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**FINANCING THE METROPOLITAN AREAS OF
SOUTH AFRICA**

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**Infrastructure Operations Division
Southern Africa Department**

MICROGRAPHICS

FINANCING THE METROPOLITAN AREAS OF SOUTH AFRICA

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Foreword

Over the past two years, the World Bank has worked actively on analyzing various aspects of urban issues in South Africa. The work has focused on assessing the policy framework that is influencing the urban sector and on developing investment profiles for the Witwatersrand area, Cape Town, Durban and Port Elizabeth. The latter work includes a preliminary quantification of the back-log in urban services in the four metropolitan areas, an initial assessment of the financial capacity of the cities, and the development of a methodology for undertaking similar exercises for other urban centers.

This work program has resulted in a series of Aide-Memoirs which have been distributed widely across the country. Based on the feedback and strong collaboration with different groups in South Africa, several issues were identified as requiring further analysis. The report Financing the Metropolitan Areas of South Africa is the first of several documents that provide a more in depth analysis of selected urban issues. Future reports will cover topics such as urban spatial and transport policies. These separate studies will eventually provide the basis for a synthesis report on the urban sector in South Africa.

The overall objective of this and future reports is to contribute to the South African debate on the alternatives and choices available in designing a comprehensive urban strategy. In writing these reports, the Bank is following a collaborative process whereby the work is guided and undertaken in conjunction with a broad spectrum of groups in South Africa. It is hoped that these reports will assist South Africa to address successfully the urban challenge facing the nation.

Acknowledgment

This report draws on the findings of the Urban Economic and Fiscal Mission to South Africa. The Missions were led by Junaid Ahmad (AF6IN) and included James Kicks (TWURD), Kyu Sik Lee (TWURD), Vinaya Swaroop (PRDPE), Hen-Fu Zou (PRDPE) and consultants W. Fox, C. McLure, M. Wasylenko and D. Wildasin. The report also draws on the analysis and cost estimates of the Urban Sector Mission led by Jeffrey Racki (AF6IN) and include Alain Bertaud (TWURD) and Steve Mayo (TWURD) and consultants C. Banes, K. Robson, and J. Kalbermatten. Stephan Malherbe provided valuable assistance in the preparation of this report.

This report would not have been possible without the assistance and cooperation extended by a variety of groups and individuals in South Africa. These included officials in central, regional, and local government, extra-parliamentary groups, their advisory networks, community-based organizations, NGOs, parastatals, research and academic institutions and a cross-section of the private sector.

The report was reviewed by Messr. Johannes Linn (FPRVP) and Michael Cohen (TWURD). Their comments and suggestions provided invaluable input in the design and writing of this report.

Financing The Metropolitan Areas of South Africa

Executive Summary

1 The urban sector in South Africa accounts for about sixty percent of the country's population and over eighty percent of its GDP. Nowhere is this concentration of people and economic activity more visible than in the four major metropolitan areas--the Pretoria-Witwatersrand-Vaal (PWV) complex, Cape Town, Durban and Port Elizabeth--which represent almost forty-five percent of the nation's population and an even higher share of its GDP. In fact, some estimates suggest that the PWV area alone will account for about 50 percent of the country's GDP by the year 2000. For South Africa, the reality of such demographic and economic concentrations is clear: without well functioning cities, the ability to sustain an overall economic recovery will be jeopardized. Designing a comprehensive urban strategy is therefore an important national priority for South Africa.

2 Such a task will be made difficult, however, by the legacy of apartheid. Segregated along racial lines, the urban sector reflects and suffers from the inequities and inefficiencies created by South Africa's racial history. The white cities are effectively managed and they possess a governance structure that serves well the minority population. These cities have a strong fiscal base and contain the bulk of the employment as well as most of the retail and commercial activities. The black townships, generally situated at some distance from the centers of the cities, were designed as dormitory towns to provide labor for the white communities. Without a fiscal base and an effective governance structure, these townships, in stark contrast to the adjacent cities, have a low level of infrastructure and basic services.

3 South Africa is now undergoing historic change. There is widespread agreement on the need to create a non-racial, democratic system of government and to end the social and economic legacy of apartheid. With the majority of the black population lacking access to basic services, it is expected that cities will play a critical role in implementing redistributive and poverty alleviating policies. The strategy being debated at the urban level to achieve these broader objectives is how to create unified city structures by merging the cities and the adjacent townships. While this process of amalgamation remains undefined, the economic and demographic concentrations of the cities clearly reflect the stakes involved. The ability of South Africa to create non-racial governments, reduce poverty, and sustain economic growth will hinge on the successful integration of the racially divided cities.

^{1/}The terms "unify", "merger", "twinning" in this report are used interchangeably. All of these terms refer to the restructuring of local governments in the sense of creating one, non-racial municipality. A twinning arrangement, for example, is not meant as a continuation of existing racial separation with a joint administrative relationship but one in which a new, unified municipality is created.

Purpose and Scope: Fiscal Dimensions of An Urban Solution

4 The unification of vastly different segments of the urban sector will require far reaching changes in the political, administrative and economic fabric of the cities. The World Bank's sector work is designed to understand the interaction between these changes and the workings of the urban economy. This report focuses on the fiscal dimensions of unifying the urban areas of South Africa and addresses, in particular, the issues of fiscal imbalance and revenue sharing arrangements between the cities and townships. While the analysis has concentrated on the Witwatersrand area, the lessons and implications drawn are relevant for the four metropolitan centers of the country. The fiscal dimensions of the amalgamation process have been defined to cover the following three critical areas:

- (a) Ensuring, in the short run, the immediate ability of the cities to contribute to the goals of poverty alleviation and redistribution by financing the access to basic services by the black community;
- (b) In the medium to long run, creating an efficient and equitable fiscal system that ensures the economic sustainability of the cities; and
- (c) Ensuring that the transitional arrangements do not undermine the economic foundations of the cities or the *macro-stability* of the economy.

The challenge is to design a fiscal strategy that will achieve these objectives. The issue of financing cities in South Africa is, therefore, more fundamental than merely selecting the right set of fiscal tools. There is a chance—and a need—to create long-standing institutions and city structures that can promote the economic and political sustainability of the urban areas.

Designing A Fiscal Strategy: Considerations and Implications

5 Several important factors will influence the design of a fiscal strategy for the cities of South Africa. Primary amongst these are: (i) the size of the back-log in urban services; (ii) the current fiscal systems of white (WLAs) and black (BLA) local authorities; (iii) the locational dynamics of household and businesses within the urban sector; and (iv) the outcome of the national debate on fiscal decentralization. The implications for the design of an urban fiscal strategy are several and often contradictory.

(i) **The back-log:** Preliminary estimates suggest that the cost of financing the back-log in local goods—water, electricity, sanitation, drainage, roads and solid waste disposal—faced by the black-communities in the four metropolitan areas of South Africa ranges from 4 to 8 percent of one year's GDP depending on the (engineering) standard of infrastructure and

services delivered.² As a percentage of the fiscal base of these four cities, the investment costs represent 270 to 464 percent and 160 to 283 percent of regional Service Council (RSC) and WLA annual net revenues and expenditures respectively in 1992.

Implications: The financing of the back-log in local goods would impose a significant fiscal shock on the revenue and expenditure base of the cities in South Africa. The size of the shock is too large for the local fiscal base to sustain within a short period and will need to be phased in over several years. Even with such phasing, the investments may not be possible without access to long term financing from outside the metropolitan areas, prioritization of existing expenditures, and increases in revenues from both the black communities and existing WLAs. In the absence of such measures, the financing of local goods may have to be undertaken by upper-tier governments.

The extent of the potential borrowing also raises several concerns. It is likely that the cost of borrowing by future amalgamated cities will increase sufficiently to warrant intermediation by central government. On the other hand, such increases may be accepted as the price of ensuring a greater independence of the local authorities. Any direct borrowing by cities will, however, need to be implemented under a regulatory framework. This policy will help ensure that capital markets or local governments do not implicitly assume that central or regional authorities will ultimately back all local government borrowing. A central or regional blanket guarantee could encourage inefficient spending by municipalities with potential macroeconomic consequences as the financial system is weakened by defaulting borrowers and the central government inherits the growing deficits of local governments.

The size of the back-log also has other important macroeconomic implications. In addition to its impact on capital markets, it will be important to assess the effect of financing the back-log on the government's overall budget deficit and on the country's balance of payments. These linkages become all the more important when one considers that urban services are only one category of expenditures that will require immediate financing. It is expected that additional public expenditure on housing, health and education, for example, will also be required in the near future. Given the potential impact that aggregate public spending will have on the national savings pool, government's consolidated budget deficit, and balance of payments, the financing of the urban back-log should not be seen in isolation of the overall expenditure needs of the country.

Preliminary estimates suggest that if the national economy continues to grow at its historically low rates, an annual public investment of the order of 1.7 percent of GDP could

^{2/}The cost estimates are for three separate components, namely, upgrading of existing settlements, allocation for new sites, and the financing of bulk investments. Local functions such as police, ambulance, fire protection, and community facilities and estimates for Pretoria and the Vaal region are not included in the total. Any estimates of urban investment at the national level, as opposed to the 4 metro areas, would have to include these omitted expenditures weighted by total urban population. Taking into account only population figures, preliminary calculations suggest that the size of the back-log in urban services at the national level is of the order of 8 to 13 percent of GDP, depending on the standard of services provided.

be sustainable at the macro level. This figure clearly suggests that from a macro perspective the back-log in urban services cannot be financed in one year. Phased over 5 years, investments in intermediate standard of urban services, for example, would represent approximately 0.68 percent of GDP annually or approximately 40 percent of the aggregate public investment that is consistent with the macroeconomic constraints. Phased over 8 years, the intermediate level investments would be 0.42 percent of annual GDP and 25 percent of sustainable aggregate public investment. These simple calculations show that in a low growth economy, investments in the urban sector alone could quickly account for a major share of the total public investment that is affordable by the nation. It is critical, therefore, policy makers in South Africa take into account all the needs in assessing the feasibility of financing the back-log in the urban area. In addition, these calculations suggest that without an emphasis on growth-enhancing policies, South Africa will be severely constrained in its ability to meet public investments needs of the economy. Finally, the calculations show that the "high" standard level of investment will not be sustainable.

(ii) **The administrative and fiscal strength of the WLAs and BLAs:** The white cities have a strong administrative and fiscal base that supports the delivery of a very high standard of urban infrastructure and services to white residents. The fiscal system is based on an implicit taxation (mark-up over cost) of services, mainly electricity and water, and on an effective taxation of property. The WLAs tax the business and commercial sectors and cross-subsidize their residents through substantial rebates in residential property taxes. In order to ensure the access to the implicit taxes on water and electricity, also called trading account surpluses, local governments have been given the sole right to distribute these services within their municipal boundaries. The WLAs in the four metropolitan areas are largely self-financing and rely only to a limited extent on central transfers. Their fiscal independence is further strengthened by the fact that health and education are financed by the center.

Implications: The fiscal position of white local authorities suggests a potential for horizontal financing of the poorer communities within each urban area. The property tax system is strong and the taxation of services is well ingrained in white municipalities. In addition, the existing level of services and infrastructure is quite high. Calculations show that with access to capital markets, WLAs would be in a position to finance the capital costs and operation and maintenance for upgrading existing black communities to an intermediate level of service standard and in some cases also provide funding for the related bulk infrastructure investment. Such a policy would require both a pooling of resources by WLAs within each metropolitan area and relatively small increases in property taxes and trading account surpluses or reductions in current expenditures. In fact, in some urban areas, access to turnover and payroll revenues of the Regional Service Councils (RSCs) at existing tax rates would obviate the need to increase property or trading account taxes. In addition, if the investment programs are phased in over a longer period local governments will be even more able to finance the capital costs and O&M of the back-log in urban infrastructure and services. This is an important conclusion given that the economy also faces back-logs in other areas such as education and health which may be stronger contenders for resources from other tiers of government. It should be noted, however, that these calculations assume that while WLAs and RSCs provide financing for capital investment and O&M, beneficiaries pay for the actual services consumed (see below). The administrative and technical strength of

the WLAs also suggests that even if the back-log were not financed at the local level, the delivery of the services could certainly be handled locally. In sum, the fiscal and administrative base of WLAs may provide a strong fiscal and administrative foundation for the unified cities of South Africa.

Affordability at the municipal level, however, does not imply that at the macro level the nation can easily finance the back-log in urban services without major tradeoffs in other areas. As discussed earlier, macroeconomic constraints may prevent the rapid financing of urban services. While a strategy of pooling resources across WLAs may allow municipalities to finance an investment program that is phased over a certain number of years, policy makers will have to ensure that such investments are consistent with macro stability, external borrowing capacity and other investment priorities. Central supervision over the growth of local government expenditures, as has been the practice in South Africa, may be an important policy instrument to maintain in the future. Additional instruments include indirect control based on requirements to balance local budgets or obtain approval for borrowing.

