	<u>250</u>	<u>260</u>
Funds Required from External Sources	50	49
New Loans	<u>50</u>	<u>50</u>
Increase in Cash	<u>0</u>	<u>1</u>
 <u>Including Operating Subsidy:</u>		
Debt Service Ratio	3.6%	3.5%
Contribution to Investment	80%	81%
 <u>Excluding Operating Subsidy:</u>		
Debt Service Ratio	3.2%	3.2%
Contribution to Investment	67%	71%

	20_0	20_1	20_2
<b><u>BALANCE SHEET</u></b>	<b>\$m</b>	<b>\$m</b>	<b>\$m</b>
Fixed Assets	1,625	1,875	2,135
Accumulated Depreciation	<u>495</u>	<u>690</u>	<u>915</u>
Net Fixed Assets	<u>1,130</u>	<u>1,185</u>	<u>1,220</u>
Inventories	10	11	12
Receivables	6	6	6
Cash	<u>4</u>	<u>4</u>	<u>5</u>
Net Current Assets	<u>20</u>	<u>20</u>	<u>23</u>
Total Assets	<u>1,150</u>	<u>1,205</u>	<u>1,243</u>
Equity:			
Contributed and Earnings	400	429	444
Revaluation Reserve	<u>260</u>	<u>260</u>	<u>260</u>
Total Equity	660	689	704
Long Term Debt	<u>480</u>	<u>506</u>	<u>529</u>
Total Capitalization	1,140	1,195	1,233
Current Liabilities	<u>10</u>	<u>10</u>	<u>10</u>
Total Liabilities & Equity	<u>1,150</u>	<u>1,205</u>	<u>1,243</u>
Debt: Equity Ratio	42:58	42:58	43:57
Current Ratio	2.0	2.0	2.3

SUPPORTING STATEMENTS                      20\_0      20\_1      20\_2

FIXED ASSETS STATEMENT                      \$m              \$m              \$m

Fixed Assets Brought Forward	1,250	1,625	1,875
Acquisitions	-	250	260
Revaluation	<u>375</u>	<u>-</u>	<u>-</u>
Fixed Assets Carried Forward	<u>1,625</u>	<u>1,875</u>	<u>2,135</u>

DEPRECIATION STATEMENT

Depreciation Brought Forward	380	495	690
Provision for Year	-	195	225
Revaluation	<u>115</u>	<u>-</u>	<u>-</u>
Depreciation Carried Forward	<u>495</u>	<u>690</u>	<u>915</u>

DEBT STATEMENT

Loans Outstanding Brought Forward*	-	480	506
Loans Raised During Year	<u>-</u>	<u>50</u>	<u>50</u>
Sub-total	-	530	556
Loans Repaid During Year	-	24	27
Loans Outstanding Carried Forward	<u>480</u>	<u>506</u>	<u>529</u>
Interest Payable at 11% on *	<u>-</u>	<u>53</u>	<u>56</u>

EQUITY STATEMENT

Contributions and Retained Earnings:

Brought Forward	400	660	689
Revaluation	260	-	-
Net Income for Year	<u>-</u>	<u>29</u>	<u>15</u>
Carried Forward	<u>660</u>	<u>689</u>	<u>704</u>

(-) = Information either not available or not relevant.

SUMMARY OF KEY FINANCIAL RATIOS

1. Balance Sheet Ratios

- (a) Working Capital = Current Assets - Liabilities
- (b) Current Ratio = Current Assets : Current Liabilities
- (c) Quick Assets Ratio  
(Acid Test Ratio) = Quick Assets (Current Assets less Inventories) : Current Liabilities
- (d) Debt:Equity Ratio = Long Term Debt : Equity
- (e) Debt Collection Ratio = Outstanding Receivables : (Credit) Sales Revenue

2. Income Statement Ratios

- (a) Rate of Return = Net Operating Income : Assets in Operation  
(Alternative) = Net Operating Income : Fixed Assets
- (b) Operating Ratio = Operating Costs : Sales
- (c) Net Profit Ratio = Net Income : Sales

3. Funds Flow Ratios

- (a) Debt Service Coverage = Internal Sources of Funds : Debt Service
- (b) Contribution to Capital Expenditure = Internal Sources of Funds less Debt Service : New  
Capital Investment
- (c) Internal Cash Ratio = Internal Sources of Funds/Fixed Assets (Gross Value in Operation)