BLAs: The BLAs, on the other hand, have a weak fiscal and administrative base. They are dependent on central and RSC transfers to finance even the minimal level of services for the black community. In the Central Wits area, for example, these transfers account for approximately 90 percent of the revenues of the BLAs. This dependence on fiscal transfers is a result of several factors. First, apartheid policies have forced the concentration of lower income households in the townships and have effectively zoned out business and commerce. In addition, these regulations have deprived the black community from ownership of land and housing. In the long run, the lack of ownership has also prevented the black community from getting access to capital markets that is needed to generate a growing economy and tax base. Finally, rent and service charge boycotts protesting the lack of representative governments have further eroded the already limited fiscal base of BLAs.

Implications: The weak fiscal base of the BLAs and dependence on central flows raise three important considerations. First, low incomes, poorly-defined property rights, and problems of enforcement, may make it difficult to use the traditional instruments of local finance--property taxes and user charges--to generate substantial amounts of additional revenue from the low income households in South Africa. As a result, at least during the short-run, second-best fiscal instruments might be needed to generate revenues from the black communities. These might include, for example, revenues from the value added tax (VAT) of the center, and turnover and payroll taxes from the RSCs. The broad base of the VAT and inefficiencies of the turnover tax suggest that the former would be a better instrument to use. Its implementation would, however, make local governments more dependent on upper-tier governments.

Second, the dependence of the BLAs on central transfers for financing operation and maintenance costs suggests strongly that any financing strategy for the South African cities will, certainly in the short to medium run, need to include central flows. Mergers of cities and townships will not automatically obviate the need for these fiscal transfers. Indeed, a simultaneous reduction of central flows and the implementation of a public investment program to finance the back-log may be difficult for the local base to sustain. This imbalance

would occur precisely at a moment when the very structure of local governments is about to change. Plans for any reduction of these central transfers in the future should be implemented in phases. This process would include a review of current public expenditures at the local level and a careful assessment of the fiscal capacity of the individual cities.

Third, the culture of non-payment that has emerged in the context of apartheid suggests that only local governments that are legitimate and are able to deliver services rapidly and visibly can hope to implement user charges and other beneficiary taxes. The need to provide services up front may require an important element of redistribution to even initiate the process of collecting beneficiary taxes. The linkage between representative local government and payment for services is ultimately one of the more critical aspects of creating fiscally sound and politically accountable local authorities. Without access to user-charges and property taxes local governments may find it difficult, in the long run, to achieve the level of accountability that fosters a sustainable local government system. In view of the importance of user charges in this context, it is assumed that while WLAs and RSCs will be able to cross-subsidize the financing of capital investments and possibly a portion of O&M, beneficiaries progressively be charged the real cost of services provided. Recent agreements reached with communities to establish some level of cost-recovery for services such as water and electricity, as in the case of Soweto, provide the basis for slowly increasing the dependence on beneficiary charges over the long-run. With the growth of a property tax base in the black community, cost recovery can also be initiated for services for which direct user-charges are not technically feasible.

In this context, it should also be noted that representative local governments are a fundamental prerequisite for allowing community preferences to guide the debate on delivery standards and affordability, creating perhaps a more realistic approach to the delivery of public services. Without the community setting the lead on standards it will be difficult to break the dependence on central flows or foster accountability in local government systems.

(iii) **Urban structure and locational dynamics:** In addition to racial segregation, South African cities are also characterized by jurisdictional fragmentation: smaller WLAs and townships surround the core white cities. In spite of this fragmentation, the different jurisdictions within urban areas have highly integrated labor markets. Historically, South African urban areas have been monocentric with the bulk of employment in manufacturing, retail, and services located within the boundaries of the core cities.

With the pressures of urbanization and the formal removal of apartheid laws, however, the allocation of population and business activities over the urban areas will be in a state of flux for some time to come. Preliminary data suggest that in recent years, there has been a decentralization of employment from the core cities into the surrounding white municipalities. In addition, in certain urban centers there has been an outflow of white residents from the central city and an inflow of black residents from adjacent townships and homelands. Nevertheless, it is expected that a substantial portion of the black community will continue to reside in the townships in the foreseeable future. In addition, it is probable that manufacturing and service industries will move into the black communities only at a slow pace. The economies of agglomeration and scale, substantial infrastructure advantage, and

better security in WLAs may continue to "lock-in" industries and businesses to these areas for some time to come.

Implications: First, it will be important to ensure that any fiscal strategy to finance the back-log does not provide incentives that further distort the spatial structure of the urban sector.² For example, a central tax is less likely to create incentives for relocating within national boundaries. Region specific turnover taxes or local property taxes may, on the other hand, result in locational decisions based on fiscal rather than economic criteria.

Second, the mobility of factors at the local level places a strong constraint on the ability to implement redistributive policies at the subnational level. Not only can households and businesses move outside city boundaries if tax burdens are too heavy; if the burdens are sufficiently different the movement may be from one city to another altogether.

Third, given that the formal sector continues to persist in predominantly white areas, a process will need to be found for transferring some of the fiscal resources back to the black communities. This is the role RSC levies and central transfers were designed to play in the current racially segregated local government system. In the future, it is expected that such transfers will automatically occur through some redrawing of boundaries. By merging the municipalities, it is argued that the black community will form part of the same municipality to which they contribute their labor. Again, given the mobility of economic nodes and that the workers from one black community may not necessarily be working in the adjacent city suggests that a relatively broad drawing of boundaries will be necessary to address this problem.

(iv) **Fiscal Decentralization:** The structure of government in South Africa is highly centralized. The central government has access to about 80 percent of the revenue collected by all tiers of government and is responsible for about 70 percent of total government expenditures. Local governments account for 10 percent of the revenues and 7 percent of total government expenditures. Political changes in the country are not only directed towards creating a democratic and non-racial form of government; there are strong advocates for a decentralized, and perhaps, a federal state. In practice, this may lead to a redrawing of regional boundaries and the creation of more powerful regions with greater fiscal responsibilities. The impact on local governments, however, remains uncertain.

Implications : Even as cities in South Africa begin to finance the back-log in urban services, they may be faced with new expenditure responsibilities devolved from upper-tier governments. Cities may not be able to absorb a rapid devolution of new responsibilities and, at the same time, finance the current back-log of basic urban services. In general, the dependence of BLAs on central flows and the potential for rapid fiscal decentralization suggests two important points. First, there is a need for correctly sequencing and dove-tailing

²/Fiscal policies can also be used to influence the locational decision of households and firms. For example, tax breaks may be given for promoting private investment in certain locations. The advantages and disadvantages of using fiscal policies for such purposes is not addressed in this report. Future sector work on urban land policies will address this broader issue.

the merging of the cities, reducing the flows of current transfers and devolving additional expenditure responsibilities. Second, given the difficulty of appropriate sequencing there is a possibility that a mismatch of revenue and expenditure responsibility at the local level may emerge rapidly, at least in some cities. To guard against such outcomes, it may be necessary to allow metropolitan areas access to a revenue base capable of absorbing such fiscal shocks. Options include access to central bases through surcharges or through some guaranteed, rather than ad-hoc, revenue sharing arrangement.

6 The factors discussed above suggest that there are sufficient economic and political differences between a transitional period and the long-run to warrant a different set of financing strategies. It is anticipated that within a very short period local governments will need to undertake an unusually large amount of public investment without having the assurance that they will be able to collect property taxes and user charges from the beneficiaries. The immediate need to finance the back-log may preclude the introduction of new fiscal instruments in the short run. In the long run, however, the investment plans will be phased over longer periods and a larger portion of the urban community is expected to contribute to the local revenue base. In addition, over a longer horizon, local governments of the metropolitan areas will have greater flexibility to restructure the administrative and fiscal settings. Finally, as the national debate on decentralization slowly unfolds, the expenditure and revenue assignments for the urban sector may change substantially in the future.

7 The discussion so far suggests several, often contradictory, implications for the design of an urban fiscal strategy. On the one hand, the nature of the problem—financing access to local services—and the fiscal and administrative strength of the WLAs seem to imply that the local base should be used to finance the back-log. Indeed, calculations clearly show that with beneficiaries paying for the actual levels of services consumed, WLAs may be able to finance the capital costs and possibly a portion of O&M of upgrading existing black settlements. Emphasizing local financing would also contribute to greater local autonomy and accountability. In addition, given the other equally overwhelming problems in the economy, including the need to finance health and education which are currently central responsibilities, it may be argued that the cities of South Africa will have to look inward to address the problems of the urban sector. On the other hand, limited access to revenues from lower-income groups, avoidance of locational distortions, uncertainty of the outcome of the debate on fiscal decentralization and the need for redistribution would suggest that there is a strong role for upper tier governments. Any strategy to finance the cities of South Africa must find a balance between these different views of the problem—a balance that must address the needs of both the transition and the long-run. It is the contention of this report that such a balance will be determined by the way the boundaries of the amalgamated cities are ultimately drawn.

Elements of A Strategy: Redrawing Boundaries

8 The first critical element in devising an urban fiscal strategy for South African cities will be the redrawing of municipal boundaries. Two very different options are being debated: (i) the administrative mergers of WLAs and adjacent townships—a "twinning" program of sorts or (ii) the creation of a metropolitan government encompassing several of the municipalities.^{4/}

^{4/} An example of a twinning could be the merger of Sandton and Alexandra or Sandton, Randburg and Alexandra—geographic proximity being the main determinant of such mergers. The greater Cape Town area including municipalities such as Stellenbosch, Paarl, Wellington, Bellville, etc.

9 The drawing of narrow boundaries, as proposed in the twinning option, would not provide a sustainable fiscal unit for financing the back-log. The burden sharing would be highly unequal and such policies would promote further spatial distortions as households and economic nodes seek to escape the incidence of higher taxes—especially if redistributive policies are undertaken at the local level. Narrow boundaries would also fail to internalize the spillovers of costs and benefits that are common in an urban setting. Central or regional transfers can be used to compensate for both the unequal burden sharing and the spillovers. Such policies may, however, perpetuate the dependence of local authorities on upper tier governments with the possible loss of autonomy, transparency and efficiency of lower-tier governments. It may also lead to the use of inefficient fiscal sources. In a metropolitan setting, even if higher income bases relocate within an urban conurbation the metro could always have access to their property taxes for equalization purposes. In a "twinning" system, the municipality losing the property base would need to rely on central or regional tax instruments (e.g. the individual income tax) which may be more distortionary than the use of property taxes.

10 Consequently, wider metropolitan boundaries and hence some form of metropolitan administration may be a fundamental prerequisite for the design of any successful fiscal strategy for financing the cities of South Africa. The boundaries would have to be drawn to take into account the nature of the labor market integration between the different local authorities and could, in practice, include several municipalities.⁵ The existence of separate municipalities under a metropolitan administration would preserve the efficiency of smaller-sized governments and promote greater accountability to their constituencies.⁶

11 Over a longer horizon, a metropolitan form of government would also provide the flexibility for implementing expenditures that have a more metro-wide impact. For example, the benefits of economies of scale could be captured by providing water and electricity over a metropolitan boundary. This wider distribution would also improve the ability to cross-subsidize between consumers. In addition, a metropolitan government would be best placed to inherit zoning responsibilities, even in the short run, to promote a more rational spatial structure. Finally, the economic arguments in support of a metropolitan boundary are further strengthened by the political realities of South African cities. A metropolitan government would provide a better chance at "levelling the playing field."

would, on the other hand, be an example of a metropolitan area. In this case, economic factors such as labor market integration and service areas that promote economies of scale would be the primary determinants of a metro boundary. [Note: the examples used in this footnote are for illustration purposes only and should not be interpreted as recommendation for drawing boundaries]

⁵This structure is often referred to as a two-tier metropolitan system. In the case of South Africa a two-tier system may include, for example, a metropolitan tier with a group of "twinning" municipalities as the second tier.

⁶The gains in efficiency and accountability will not be automatically achieved. For example, in the context of a two-tier model with "twinning" municipalities, the municipalities will encompass large populations. The challenge will be to create smaller level representation and local participation in individual municipalities even as cities establish metropolitan authorities and governments.

Elements of A Strategy: The Transition

12 During the transition, a metropolitan administration could function as a "banker"^{7/} to finance the delivery of services across the constituent municipalities. This option would permit the rapid delivery of services by restructuring the existing administrative system of the WLAs and RSCs but without having to create a completely new administrative tier for the delivery of services. In addition, such a transitional arrangement would provide some flexibility for the future which is an advantage in the context of South Africa where the economic and demographic evolution of the urban areas is in a state of flux. Finally, by pooling fiscal resources within metropolitan areas, the cities will be able to fund major components of the back-log in urban infrastructure and services without access to additional central transfers.

13 As a banker, the metropolitan administration could potentially have access to three sources of revenue: (i) turnover and payroll taxes that are currently in the hands of RSCs; (ii) a portion of the property taxes collected by the WLAs; and (iii) the continued central transfers currently designated for the BLAs. In the absence of user charges and property taxes, the turnover and payroll taxes provide a "second-best" instrument to finance the back-log from the direct beneficiaries of capital investments in the black communities. The property taxes from the WLAs are the redistributive aspect of this fiscal arrangement. As a first step, the metros could inherit the rebates currently being given to residents in the WLAs. Subsequently, a fixed proportion of the non-residential property collections could also be designated to the metros. This would compensate for the "lock-in" effect that apartheid policies have had on the location of industries. Finally, maintaining the central flows would, as argued before, assist the municipalities in their process of restructuring and strengthen the position of the metro as a banker. In this arrangement, the municipalities, would retain access to a portion of the property taxes and perhaps a portion of the trading account surpluses.^{8/}

14 The role of a "banker" for the metro during the transition is not a passive one; its ability to pass on large amounts of funds will shape the emergence of the new municipalities. This power, however, should not be ad-hoc. A transparent and predictable system of transfers will be essential in promoting a sustainable local government structure. To ensure proper accountability, the functions of the metro and municipalities may need to be incorporated in local government legislation and perhaps even the constitution. The critical

^{7/}In the context of this paper, the term "banker" is used figuratively to characterize a metropolitan administration that does not have any direct expenditure responsibility. Its sole responsibility is fiscal or financing expenditures of municipalities.

^{8/}It is suggested in this paper that in the future distributional objectives may prevent municipalities from generating surpluses from the trading accounts. In addition, it is argued that trading accounts may be an inefficient source of revenue for financing general municipal services. While a case may be made to retain this source of revenue at the municipal level during a transitional period, in the long run it will be more efficient and equitable to transfer the responsibility for distributing electricity and water to a metropolitan authority.

The issue of whether the metro or municipality should have the authority to borrow from capital markets has not been raised in this report. A case may be put forward that a metro would have greater ability to raise resources from capital markets at a lower cost than a municipality. This issue will be addressed in future sector work.

and powerful role played by the metro underscores the need for legitimate and accountable representation as a prerequisite for the effective functioning of this fiscal system.

15 During the implementation of such a fiscal arrangement policy makers will have to decide on the relative weights to assign to each source of revenue. A greater use of turnover, payroll and property taxes will push the system towards local financing while reliance on central transfers will clearly promote more upper tier financing. A similar choice will have to be made in deciding on the share of revenues between the metro and the municipality. At one extreme all revenues generated within a metropolitan area could be allocated to the metro; the municipalities would in effect become administrative arms of the metropolitan authority. If municipalities are to retain their ability to deliver a level of service that reflects the preferences of their constituencies, a larger portion of the revenues and the right to set rates on property may need to remain at this level. In this scenario, the metro in effect takes the responsibility for equalizing and financing a basic standard of service across the metropolitan boundary leaving municipalities to respond to the different preferences of their communities.

16 An alternate approach would be to introduce expenditure responsibilities at the metropolitan level even during the transition. In this case, the objective of ensuring the availability of a basic standard of services across the municipalities could be achieved through the direct delivery of services by the metropolitan entity. As argued earlier in justifying the "banker" format, this strategy would require substantial administrative restructuring which may delay the financing of the back-log and "lock-in" the organization of a metropolitan tier during a period in which the demographic and economic evolution of the urban areas remains uncertain. For these reasons, the issue of reassigning functions has been raised in the context of the long-run. However, if it is perceived that the benefits of reassigning expenditure functions, as described below, outweigh these potential costs, it may be advisable to restructure the delivery of major items such as water, electricity and water even during the transition.

Allocation of Revenues	
Metro	Municipality
Short-run	
Turnover	Property
Payroll	User charges
Property	
Transfers	
Long-run	
Excise	Property
Automotive	User charges
Income Tax	
Property	
Transfers	
User charges	

Note: Depending on its fiscal position, a municipality may also receive fiscal transfers from the metro.

Elements of A Strategy: The Long Run

17 Three important policy issues form the back-bone of the longer run strategy. First, international experience strongly suggests that urban centers in South Africa will continue to feel the pressures of decentralization as economic nodes and higher income bases move away from the core cities. To preserve the fiscal integrity of the cities, policies may have to be enacted to ensure that metropolitan areas have access to the fiscal bases that move beyond the

boundaries of metropolitan areas. Second, policy makers may need to devolve new tax instruments to metropolitan governments. Such measures would help replace the highly inefficient turnover tax, add a fiscal base to support the property tax which, for a variety of reasons may not be buoyant in the long run, and finally reduce the reliance of the cities on central transfers. The latter step would promote greater independence and accountability of the cities. Third, given the relatively stronger fiscal position of the metropolitan government, either a reallocation of expenditure or fiscal assignments may be required between the metro and its municipalities.

18 In the first case, one option is to rely on greater central (or regional) transfers since central tax instruments have the broadest geographic coverage. Short of crossing national boundaries, households and businesses cannot escape their fiscal responsibilities for taxes of central government. This strategy would increase the dependence of the cities on central flows. A second option, if reliance on the center is to be avoided, is to draw the municipal boundaries large enough to encompass the growth of new municipalities—as in the case of, for example, the Minneapolis-St. Paul arrangement. In addition, policy makers may consider the option of passing legislation to grant metropolitan governments the right to annex or veto the incorporation of new municipalities and communities outside their boundaries—creating in effect "cities without suburbs."

19 In the devolution of new fiscal instruments, the options seem very restricted. This report suggests that in the context of the country's fiscal decentralization, metropolitan areas may be best advised to have a system of surcharges on personal income tax and an assortment of excise and automotive taxes. The future demands of urbanization and, perhaps, decentralization of new expenditure responsibilities, however, may require central and regional transfers. The challenge will be to ensure the predictability of such flows so that both local governments and the capital markets perceive such resources as "own revenues" of the cities. Legislation defining such transfers as legally belonging to the cities, as well as application of legally established formulae in the allocation of such transfers, may be required. Finally, to reiterate a point emphasized earlier, it is assumed that over the long-run the emerging local governments will continue to extend the base of property taxes and user charges to all households in the urban communities.

20 The allocation of expenditure and revenue responsibilities between the municipality and the metro is an important issue. Criteria such as spillovers of benefits, economies of scale, better coordination, and redistribution suggest that metro-wide delivery of certain services may be needed. Transportation and water and electricity distribution are good candidates for metro-wide responsibility—either as utilities serving special purpose districts or as departments within a metropolitan government. Equally important, implementing clearly drawn lines of responsibility between the metro and the municipalities will be critical in ensuring that accountability of these two tiers of local government is transparent. As suggested earlier, the gains from changing the expenditure responsibility may be sufficiently high to even begin this process at an early stage.

Conclusion

21 In restructuring the municipalities of South Africa, policy-makers face two critical decisions: the drawing of boundaries and the development of a financing strategy. It is the conclusion of this report that the choice of municipal boundaries will directly influence the selection of fiscal strategies. A narrow "twinning" of WLAs and BLAs will require regional or central transfers to sustain the new municipalities. A metropolitan structure, on the other hand, will allow for greater reliance on local financing of urban infrastructure and services. If the rapid delivery of the back-log requires central assistance, under a metropolitan system this may only need to be of limited duration and could be designed to be so. Under a twinned system, the recourse to central or regional transfers may be greater and last longer.

22 This report concludes that a metropolitan system of finance would best support the process of amalgamation of cities and townships and provide the basis for an effective local government system in South Africa. During the transition, it was suggested that the metro could play a role of a "banker". In the long run, however, it will be more efficient and equitable to transfer expenditure responsibilities also to the metropolitan level --either as special purpose districts or part of the metropolitan government. These gains may be sufficiently strong to reorganize the expenditure side for selected functions even in the short-run. The creation of a metropolitan tier does not preclude the existence of municipalities within its boundaries. It is suggested in the report that individual municipalities under a metropolitan umbrella can play an efficient role in the delivery and financing of services. Overall, in a two-tier system it is suggested that the metro-tier can play the role of "equalizer" by financing a minimum standard of services across the municipalities while the individual local authorities can cater to the specific preferences of their own constituencies.

23 Three caveats need to be raised at this stage. Without a system of effective and credible representation, the fiscal arrangements discussed in this report would fail to meet the needs of South Africa. Second, with time, the cities in South Africa will continue to be the growth centers of the country: care must be taken that the metros have the resources needed to continue to play this vital national role. Third, and equally important, while access to services is an important aspect of building the economic base of the black community, in the long run, sustained investment in human capital will be critical in reversing the income differentials that characterize the South African communities. Indeed, without a strong policy of investment in education, the possibility of a permanent under class in South African cities looms large.

Financing The Metropolitan Areas of South Africa

Chapter 1: Introduction

1.1 The Stakes of Urban Change. The urban sector in South Africa accounts for about sixty percent of the country's population and over eighty percent of its GDP. Nowhere is this concentration of people and economic activity more visible than in the four major metropolitan areas—the Pretoria-Witwatersrand-Vaal (PWV) complex, Cape Town, Durban and Port Elizabeth—which represent almost forty-five percent of the population and an even higher share of GDP. In fact, some estimates suggest that the PWV area alone will account for about 50 percent of the country's GDP by the year 2000. For South Africa, the reality of such demographic and economic concentrations is clear: without well functioning cities, the ability to sustain an overall economic recovery will be jeopardized. Designing a comprehensive urban strategy is therefore an important national priority for South Africa.

1.2 Such a task will be made difficult, however, by the legacy of apartheid. Segregated along racial lines, the urban sector reflects and suffers from the inequities and inefficiencies of South Africa's racial history. White cities are effectively managed and have a strong fiscal base. The governance structure of the cities serves well the minority white population of South Africa. The black townships, generally situated at some distance from the centers of the cities, were designed as dormitory towns to provide labor for the white communities. Without a fiscal base and an effective governance structure, these townships, in stark contrast to the adjacent cities, have a low level of infrastructure and basic services.

1.3 South Africa is undergoing historic change. There is widespread agreement on the need to create a non-racial, democratic system of government and to end the social and economic legacy of apartheid. With the majority of the black population lacking access to basic services, it is expected that cities will play a critical role in implementing redistributive and poverty alleviating policies. The strategy being debated at the urban level to achieve these broader objectives is how to create unified city structures by merging the cities and the adjacent townships. While the *process* of amalgamation remains undefined—partly because there is no one formula for undoing the dualities and partly because the political situation at the national level is in a state of flux—the economic and demographic concentrations of the cities clearly underscore the importance of the stakes involved.

1.4 At the political level, the restructuring of the urban sector is at the center of South Africa's bid to create non-racial government structures. Equally important, its social aspect is about access to basic services: water, electricity, housing, education and health. With about 60 percent of the country's population in the urban sector, amalgamated cities are expected to play a fundamental role in the efficient and equitable provision of public goods. Finally, the concentration of economic activities in the urban sector suggest that ensuring the productivity of cities will be critical in renewing growth and promoting equity at the national level. The ability of South Africa to create non-racial governments, provide basic services to the majority of the

population, and sustain economic growth will thus hinge on the successful integration of the racially divided cities.

1.5 Purpose and Scope: Fiscal Dimensions. As is implicit in the objectives of the amalgamation process described above, the unification of vastly different segments of the urban sector will require far reaching changes in the political, administrative and economic fabric of the cities. The World Bank's sector work is designed to identify how this process will affect the operations of the urban economy. In this regard, the Bank is undertaking work in urban transport, land and housing sectors.

1.6 A critical issue undergirding almost all aspects of the urban economy is the financial ability of the metropolitan areas to sustain themselves. This report, therefore, focuses on the fiscal dimensions of unifying the urban areas of South Africa and addresses in particular the issue of fiscal imbalance and revenue sharing arrangements between the cities and townships. While concentrating on the Witwatersrand area, the lessons and implications drawn are relevant for the four metropolitan areas of the country. The fiscal dimensions of the amalgamation process have been defined to cover the following three critical areas:

- (a) Ensuring, in the short run, the immediate ability of cities to finance the back-log in basic services faced by the black community;
- (b) Creating in the medium to long run, an efficient and equitable fiscal system that ensures the economic sustainability of the cities; and
- (c) Ensuring that the transitional arrangements do not undermine the economic foundations of the cities or the *macro-stability* of the economy.

The challenge is to design a fiscal strategy that will achieve these objectives.

1.7 The economic strength of South Africa lies in its growing cities and, not surprisingly, it may be argued that the seeds of a successful fiscal strategy may also lie within the boundaries of the urban centers. One option is to extend the current fiscal and administrative system of white cities to finance the delivery of services across the black townships.⁸ Implicit in this approach is the assumption that the revenue and administrative bases of white municipalities are resilient enough to provide the fiscal foundation for the amalgamated cities.

1.8 Given the extent of the back-log in services and the need for implementing redistribution even at the local level, a competing hypothesis would suggest that the horizontal extension of the fiscal system of white municipalities may not be sufficient (in terms of revenue adequacy) or appropriate (in terms of equity or efficiency) to meet the goals defined above. Instead, it may be necessary to establish a fiscal arrangement in which local governments retain some of the fiscal resources that are released to the center to finance the expenditure needs of cities during the short and, perhaps, the long run. Underlying this strategy is the critical assumption that the restructuring of the metropolitan areas is a national

issue with national implications; the stakes are too high to consider it primarily a local problem.

1.9 This report looks at the tradeoffs inherent in these various options. It is concluded in the report that the choice of a fiscal strategy will ultimately be determined by the way the boundaries of the amalgamated cities are drawn. The analysis suggests that the amalgamation process may best succeed under a metropolitan system of finance in which municipalities pool their fiscal and administrative resources over a metropolitan boundary.

1.10 Chapter 2 through 4 of this report looks at the characteristics of the urban setting in South Africa which will influence the choice of the fiscal strategy to be adopted. Chapter 2 provides an analysis of the current system of local government finance while Chapter 3 quantifies the extent of the back-log in urban infrastructure and services. Chapter 3 therefore estimates the size of the fiscal shock that may be placed on the local government finances during the process of amalgamation. Chapter 4 looks at other factors which will impinge on the design of an urban fiscal policy and, in particular, the impact of locational decisions of households and firms and the national debate on restructuring the intergovernmental fiscal system. Based on the discussion in Chapters 2 through 4, Chapter 5 provides an analysis of the fiscal alternatives during the transition while Chapter 6 extends the discussion to long-run issues.

1.11 As suggested earlier, the restructuring of the urban sector is aimed at creating a democratic government and at reversing the social and economic costs of apartheid. The challenge will be to choose a fiscal strategy that will support these larger goals—the issue of financing cities is thus more fundamental than merely choosing the right set of fiscal tools to finance the back-log in basic services. For example, a strategy based on promoting local participation in the choice of type and level of urban services provided and on securing property rights will produce a fiscally more sustainable outcome and strengthen the democratic process. Conversely, given the income inequities between the communities, an inappropriate fiscal strategy may inadvertently strengthen the spatial distortions of apartheid. Both these examples suggest strongly that the financing of the back-log should be seen as an opportunity to create long-standing institutions and city structures that support the sustainability of the economic foundations of the metropolitan areas of South Africa.

Chapter 2: Local Government Finance

2.1 The policy options for financing the future expenditure needs of the metropolitan areas will be influenced by the existing financial arrangements of white and black municipalities. To set the stage for the discussion on fiscal alternatives, the analysis in this chapter focuses on the current system of local government finance. Local governments are first placed in the context of national government, followed by a discussion of the fiscal differences between black and white local authorities.

2.2 Overall, South Africa has a highly centralized system of inter-governmental finance. Local governments have limited expenditure responsibilities with major items such as education and health being financed by the center. Within local government, the contrast in the fiscal situation of the townships and cities is very much evident. Fiscally weak, the black townships are heavily dependent on central transfers. White cities, on the other hand, are largely self-financing. This outcome is a reflection of the spatial and economic segregation imposed by apartheid. With high-income residents and businesses located within the boundaries of WLAs, these municipalities in the metropolitan areas generally rely on mark-ups on electricity and water and property taxes to finance their expenditure needs. The extent to which this local government system of finance can be used to accommodate the needs of amalgamated cities is central to the discussion in Chapters 5 and 6.

The National Context

2.3 **Structure.** The government structure of South Africa comprises of three tiers: the center, the region and local authorities. The regional tier is composed of the Provinces, Self-Governing Territories (SGT), and the TBVC group. Local authorities include the Regional Service Councils (RSC)¹, the Black Local Authorities (BLA) and the White Local Authorities (WLA).

2.4 The national boundary is composed of the four Provinces and the TBVC/SGT group. Each Province is served by several RSCs. In turn, the RSCs span groupings of BLAs and WLAs. It is important to note that the analysis in this report is restricted to the local authorities and their relationship with the Provinces and the Center.

2.5 **Revenue Assignment.** The main tax instruments, value-added tax (VAT), personal income tax (PIT), and corporate income tax (CIT) are under the control of the central government. In addition, the center also has access to customs duty, excise taxes and fuel levy. The Provinces, which in fact are deconcentrated arms of the center, have access to only a limited set of revenue instruments composed primarily of betting and totalisator taxes, taxes on vehicles, and charges on various services provided including health services. At the local level, the main sources of revenue for RSCs are turnover and payroll taxes. WLAs have access to user charges and property taxes while BLAs raise revenues primarily through fees and rents.

¹In Province of Natal these are called Joint Service Boards or JSBs.

2.5 Expenditure Responsibility. The central government plays a prominent role in all spheres of public expenditure, including protection services, education, social security and welfare, transport and communication. The Provinces mainly provide hospital and health services, roads and traffic administration, and other regional services. In addition, Provinces have the responsibility of overseeing resource transfers to local authorities, primarily BLAs. The local municipalities are concerned primarily with distributing water and electricity and providing other services. The RSCs have the responsibility for financing capital investments that are more regional in scope and improving and upgrading infrastructure in the poorer--including black-- municipal areas.²

2.6 As the description of the structure of government, and the assignment of expenditure and revenue responsibilities already suggest, South Africa is a highly centralized state. According to 1990/91 budgetary figures, the Central Government accounted for approximately 80 percent of the total revenues collected and 70 percent of the total government expenditures. Local governments, on the other hand, represent about 10 percent of the total revenues collected and about 8 percent of public expenditures. Given that Provinces are deconcentrated arms of the center, these figures actually understate the extent of the centralization.

2.7 This high level of centralization, however, masks a duality at the sub-national level: Nation-wide about eighty percent of the revenues of white municipalities originate from own sources. By contrast, at the regional level, for the Provinces and TBVC/SGT this figure was in 1990/91, for example, 16 percent and 42 percent respectively. The dependence of BLAs on the center is equally high. South Africa is thus characterized by a dual intergovernmental structure. On one side is a system of finance in which the central government provides the fiscal base of the TBVC, SGT, and BLAs through substantial transfers, and on the other an adapted version of a centralized system which, in practice, allows white local authorities sufficient autonomy to act as an independent tier of government. To assess how this duality will affect the design of policy options for the metropolitan areas in the future, the following sections provide a detailed description of the financing mechanisms of local governments³.

²There are, however, significant differences between some of the regional councils. In the Cape Province, for example, regional councils also have responsibility for rural services.

³The discussion draws mainly on data on local governments in the Central Wits region. The broad conclusions are however applicable to other parts of the country.

**Table 2.1: Share of Revenue, Expenditures and Transfers by Tier of Government
1990/91**

	Revenue Shares	Expenditure Shares	Transfers as % of Own Revenue
Central	80.1	70.9	—
Province	2.0	9.7	83.6
TBVC/SGT	6.7	11.8	58.1
Local	10.6	7.6	17.8
Total	100.0	100.0	100.0

Memorandum Items

	1987/88	1988/89	1989/90	1990/91
Transfers as % of GDP	5.7	6.1	6.2	6.4
Transfers as % of GDP (extra-budgetary incl.)	9.6	10.1	10.1	10.8
Transfers as % of Expenditures	30.4	30.9	29.7	32.3

Source: Department of Finance

2.8 Financing of BLAs. Black local authorities (BLA) in South Africa are heavily dependent on central government and RSC transfers for financing of public services. The lack of a fiscal base in black townships is a result of various forces. First, apartheid policies have forced the concentration of lower-income households in the townships and have placed effective barriers to the growth of the formal manufacturing and commercial sector in the BLAs. These regulations have deprived the black community of ownership of land and housing, thus aborting the growth of a property tax system. In the long run, the lack of ownership rights has also prevented the black community from using land and housing as a form of collateral to generate a growing economic and, hence, a taxable income base. Finally, rents and service charge boycotts protesting the lack of representative government structures have further diminished the already limited revenues being collected by the BLAs.

2.9 The dependence on upper-tier financing is well reflected in the data for BLA in the Central Wits RSC, which is one of the richest region in the country. As Table 2.2 shows, own revenues accounts for a small portion of total revenues. For Central RSC as a whole, own revenues of BLAs are approximately five percent of total revenues. The major portion of the revenues are either central government transfers, predominantly general grants

provided through Provincial administrations, or grants for current expenditures from RSC levies (payroll and turnover taxes).

**Table 2.2: Revenue Structure of BLA in Central Wits: 1992/93 Budget
(Rand Millions)**

	Alexandra	Diepmedow	Dobsonville	Soweto
Own Revenue	0.3	3.5	0.9	9.9
Health Grant	0.7	0.6	0.0	10.1
Provincial Grant	16.8	28.2	7.4	103.4
RSC Grant for O&M	16.9	22.0	2.8	57.9
Total	34.7	54.3	11.1	181.3
(Percentages)				
Own Revenue	0.86	6.45	8.11	5.46
Health Grant	2.02	1.10	0.0	5.57
Provincial	48.41	51.93	66.67	57.03
RSC Grant for O&M	48.70	40.52	25.23	31.94

Source: Central RSC

2.10 The situation at the national level is similar. Grants from the central government account for over 60 percent of the revenues of BLA across the country. This is well reflected in the fact that Provincial grants have been increasing at a rate of about 17 percent annually, from 370 million Rands in FY 1987/88 to about 800 million rand in FY 1992/93. While still a relatively small portion of the overall inter-governmental transfers, on average about 10 percent of total, these grants have progressively become the dominant source of finance for BLAs. Initially classified as bridging loans and intended for financing capital expenditure in black communities, central government has converted the flows to explicit grants for financing of current expenditure. In addition, as explained below, even the RSC revenues--which are suppose to finance capital expenditures in the black communities--have been diverted to finance the current expenditures of BLAs.

2.11 **Financing of WLAs.** Relative to BLAs, the fiscal story of WLAs is one of sharp contrasts. As the data on Central Wits RSC in Table 2.3 suggest, on average, grants from other tier governments account for approximately three percent of the total income of WLAs--the corresponding figure for BLAs was close to 95 percent. Property taxes, implicit taxes on consumption of electricity, water and other services (surplus on trading services) and interest income provide the main sources of income for WLAs.

Table 2.3: Central Rand: Contributions to Net Income (incl. Int. & Grants)

Year Ending June 30	1991 (%)	1992 (%)	1993 (%)
Property Taxes			
Residential	12.10	15.80	15.40
Industrial/Commercial	17.20	24.40	23.70
Government	10.70	12.50	12.30
Total Property Taxes	40.10	52.67	51.38
Surpluses from Services	23.22	11.19	13.81
Other⁴	33.67	33.00	31.78
Grants	3.01	3.13	3.03
TOTAL	100.00	100.00	100.00

Source: Data collected from Town Treasurers

2.12 Several important features of the WLA finances should be noted. First, the implicit taxes on consumption of services such as electricity and water represent an important source of income for WLAs. To ensure the access to this source of revenue, local authorities have been given the exclusive right to distribute services such as water and electricity. As a result, each white municipality has its own distribution network; in a relatively integrated urban setting such as Central Wits, for example, there are at least five separate local authority distribution utilities for water and electricity and nation-wide there are more than 700 at the local level. These distribution utilities purchase electricity and water in bulk and distribute to users within their municipal boundaries. Not only do consumers of electricity pay full user charges that compensate for capital and operating and maintenance costs but also an implicit excise tax on water and electricity. Between 1990 and 1992 the tax on electricity in the various WLAs in Central Wits, for example, has averaged around 20 percent for electricity. The average for water was 11 percent. There are large variations around these averages with Johannesburg charging 45 percent implicit tax rate on electricity in 1991 and Randburg charging 22 percent for water in the same year.

2.13 The revenues from the high level of taxation of electricity and water, however, are used to cross subsidize other services and dampen the increases in property taxes. In fact, in the major WLAs, taxes on properties are set residually after the municipalities have decided on the level of profits to be generated from the distribution of services such as electricity and water. For example, Table 2.4 shows for Johannesburg and Roodepoort the required increases in the share of property taxes in total revenue if the combined amount of electricity and water surpluses were to be generated from taxes on property.

⁴Includes interest payment. Data was however not available to ascertain the extent of "net" interest and "internal" interest payments. The latter is in effect a book-keeping device.

Table 2.4: Trading Account Surplus and Property Taxes

Year	Actual Share	Required Share
1989/90	17.5 [22.9]	32.4 [27.6]
1990/91	15.9 [23.0]	30.5 [27.0]
1991/92	22.3 [22.9]	30.4 [28.3]

Numbers in square brackets are for Rodepoort

2.14 The cross-subsidy from trading accounts to property taxes however points to a second characteristic of the WLA finances: the role of cross-subsidy between businesses and residents. Overall, residents in WLAs in the Central Wits Area receive a rebate of the order of 35-60 percent in their property tax payment which is not available to businesses or commercial property.

Table 2.5: Central WITS LAs: Property Tax Rebates

	Rebate (%)
Johannesburg	
Residential	35/55
Government	
Randburg	
Residential	40.00
Government	20.00
Sandton	
Residential	60.00
Government	
Rodepoort	
Residential	40.00
Government	10.00

Source: Data collected from Town Treasurers

2.15 The final fiscal incidence and efficiency of this system of finance are not obvious. Clearly, by zoning businesses within white communities, WLAs have been able to cross-subsidize their residents in the form of property tax rebates. However, to the extent that businesses are able to pass on the cost of these excess charges, especially in the case of non-tradeables, the cross-subsidy is proportionately less. On the other hand, given the highly integrated nature of the labor market in the metropolitan areas, the potential for exporting part of this tax burden from WLAs to BLAs is quite high, thus further protecting the cross-subsidy to white residents. This latter issue has been one of the principal sources of tension in the politics of apartheid. By zoning in businesses within their municipal boundaries, WLAs have forced members of the black community to work and consume in white areas, thus indirectly financing part of the cross-subsidy to white residents.

2.16 Regardless of whether this system of implicit excise taxes on services, higher property taxes on business activities and residential rebates is an efficient or equitable system, it clearly scores well on revenue adequacy—as reflected by the limited reliance of WLAs on upper-tier transfers. In fact, this system seems well adapted to financing the public service needs of municipalities where equity dimensions play a small role and expenditure responsibilities are limited. As pointed out earlier, local authorities in South Africa are not responsible for items such as education and health. The critical question therefore is the extent to which such a system of financing can be partially or fully extended to the future amalgamated cities of South Africa—the discussion of this question is central to the analysis in Chapter 5.

2.17 **Regional Service Councils.** RSCs/JSBs were established by the national government in 1987. Given the authority to raise payroll and turnover taxes over a larger metropolitan area comprised of several WLAs and BLAs, the RSCs have the authority to finance, on a project by project basis, capital investments of a regional nature and also infrastructure in the black townships.

2.18 Even though the mandate is to finance capital investments, progressively, the RSC budgets have been diverted to finance the operation and maintenance costs of BLAs—thus reducing the need for central government to continuously increase transfers through the Provinces to the black townships. For example, in 1992/93 budget the Central RSC has allocated approximately 40 percent of its revenues to finance the current expenditures of BLA in its jurisdictions⁵. The remainder is used to finance capital investment in the townships on a project by project basis.

2.19 By creating a fiscal arrangement over a group of WLAs and BLAs, RSCs form a geographic boundary that has the potential of capturing some of the spillovers that result from the fragmented nature of the urban conurbations of South Africa. For example, by levying the business tax and payroll taxes within the boundaries of WLAs and financing investments in BLAs, the RSCs to a certain extent return to the black community some its share of the

⁵Central RSC may be an extreme example. Other RSCs on average allocated about 20% of their budgets for current expenditures.

fiscal contribution to WLAs. In addition, there may be some element of redistribution in these flows.

2.20 To summarize, within a highly centralized system of intergovernmental finance, the overall fiscal situation of local governments is one of contrasts. WLAs are fiscally strong relying on user charges and property taxes to finance their expenditure needs while the BLAs are dependent on central and RSC transfers. Not only has this system of finance left the BLAs fiscally weak, it has also destroyed the basic elements of governance and accountability.

Chapter 3: Size of the Back-log

3.1 One of the critical problems confronting the cities of South Africa is the back-log in urban infrastructure and basic services in the black communities. How to rapidly finance these investment is a central element of the debate on restructuring local governments. This chapter provides an initial assessment of the size and nature of the back-log in local goods across the four metropolitan areas. To assess the extent of the potential fiscal shock on local governments, these estimates are placed in the context of the expenditure and revenue flows of the cities. In doing this analysis, it is initially assumed that only the fiscal base of the RSCs and WLAs are available to finance the back-log. The chapter concludes by looking at some of the implications for the design of fiscal strategies and identifies key areas that will need to be addressed in future work.

3.2 Affordability of the urban investment program needs to be assessed at the household, municipal and macro level. Preliminary analysis suggests that WLAs and RSCs would be able to finance the capital investments and the associated operations and maintenance for upgrading existing black settlements to an intermediate service level. This surprising result indicates that local financing of major aspects of the back-log in urban infrastructure and services may be feasible. Such a policy would, however, require important adjustments in the structure of local government finance. WLAs will need to pool their resources and also have access to RSC revenues. In addition, user charges for the consumption of services will need to be broadened. Finally, the white municipalities will need to rely more heavily on borrowing and either increase their property and trading account taxes or reduce, in real terms, the existing levels of capital and current expenditures in white communities. These adjustments would enable WLAs to finance capital costs and possibly a portion of O&M of BLAs through direct transfers while user charges would cover the remaining consumption costs. The potential for such horizontal financing is one of the options available for financing the back-log in services and for providing the fiscal base of the unified cities. The efficiency and equity implications of adopting this financing strategy are discussed in Chapter 5.

3.3 Local financing of the back-log in urban services will however have an important impact on the macro economy. Policy makers will therefore need to ensure that local financing strategies are consistent with macro stability, external borrowing capacity and other investment priorities at the national level. The current budgetary regulations that constrain the growth of local government expenditures may be an effective policy tool for ensuring that local government financing strategies are consistent with national fiscal constraints.

Investment Profiles: Impact on Local Fiscal Bases

3.4 Various investment profiles have been estimated for the major metropolitan areas of South Africa.⁶ The profiles include cost estimates for: (a) upgrading of existing squatter

⁶The analysis below is based on actual investment costs estimates for the Witwatersrand, PE, and Durban only. On the basis of these estimates, investment costs for Pretoria and Cape Town have been extrapolated using weighted per capita costs of delivering services to the other metropolitan areas.

and formal communities; (b) the development of suitably located vacant land for the supply of low and moderate income households; and (c) the expansion of bulk infrastructure systems to eliminate existing deficiencies as well as meet the demand generated by the

Investment Standards

Three levels of (engineering) standards have been considered in developing the investment profiles for the metropolitan areas. These are:

[1] **Basic Standard** One standpipe per 20 stands; on-site sanitation; high mast lighting; gravel surface road.

[2] **Intermediate Standard** Water and sanitation; one standpipe per 5 stands; intermediate sewerage; Electricity; house connections with restricted supply (pre-paid meters); high-mast lighting; paved bus roads; refuse collections from specific points from within the communities.

[3] **Full Standard** Water and sanitation; House connections and conventional sewerage; Electricity; house connection and full street lighting and underground cable; all roads paved; refuse collection from individual houses.

Note: The standards presented here are not recommendations for actual implementation. The standards and the associated costs reported in this report are simply examples to show the potential bounds on cost estimates.

proposed upgrading and development of new sites. These investments cover water, electricity, sanitation, solid waste, and municipal roads and are only a sub-set of what are currently considered local public goods.⁷ In addition, the profiles have been estimated for three alternative (engineering) standards.

3.5 The cost estimates of the back-log for the four metropolitan areas are summarized in Table 3.1. As a first approximation it is assumed that the capital costs are financed in one year using only the revenue base of the WLAs and RSCs. To understand the impact of such a fiscal shock, the costs are compared with the country's annual GDP and the annual fiscal base of the four cities. These calculations reveal clearly the extent of the back-log. Depending on the engineering standards chosen, capital investments alone represent between 4.5 to 7.5 percent of one year's GDP, or about 270 to 464 percent of the total annual

The actual costs for Pretoria and Cape Town will be estimated during the next urban mission to South Africa.

⁷Local functions such as police, ambulance, fire protection and community facilities are not included in the cost estimates. In addition, the investment needs in health and education, which are currently provided by central government, are also not considered. The analysis thus assumes that health and education will continue to be funded centrally.

revenues of all RSCs and WLAs in the four metropolitan areas. The extent of the fiscal resources required suggest that the cities cannot finance the investment needs from local resources as a lump-sum, one year investment. Instead, it will be necessary to gradually phase in the investments by drawing local capital markets.

3.6 As an example of phased investment, a second scenario was calculated assuming that the capital expenditures are implemented in equal installments over five years. The exercise assumes a 5 percent real interest rate and a repayment period of 15 years. As in the one year exercise, the investments are also financed from the revenue base of WLAs and RSCs while consumption charges are recovered through user charges levied on beneficiaries. The profile of principal and interest payments for the capital investments and operations and maintenance is shown in Annex 1. In this scenario, the payments will reach a maximum by the sixth year of the investment program.

3.7 As shown in Table 3.2, by the sixth year of the program the interest and principal payment for the minimum (or intermediate) standard investment profile will represent about 45 percent of current revenue of the cities combined⁸ and over 68 percent for the high standard. In other words, to finance the intermediate standard of services WLA and RSC revenues will need to increase by approximately 7 percent annually in real terms for six years to pay for the principal and interest during the duration of the loan. During this period all other expenditures are assumed to remain constant. To finance the high standard, revenues will need to grow at a rate of about 10 percent per year in real terms. The extent of the adjustment is evident by the fact that over the last five years revenues of the four metropolitan areas have, on average, increased by only 2 percent per annum in real terms.

⁸As a result of the assumptions underlying the O&M costs, the difference between BASIC and INTERMEDIATE standard is marginal.

**Table 3.1: One-year Investment Program for the Metro Areas:
Capital Costs**

	Basic	Intermediate	Full
Total Investments (Rm)			
Upgrading	1,494.64	2,454.96	7,494.83
New Sites	2,950.72	3,910.26	5,016.72
Sub Total	4,445.36	6,365.22	12,511.56
Bulk	6,844.91	6,844.91	6,844.91
Total	11,290.27	13,210.13	19,356.47
% of GDP			
Upgrading	0.78	1.22	3.03
New Sites	1.04	1.42	1.88
Sub-Total	1.82	2.63	4.91
Bulk	2.61	2.61	2.61
Total	4.43	5.24	7.52
% of Expenditure (WLA & RSC)			
Upgrading	29.52	45.83	114.25
New Sites	39.14	53.36	70.86
Sub-Total	68.67	99.19	185.11
Bulk	98.33	98.33	98.33
Total	167.00	197.52	283.44
% of Revenues (WLA & RSC)			
Upgrading	48.40	75.13	187.32
New Sites	64.18	87.49	116.17
Sub-Total	112.58	162.63	303.49
Bulk	161.22	161.22	161.22
Total	273.80	323.85	464.71

Table 3.2: Financing Charges: Five-year Investment Program for the Metro Areas: Principal and Interest in Year Six

	Basic	Intermediate	Full
Rand Millions			
Upgrading	293.46	359.26	1,096.81
New Sites	579.35	572.24	734.16
Sub-Total	872.81	931.50	1,830.97
Bulk	1,001.70	1,001.70	1,001.70
Total	1,874.51	1,933.20	2,832.67
% of Expenditures (WLA & RSC)			
Upgrading	5.80	6.71	16.72
New Sites	7.69	7.81	10.37
Sub-Total	13.48	14.52	27.09
Bulk	14.39	14.39	14.39
Total	27.87	28.91	41.48
% of Revenue (WLA & RSC)			
Upgrading	9.50	11.00	27.41
New Sites	12.60	12.80	17.00
Sub-Total	22.10	23.80	44.41
Bulk	23.59	23.59	23.59
Total	45.70	47.39	68.01
FOOTNOTES: (a) Includes O&M costs. Ten percent of investment costs annually for BASIC and 5 percent for INTERMEDIATE and FULL.			

Some Implications

3.5 Several issues relevant for the design of urban fiscal policies are evident from this preliminary analysis. Primary amongst these are (i) the need for further refinement of the investment estimates; (ii) the importance of accessing capital markets by local governments; and (iii) the potential for local government financing of the back-log.

3.6 **Further Work.** The figures reported in Tables 3.1 and 3.2 are underestimates of the potential cost of the back-log at the metropolitan level. Not all urban centers have been included and only a sub-set of what are considered local goods are included in the cost profiles. The need to extend this work to cover all of the major urban areas and all local goods

is evident. Without a more accurate estimate of the total cost of financing the back-log , developing an appropriate fiscal strategy will be difficult.

3.7 In addition, to assess the robustness of the figures, the assumptions behind the calculations, such as population count, growth rates, and per unit costs, need to be tested. The uncertainty inherent in many of these assumptions however suggest that contingencies in the design of any fiscal strategy may be necessary. For example, during the implementation of the investments policy makers may need to prioritize expenditures--i.e. ascertain in advance which investments can be delayed if there is a short fall in available finance--or identify additional fiscal resources that may be tapped at a short notice. Whether the such flexibility can be achieved with only local financing or require central assistance is addressed in Chapter 5.

3.8 Capital Markets. The cost estimates clearly suggest that without access to capital markets, either directly or through the intermediation of other tiers of government, it will be difficult for the cities to bear the primary burden for financing the back-log in urban infrastructure and services. In other words, while it may be difficult for the local government fiscal base to absorb the size of the back-log over a short period, capital markets may be better placed to assist in smoothening the fiscal shock.

3.9 Preliminary calculations show that if a five year investment program is implemented, by the sixth year the stock of total local government debt will increase, relative to 1993 figures, by 170 percent if the minimum standard is adopted, 199 for the intermediate, and by over 280 percent if the full level is adopted. These figures assume that over this period borrowing is undertaken only for the purposes of financing the back-log as defined above. From a national perspective, this level of borrowing implies that by the sixth year of the program the investment in local goods will have absorbed 29 to 50 percent of gross national savings assuming that there is no growth in the savings rate relative to 1993 figures.

3.10 To what extent can capital markets in South Africa meet such financing needs, what are the macro implications of such borrowing , and what financing strategies should be pursued by the center and local governments to facilitate the access to capital markets--are critical issues that will affect the design of fiscal policies. It can be argued that the cost of borrowing for future amalgamated cities may increase sufficiently to warrant an intermediation by the central government. On the other hand, this increase may be the price paid for ensuring the independence of the cities and, hence, a greater accountability to local constituencies. Any direct borrowing by the cities will, however, need to be implemented under a strict prudential framework to ensure that the market or local governments do not falsely assume that, in the final analysis, central government will implicitly back all local government borrowing. Otherwise, inefficient spending by municipalities could have potential macroeconomic consequences as the central or regional government inherits the growing deficits of local authorities.

3.11 On the other hand South Africa already has an active and deep capital market in which local governments are strong participants. In addition, preliminary figures suggest that local governments are not heavily indebted. Data from the Reserve Bank suggest that local

government across the nation have a total of 5 billion rands as liquid reserves—a base that may be leveraged to access capital markets. The issues revolving around the access to capital markets by local governments will form one of the areas of investigation of the future World Bank Urban Mission to South Africa.

3.12 Local Financing. There are two primary source of finance at the local level: revenue increases and expenditure prioritization. The discussion has so far focused on quantifying the extent of the back-log and suggesting the levels of increases that will be required in revenues to sustain such investments. Equally important, however, will be the ability of the white cities to cut back on existing expenditure levels and shift resources towards the black communities.⁹ As Table 3.2 suggests, a 6 percent decrease in expenditures sustained over six years would provide the additional resources necessary for financing the intermediate level of investment at current levels of taxation. The feasibility of adopting this option by itself or in conjunction with increases in revenues can only be ascertained by a careful review of the existing expenditure patterns of WLAs.

3.13 Secondly, while a "standards" approach can be quite useful for ascertaining the cost of service provision, the crucial issue from an economic view point is the ability of households to express their preferences and their willingness to pay for the different levels of services. In this context, representative local governments are a fundamental prerequisite for allowing community preferences to guide the debate on delivery standards and affordability, creating perhaps a fiscally more realistic approach to the delivery of public services. Without such a participatory approach the ability to build institutions that promote public accountability cannot be fostered. Equally important, without the appropriate governance structure, local governments will not be able to get access to property taxes and user charges from the direct beneficiaries of the investments.

3.14 The third element that will affect the potential for local financing is the ability of local governments to "unbundle" the investment package and finance separate components. As Table 3.2 suggests, capital costs and operation and maintenance for upgrading settlements even to the intermediate level is affordable at the local level. Under the assumption that the investments for upgrading the settlements are implemented over a five year period with a fifteen year financing option, WLA and RSC revenues need to increase by about 1.5 percent annually for six years to pay for the principal and interest of the capital costs and operations and maintenance. If the investment program is phased over a longer period the ability of local governments to finance the capital investments and operations and maintenance is even more evident. A comparison of a 5 and 8 year investment program is shown in Table 3.3. The calculations show that for a eight year program, the annual rate of increase in revenues required to finance the upgrading in services is less than one percent for both the basic and intermediate level of standard. In general, the longer the investment period, the greater will be the ability of local budgets and capital markets to absorb the incremental cost. Whether

⁹In general, the best way to absorb a shock is to have as many degrees of adjustment as possible; only in special cases will it be optimal to adjust by holding some instruments fixed at pre-shock levels. Applied to this context, this general principle suggests that WLAs may find it desirable not only to change tax levels but also to limit their own expenditures in some cases.

political pressures and the needs of those who have been deprived of basic services will permit such phasing remains to be seen.

**Table 3.3: Annual Increase In Net Income Required to Cover Debt Repayment
(including O&M)
(Figures in %)**

	Basic	Intermediate	Full
5 Year Program			
Upgrading	1.23	1.50	4.33
New Sites	2.38	2.35	2.98
Sub-Total	3.51	3.72	6.88
Bulk	3.98	3.98	3.98
Total	7.02	7.21	10.00
8 Year Program			
Upgrading	0.77	0.94	2.69
New Sites	1.48	1.46	1.85
Sub-Total	2.18	2.31	4.24
Bulk	2.47	2.47	2.47
Total	4.33	4.45	6.14

Impact At the Household Level: An Example From Central Wits

3.15 A similar conclusion about the affordability of an upgrading program at the local level is evident from the data on Central Wits. Two financing options were explored for this urban area. For both it was assumed that capital investments for upgrading and for the development of new sites may be implemented without the bulk investments and phased in over a five year period⁶. In the first strategy, water and electricity costs are financed through increases in trading account surpluses and in the second, investment costs for sanitation, roads, drainage and refuse collection are financed through increases in property taxes. The objective of this exercise is to assess at the household level rather than at an aggregate level the impact of financing the back-log from the fiscal bases of WLAs.

⁶As in the previous exercises, this implies that debt payments including O&M will reach a maximum in the sixth year of the financing program. A resident of a WLA will therefore see a progressive increase in electricity and water bills and property taxes with the maximum payment being reached six years after the investment program has been initiated.

3.16 Table 3.4 shows the increases in revenues required from trading account surpluses to finance the upgrading and new sites investments for water and electricity in the Central Witwatersrand area. As the table shows, to finance these costs including capital investments and O&M, the electricity bill of a resident in the WLAs will increase by the sixth year, relative to the 1991/92 tariff estimates, by 0.51 to 7 percent for electricity and by 4 to 10 percent for water. For Johannesburg municipality, for example, it means that the surplus from water and electricity will need to be raised by 7 percent by year six for the basic investment in upgrading and new sites, by 18 percent for the intermediate level and by 43 percent for the full service. These figures suggest that while the full service level may be difficult to finance, if the investment can be separated into individual components (for example, upgrading and new sites versus bulk investments) it may be possible to finance the basic and even the intermediate levels from local resources.

Table 3.4: Real Increase In Per Capita Electricity and Water Bills for Central Wits (Figures in %)

	Upgrading Costs	Upgrading and New Sites
Electricity		
Basic	0.06	0.51
Intermediate	0.52	3.42
Full	3.35	6.66
Water		
Basic	0.51	4.4
Intermediate	0.51	4.4
Full	5.30	9.6

3.17 The conclusion is the same if one estimates the increases required in property taxes to finance the up-grading investments for sanitation, roads, drainage, and refuse collection. Indeed, calculations from the Central Wits area suggest that if RSC revenues at current tax levels are available to assist in the financing of these specific capital investments, no increases in property taxes will be required to implement up to the intermediate level of upgrading. Again access to capital markets to phase in the investment would be critical.

Impact at the Macro Level

3.18 In addition to its impact on capital markets, as suggested earlier, the financing of the back-log in urban services has the potential of affecting the government's overall budget deficit and the country's balance of payments. These linkages become all the more

important when one considers that urban services are only one category of expenditures that will require immediate financing. There are also pressing needs in the area of housing, health and education, for example. Given the potential impact that aggregate public spending will have on the national savings pool, government's consolidated budget deficit, and balance of payments, the financing of the urban back-log should not be seen in isolation of the overall expenditure needs of the country. It will be important to ensure, therefore, that affordability at the municipal level is consistent with macro economic constraints.

3.19 Work on macro economic policies undertaken at the World Bank indicates that over the period 1994-2005, total cumulative government capital investment could be as high as 33.2 billion Rands at 1985 prices if the economy continues to grow at its historically low rates, and 71.7 billion Rands if faster rates are achieved through supply-enhancing policies. Spread over this period, these figures are equivalent to 1.8 percent and 3.3 percent of annual GDP respectively. These "maximum" investment figures reflect what is sustainable at the macro level and consistent with a certain level of fiscal deficit and foreign debt.⁹

Table 3.5: Urban Services as a Percentage of Total Public Investment⁽¹⁾

	Annual Total Public Investment ⁽²⁾ (% of GDP)	Basic		Intermediate		Full	
		5 Year	8 Year	5 Year	8 Year	5 Year	8 Year
Low Growth	1.7	33.0	21.0	40.0	25.0	58.0	36.0
High Growth	3.2	15.0	9.7	18.0	11.0	27.0	16.0

⁽¹⁾ Figures in 1992 prices.

⁽²⁾ Only capital investments are included.

3.20 Table 3.5 shows the urban investment program for the four metropolitan areas in relation to the overall capital investment program sustainable at the macro level¹⁰. Under the low growth scenario, for example, the intermediate level of urban investment could account for 25-40 percent of the total public investment that is sustainable at the macro level. For the

⁹See World Bank Discussion Paper, South Africa: Economic Performance and Policies, November 24, 1993 for a detailed analysis of the assumptions underlying the calculations of these figures. For the purposes of this report, the figures are being used for illustrative purposes only.

¹⁰These figures are for the four metropolitan areas only and do not reflect the total back-log in the urban sector. Calculations for the urban sector as a whole would have to include estimates for a variety of additional investments (e.g. community facilities, police, and ambulance) and adjustments for population figures. The figures reported in Table 3.5, therefore, under-estimate the potential impact of urban investment on the macroeconomy.

high growth scenario, the figures are between 11-18 percent of total public investment. These rough calculations suggest several implications. First, affordability at the municipal level does not imply that at the macro level the nation can easily finance the back-log in urban services without major tradeoffs in other areas. Determining inter-sectoral priority for public investment is an important and urgent task facing policy makers in South Africa. Second, economic realities suggest strongly that South Africa may not be able to meet the back-log in services over a short time span. Third, without growth enhancing policies, South Africa will be severely constrained in its ability to meet the demands for basic public services. Finally, the potential for investments by subnational governments to surpass the maximum sustainable at the macro level, suggests that macro economic control by central authorities over local government budgets may be critical during both the transition and the long-run. It may be advisable to continue the current policy whereby the central government approves the overall budgetary growth of expenditures by local government¹¹. This policy provides a good balance between allowing the local governments sufficient autonomy to set their own budget priorities within an overall envelope consistent with macroeconomic goals.

3.21 The desirability of local financing of the investment back-log will be discussed in Chapter 5. This chapter has concentrated on estimating the size of the back-log and on assessing the potential fiscal shock that may result from financing the investment program at the local level. The calculations clearly show that in terms of the fiscal base of the cities, the back-log represents a substantial percentage of existing expenditures and revenues. However, with access to capital markets, revenues from the RSC, and some increases in trading account and property taxes, WLAs may be able to rapidly finance a program of upgrading black settlements. This potential is further strengthened if the resources are pooled across WLAs within metropolitan areas. In the long run, a strategy which promotes (i) community participation in the delivery of services, (ii) rationalization of current expenditures in the WLAs and BLAs (iii) payment of user charges and property-taxes from the black-community (iv) local tax increases in WLAs may permit the cities to finance even the bulk investments solely with local resources¹². This is an important conclusion given that the economy also faces back-logs in housing, health and education and which may be stronger contender for central resources. Affordability at the local level, however, will need to be made consistent with affordability at the macro level. Even as local governments rationalize their fiscal base and begin financing the back-log, central authorities will have to ensure that macro stability is maintained and that public investment at the aggregate level is sustainable.

¹¹ Complementary policies could include control over the size of local government deficits or levels of debt.

¹² An equally important condition is the need to redraw the fiscal and administrative boundaries of the cities. This point is addressed in Chapters 4 and 5.

Chapter 4: Decentralization Trends: Real and Fiscal

4.1 This chapter analyses the impact of two important types of decentralization on the cities of South Africa. The first, already well in progress, is the decentralization of employment nodes that is influencing the structure of some of the cities. The second, and still uncertain, is the outcome of the national debate on fiscal decentralization. Both these forms of decentralization have real and fiscal linkages which will bear on the analysis of financial options in Chapters 5 and 6.

4.2 The chapter first discusses the dynamics of household and firm mobility in Central Wits and Cape Town. Preliminary data from these two urban areas reveal a highly integrated metropolitan labor market with bulk of the formal employment located in the core cities. However, in recent years there has been a rapid decentralization of jobs and, in the case of Central Wits, some movement of black households towards the CBD. The jobs are, however, not moving towards the townships but rather into surrounding white municipalities. In addition, it is expected that in the foreseeable future the townships will continue to be the place of residence for the majority of the black urban population. The drawing of narrow boundaries to create new municipalities would, therefore, preserve the inequities and spillovers that characterize the urban areas of South Africa. Consequently, the option of creating wider, metropolitan boundaries as the base for new local government structures may need to be considered.

Structure of Metropolitan Government: The division of fiscal responsibility between central and local governments is the vertical dimension of fiscal decentralization. The horizontal dimension is the way large metropolitan cities organize themselves to finance and deliver services within their areas. Three systems of horizontal fiscal relationship seem to have emerged in the governance of metropolitan areas: centralized metropolitan government (e.g. Manila, Seoul, Jakarta), under which a single local government has responsibility for all or nearly all the full range of local functions; functional fragmentation (e.g. many Latin American cities), under which the provision of services is area-wide but is split between the general purpose local government and autonomous agencies; and jurisdictional fragmentation (e.g. cities in the United States) under which responsibility for the same local functions lies with many local governments operating in the same urban area.

Centralized metropolitan government has all the advantages of centralization—planning, capturing economies of scale, and internalizing externalities. But it neglects diversity of preferences because government is so large and so far removed from the voter. In contrast, jurisdictional fragmentation has the most potential for recognizing differences in preferences and allowing citizen participation. It fails, however, to produce uniformity of services and tax burdens within the urban area, to allow for effective planning or coordination of capital investment, or to deal with spillover effects. Functional fragmentation—in which services are delivered by a set of independent public service agencies—has the advantage of specialized professional management, and some degree of freedom from the political process. It leads, however, to difficulties in the coordination of the delivery and financing of services. In addition, professional managers of agencies who have access to substantial revenues from user charges may overspend the function involved relative to what is spent on all other local functions. In sum, one model emphasizes local control and participation, another central coordination and a third technical efficiency.

[Adapted from: Bahl and Linn]

4.3 The discussion then focuses on some of the salient features of the fiscal decentralization debate as it relates to the financial system of the cities. The analysis suggests that a rapid devolution of new fiscal responsibilities on the cities should be avoided. Existing levels of central transfers may need to be guaranteed for the some time to come and if such transfers are to be reduced, a phased approach may be preferable. Finally, it is suggested that there may be strong economic reasons for keeping intact the current regional boundaries of the PWV.

Urban Structure and Locational Dynamics

4.4 The structure of metropolitan areas in South Africa is characterized by two forms of fragmentation--geographic and racial. The former--jurisdictional fragmentation--has resulted in white municipalities expanding beyond old core cities into surrounding minor centers and peri-urban areas. An important determinant of this expansion has been the natural pace of urbanization. In contrast, the racial fragmentation was a deliberate, political decision to create dormitory towns some distance from the white centers.

4.5 In spite of this fragmentation, the different jurisdictions have a highly integrated labor market. In the Central Wits area, for example, Johannesburg in 1990 accounted for 80 percent of the total employment of Johannesburg and its surrounding white municipalities (Sandton, Roodepoort, and Randburg). Cape Town CBD, to take another example, in 1990 accounted for 70 percent of the employment of the greater metro area. In general, the data on employment reveal a monocentric urban structure.

4.6 While data in this regard is sparse and often outdated,¹³ the dynamics of employment location suggest that a more multi-centered employment pattern may be emerging. For example, the Central Wits area is experiencing a strong trend of decentralization of employment from the central city to surrounding municipalities. This trend cuts across all sectors--manufacturing, trade and services. Over the 1985-1990 period, the total number of jobs in Randburg increased--albeit from a small base-- by about 14%, followed by Sandton (6.4%), Roodepoort (5.3%) and Johannesburg only 1.3 percent. Similar changes are also occurring in the Cape Town region where manufacturing jobs are moving to the east in the Bellville area and also towards the North. In both Cape Town and Johannesburg, however, the movement of the formal sector jobs has not been towards the existing black communities.

4.7 In the case of Johannesburg, there has also been an exodus of low and middle income white residents from the central city to the Northern suburbs. About 80 percent of the high-rise residential buildings in the central city are now occupied by new black immigrants coming from various townships, homelands and even other countries. According to one

¹³Data on the dynamics of locational decisions of households and businesses, the changing role of the informal sector, and the evolution of land markets would provide valuable information for the design of housing, land and fiscal policies. The constantly evolving nature of the cities suggest that it may be useful to establish a "monitoring unit" for gathering statistics on key aspects of the urban economy at regular intervals. This issue has been raised by Bank Missions with several institutions in South Africa.

estimate, there are about 45000 new immigrants living in the flats in Central Johannesburg. Along with the decentralization of jobs the movement of households has led to a fundamental change in the characteristic of Johannesburg's CBD. With over 14000 street vendors in the CBD alone, Johannesburg's downtown is going through a rapid transformation from the formal financial services and retail sectors to an increasing share of the informal sector economy.¹⁴

Table 4.1: Decentralization Trends: Johannesburg Area

Local Authority	1985 %	1990 %	Annual Growth Rate
All			
Johannesburg	84.0	80.0	1.3
Randburg	3.1	5.3	13.9
Roodepoort	4.3	4.9	5.3
Sandton	7.8	9.4	6.4
Manufacturing			
Johannesburg	84.0	81.0	0.5
Randburg	1.6	3.0	15.4
Roodepoort	7.4	8.6	4.3
Sandton	6.9	7.3	2.5
Offices			
Johannesburg	86.4	81.0	1.9
Randburg	3.5	5.6	13.4
Roodepoort	1.8	2.4	4.3
Sandton	8.3	11.0	9.2
Retail			
Johannesburg	77.7	75.2	0.9
Randburg	7.0	8.1	4.7
Roodepoort	8.3	9.4	4.0
Sandton	6.9	7.4	2.9

Source: May 1993 Aide-Memoire

¹⁴It is important to note that the figures reported on the locational change of household and firms took place during a period that apartheid regulations were still legally binding. It would, therefore, not be surprising if surveys taken recently show that the rate of change has continued to increase.

Implications for Redrawing Municipal Boundaries

4.8 In this context where the allocation of population and business activity over the urban areas is in a state of flux, it will be critical that any strategy chosen for financing urban services does not distort the locational choices facing individuals and firms.¹⁵ A policy of amalgamating cities and adjacent townships over a narrow boundary for the purposes of financing the back-log in services may result in such inefficiencies. There is a high risk that the fiscal burden on any one individual jurisdiction will create incentives for tax-paying households and firms to escape from the taxing jurisdictions. Moreover, low-income households may be attracted to the areas offering the highest level of transfer payments or public services for the poor. Because these incentives do not correspond to true economic benefits and costs, they cause misallocation of resources and economic inefficiency. In addition, they may also impact adversely on equity. There is no obvious reason why tax payers in the same income bracket should have to bear higher fiscal burdens depending on the place of residence; conversely, there is no reason why the benefits provided to the poor in some localities should be more generous than the benefits provided to the poor in other areas.

4.9 To illustrate the problem with narrow boundaries, an exercise was undertaken to assess the potential fiscal burden of a "town-twinning" program in the Central Wits area. For the purposes of illustration, various BLAs were merged with their adjacent white municipalities. In this exercise, the inherited deficits of the BLAs are financed by property increases in WLAs. Due to the large variation in these deficits, the mergers will result in an increase in property tax rates of about 9.3 percent in Randburg and Sandton and 40 percent in Johannesburg. On the other hand, in a combined metropolitan area the property tax increase would be approximately 32 percent.¹⁶

¹⁵Such a policy does not imply that fiscal incentives should not be used to affect the locational decisions of households and firms. The pros and cons of using fiscal policies for such purposes will be addressed in future work on land issues. What is important in the context of this paper is that financing strategies should not have inadvertent and unintended impact on the location of households and firms.

¹⁶This exercise is only indicative of the potential fiscal impact of the amalgamation process. The burden on property taxes and trading accounts in WLAs will be higher and the differences between the municipalities greater if past debt burdens of the BLAs and the back-log in services are also financed from local resources. The impact on locational decisions will also be higher.

It is possible that if service levels are similar across jurisdictions, tax differentials will be capitalized into land prices. Fiscal differentials are unlikely, however, to be capitalized completely into the price of land and would therefore still provide some scope for household movement to lower taxed jurisdictions. In general, some capitalization will lead to changes in land prices which will have a negative impact on equity with some landowners facing capital gains and others losses. The net welfare outcome is uncertain.

**Table 4.2: Fiscal Implications of Merging WLA's with BLA's
In the Central Witwatersrand and Financing BLA Deficits
With Property Rates in WLA 1992/93**

BLA/WLA Merger	BLA Deficit (in Rand millions)	Property Tax Rate in WLA's before merger (tax as a percent of site value)		Property Tax Rates in WLA's after merger and Financing the BLA deficit		Percent increase in Tax Rates
		Residential	Business	Residential	Business	
Alexandra Sandton/Randburg	12.0	2.4 1.3	3.8 2.6	2.6 1.4	4.1 2.7	9.3 9.3
Diepmeadow/Sowet o Johannesburg	200.3	2.1	3.8	3.0	5.3	39.6
Dobsonville Roodepoort	13.7	3.1	4.4	3.8	5.4	20.4
Metropolitan Area	226.0	2.1	3.7	2.7	4.9	32.4

4.10 The locational trends of employment also suggest that the formal sector is probably not shifting towards the townships. While there is some indication that the formal retail sector is expanding in existing BLAs, it is likely that most of the business and commercial tax bases may remain outside the boundaries of these townships. Possible reasons include the infrastructural advantage, economies of agglomeration and scale and better security that is available in WLAs. In effect, the past policies of apartheid zoning and investments may have "locked-in" an advantage which will change only slowly with sustained public and, subsequent, private investment directed specifically at the townships.

4.11 In addition, the decentralization trends also indicate that a majority of the black workers in the formal sector will continue to contribute to the fiscal base of the WLAs without having access to such revenues for financing basic services in their jurisdiction. This problem may remain unresolved even with the "twinning" of WLAs and adjacent townships. While the elimination of residential restraints will almost certainly lead a portion of the black population to move closer to the urban centers or to adjacent undeveloped land, zoning policies, lack of access to capital, and land prices may limit such possibilities. Even with policy changes to facilitate household mobility, it is expected the bulk of the black-community will continue to reside in municipalities different from their place of employment. Finally, the drawing of narrow municipal boundaries will not overcome the potential spillovers among jurisdictions in the urban areas.

4.12 The discussion thus suggests that in the case of the metropolitan areas, narrow drawing of municipal boundaries may result in unequal fiscal burdens in the financing of urban services. The potential for distorting locational decisions of households and firms would be high. In addition, narrow boundaries may not internalize the spillovers across jurisdictions. Two options are available to compensate for these effects. Central or regional fiscal transfers could be used to assist the municipalities to finance the cost of the back-log and compensate for the spillovers. Or, instead, the municipal boundaries could be drawn to so as to internalize the spillovers and reduce any incentive for locational decisions based solely on fiscal criteria. The trade-offs involved in relying on central versus local financing are addressed in the next chapter. However, at this stage, it should be noted that without recourse to central or regional transfers, the financing of urban services in twinned municipalities through a strategy of horizontal financing--as suggested in the previous chapter--may be inefficient and inequitable. Mobility of richer households and economic activities will, over time, place a strong constraint in implementing such redistributive policies at the local level. Consequently, drawing a more metropolitan-wide boundary may be a prerequisite for implementing a policy of local financing of urban services.

The National Debate on Decentralization

4.13 Political change in South Africa is not only directed towards forming a non-racial democratic system. It may also lead to the creation of a decentralized, and, perhaps, a federal state. The current debate on decentralization is focussed on the redrawing of regional boundaries and on redefining their fiscal powers and responsibilities. There are proposals for merging the Provinces and the TBVC/SGT states to create a series of new regions. In contrast with the current Provinces, these regions are expected to have greater fiscal autonomy with devolved revenue sources and new expenditure responsibilities. How this system may affect the finances of the metropolitan areas is currently not a prominent aspect of the national negotiations.

4.14 This vacuum is surprising, especially since the outcome of the debate on the intergovernmental system may have several implications for the cities of South Africa. First, decisions at the national level may change the very definition of a local good. A future government may well devolve aspects of health and education to cities precisely at a time when the process of amalgamation and financing of the back-log in urban services is about to begin. Secondly, the national negotiations may result in autonomous regions with substantial fiscal powers, including the right to regulate local governments within regional boundaries. How this will affect the current and future level of fiscal transfers to cities including the townships is also uncertain. Thirdly, the choice of fiscal instruments to devolve to regions will affect the choice available for cities. All of these uncertainties suggest the potential for a mismatch between available revenues and expenditure responsibilities at the local level is quite high. Any future fiscal strategy for cities in South Africa must plan for such a possibility.

4.15 Finally, in the special case of the PWV, the drawing of regional boundaries may have immediate implications for the structure of this larger metropolitan complex. While all prospective plans for a decentralized system of government include the PWV as a separate area,

serious considerations are also being given to incorporate parts of the PWV into adjacent regions. The objective is to strengthen the fiscal capacity of these new regions. The potential for spillovers of cost and benefits across jurisdictions if such a strategy is adopted may be sufficiently strong to affect the locational decisions of household and firms in this greater metropolitan area. In addition, it would exacerbate the exporting of tax burdens that is already taking place as, for example, in the case of the payroll and turnover taxes across the different RSC boundaries.¹⁷

Implications for the Design of A Fiscal Strategy¹⁸

4.16 The dependence of the BLAs on central transfers for the financing of operation and maintenance costs suggests strongly that any financing strategy for the South African cities will, in the short to medium run, need to maintain such central assistance. In this context, amalgamating cities and townships will not obviate the need for central transfers. Indeed, a simultaneous reduction of central flows and the implementation of a public investment program to finance the back-log may create a rapid emergence of fiscal stress on local governments. This caution is equally applicable to the debate on fiscal decentralization: cities may not be able to absorb a rapid devolution of expenditure responsibilities and finance the current back-log of basic urban services at the same time. Should any plans for reducing the level of central transfers be contemplated in the future, it would be important to implement them in a phased and gradual manner. This process would need to include a review of current public expenditures at the local level and a careful assessment of the fiscal capacity of the individual cities.

4.17 In general, the discussion of dependence of BLA on central transfers and the potential for rapid fiscal decentralization raises two important points. First, it suggests the need for correctly sequencing and dove-tailing the merging of the cities with any plans for reducing the flows of current central transfers and devolving additional expenditure responsibilities to the urban areas. Second, given the difficulty of appropriately synchronizing the sequencing there is a high potential that a mismatch of revenue and expenditure responsibility at the local level will emerge rapidly. To guard against such outcomes, there may be a need to devolve to the metropolitan areas a revenue base—e.g. a surcharge on the personal income tax—capable of absorbing such fiscal shocks or instead to guarantee a fixed level of transfers for a definite period.

4.18 Four specific suggestions emerge from this discussion. First, during a transitional period—defined between three to five years—the existing level of transfers may need to be maintained in real terms to assist the cities in their process of restructuring. Second, during

¹⁷Inhabitants of Orange farm, for example, who work in the formal sector in the Johannesburg area are contributing to the tax base of Central Wits RSC. Exporting of tax burdens will intensify in the future as locational dynamics increase and if the PWV is jurisdictionally fragmented.

¹⁸A discussion paper on intergovernmental fiscal relations in South Africa is currently being prepared by the Bank. This section therefore only summarizes some of the main points relevant for the discussion on local government finance.

the same period, it may be preferable not to devolve new expenditure responsibilities on cities especially in the field of education and health. Third, as part of insuring against the dangers of fiscal mismatch and addressing the uncertainties of the cost of the back-log, a certain level of central transfers may need to be allocated to a non-replenishable municipal fund as described in the next chapter. Finally, it may be preferable to leave the PWV as one economic and administrative region.

4.19 In sum, the drawing of narrow municipal boundaries will result in unequal burden sharing in the financing of urban services. The subsequent impact on the locational decisions of households and firms may be both inefficient and inequitable. Even if initially the differences in the fiscal capacity between municipalities is not that great, the current locational dynamics of households and firms indicate that the fiscal bases of many of the WLAs are not secure. Central and regional fiscal transfers would eventually be required to compensate for any existing and growing fiscal differences. Given the uncertainty of the outcome of the national debate on fiscal decentralization, it is not clear whether a reliance on central and regional transfers is a preferable option. Drawing larger boundaries and establishing a financial arrangement that pools the resources across several WLAs may provide the cities with a better fiscal capacity to meet the financing needs of the back-log.

Chapter 5: Elements of A Strategy: The Transition

5.1 The principal issue in the short run is the financing of the back-log of urban infrastructure and services in the black community. It is anticipated that during this period local governments will need to undertake an unusually large amount of public investment over a short period without access to sufficient property taxes and user charges from the beneficiaries. Financing will therefore have to occur through alternative means with an element of redistribution implicit in the strategy. The extent of the redistribution is, however, uncertain. The fiscal alternatives discussed below are based on the assumption that during this period local areas will not inherit new expenditure responsibilities or have access to newly devolved sources of finance. Instead, the focus will be on creating new revenue sharing arrangements from existing fiscal bases of the WLAs and the RSCs or the center

5.2 In this context, two alternative revenue-sharing mechanisms are being considered. The first option is to finance the back-log of local goods with transfers from upper-tier tax bases. The second is to use some combination of local revenue sources. In the former case, the transfers would be time-bound, perhaps three to five years or even less, but allowing enough time for the administrative merger of the cities to be completed and the investments initiated. The second option could include the following alternatives: (i) a sharing of RSC revenues across a metropolitan area; (ii) pooling of a portion of local revenues--property tax and trading account surpluses--over a metropolitan area; and (iii) horizontal transfers of revenues from white local authorities to adjacent black townships--a "town-twinning" program of sorts. To bring out clearly the different implications of these policies, the analysis below initially considers these options as being mutually exclusive. Given the various constraints discussed in the previous section, however, a combination of the various fiscal instruments will ultimately be needed to finance the back-log.

5.3 This chapter first broadly discusses the advantages and disadvantages of using central versus local financing. Based on specific criteria, the chapter then ranks the financial options described above. Finally, the chapter concludes by proposing a fiscal arrangement that draws on the strength of the various options being proposed.

Central Versus Local Financing: Some Considerations

5.4 **Central Financing.** The arguments in favor of relying on upper tier transfers are several. First, apartheid has been a national policy; logic holds that the burden of financing the back-log should not fall exclusively on local governments. Equally important, the deficit of services and the fiscal ability to overcome this deficit differs widely across the country--it would be inequitable to treat the financing of the back-log as a local problem.

5.5 These equity concerns become all the more apparent when differences in the fiscal capacity of regions and cities in South Africa is taken into consideration. At the regional level, for example, under the 10-region plan the per capita income differences between the

poorest and the richest region is approximately 1:6; the difference in tax per capita collected is over 1:16. Such differences are not significantly diminished in an alternative proposal for a 7-region configuration.

Table 5.1: Fiscal Indicators for the Witwatersrand

	GGP	Property Tax		Trading Surplus	Effective Property Rate	
		Residential	Non-residential		Residential	Non-residential
East Rand	10,476	142.49	195.16	246	3.27	4.40
Central Rand	11,364	153.88	358.48	191	2.36	4.45
West Rand	8,168	66.09	85.27	79	4.42	5.74
All Wits	10,773	137.18	261.40	187	3.38	4.75

Notes: [1] GGP figures are for 1988. All other data are 1992/93 figures.
 [2] Except for property rates, all other figures are in terms of per capita.

Source: Data gathered from Town Treasurers during May 1993 Mission.

Table 5.2: Percentage Increase in Net Revenues Required by Year Six to Finance Back-log

	Minimum	Intermediate	Full
East Rand	38	47	83
Central Rand	18	20	29
West Rand	59	62	78
All Wits	25	29	44

Source: May 1993 Mission

5.6 At the local level, the differences are equally important. For example, in the Witwatersrand area, which is interlinked through a highly integrated labor market, there are important differences in the per capita gross geographic product (a proxy for per capita income) and the per capita tax collected (Tables 5.1 and 5.2). Not surprisingly, the revenue increases required to finance a program of investment that is phased in over six years is quite different across these areas. Metropolitan differences are also reflected in the growth rates of total revenue. The average annual change in revenue in real terms over the last five years for Port Elizabeth is negative while for Durban it is approximately 1.1 percent and for the Central Rand area it is a healthy 4.6 per cent. The ability of different parts of the country to address the back-log thus varies substantially suggesting that a local solution to the financing problem may not be suitable for all areas.

5.7 Thirdly, as suggested in Chapter 4, it may be difficult for a local government acting alone to implement policies intended to achieve redistribution of income. The differences in the financing burden and the varying adjustments required at the local level (either through local tax increases on current tax payers, or expenditure decreases in white cities) may create strong incentives for households and firms to change locations based on fiscal considerations rather than economic criteria¹⁹. At the extreme, local areas that undertake the highest amount of redistribution may promote both a strong influx of poor households and the flight of wealthier residents and businesses—essentially destroying the fiscal capacity of the jurisdiction.

5.8 Finally, in favor of central transfers is the fact that the national tax base is broader and more progressive; if additional revenues are required, especially to pursue redistributive policies, the distortions and inequities may be less by tapping into the national base rather than the local one.²⁰ For example, if the investment needs are financed through central tax bases, then by the sixth year when all the investments have been phased in, the following increase in total revenues will be required:

(% increases)	Minimum			Intermediate			Maximum		
	VAT	PIT	CIT	VAT	PIT	CIT	VAT	PIT	CIT
Upgrading	0.07	0.11	0.32	0.11	0.18	0.53	0.35	0.54	1.61
New Sites	0.14	0.21	0.63	0.18	0.28	0.84	0.23	0.36	1.08
Bulk	0.21	0.49	1.47	0.32	0.49	1.47	0.32	0.49	1.47
Total	0.53	0.81	2.43	0.62	0.95	2.84	0.90	1.39	4.16

5.9 The cost of financing the investments directly from the center without relying on capital markets would require the following annual increases in total revenues generated from the VAT if the capital investments were implemented, for example, over a five year period.

¹⁹This argument is also applicable at the central level. The mobility of capital and skilled workers across international boundaries places a constraint on the ability of central governments to pursue a policy of redistribution. This constraint is generally less severe at the central level than for localities, however.

²⁰The VAT may not be progressive in its incidence. This source of revenue may, however, provide a "second-best" alternative for generating revenues from the black community for services if user charges and property taxes are not available.

(% increases)	Minimum	Intermediate	Maximum
Upgrading	0.13	0.22	0.68
New Sites	0.27	0.35	0.45
Bulk	0.62	0.62	0.62
Total	1.02	1.19	1.75

Drawing on all three central bases (VAT, PIT, CIT) would require even smaller increases. Finally, it could be argued that the restructuring of the metropolitan areas is a national issue with national implications. The stakes may be too high to consider it primarily a local problem.

5.10 Local Financing. The counter-arguments are equally strong. First, there may be more scope at the local level for shifting fiscal resources without the need for additional increases in rates—current turnover taxes, [even with all their inefficiencies] and pay-roll taxes fall into this category. These taxes are currently levied at a low level²¹ and are, because of national control, more or less uniform across urban sectors—the scope for differential distortions from turnover tax is thus limited. In addition, the levies are already available for financing capital investments in black townships and could easily be channelled into financing the back-log in a more systematic way.

5.11 In addition, political changes at the local level, especially if local participation in the choice and delivery of services is encouraged, may provide the opportunity to broaden the local fiscal base by progressively increasing the amount collected through user charges and property taxes from the black community. More importantly, such an effort would strengthen governance and accountability at the local level. Thirdly, by putting the pressure on the local budgets, incentives would be created for the rationalization of existing expenditure patterns. Implicit in both these arguments is the assumption that, at the margin, transfers from upper-tier governments may not be more efficient in promoting a process of participation, accountability or budget reviews at the municipality level. Fourthly, given the fiscal resources required for financing expenditures on education and health, items which have national spillover characteristics and a large redistributive element, it seems appropriate to finance local goods at the local level. Finally, relying on central transfers because they are subject to uncertainty, may actually undermine local fiscal management.

Evaluating the Options: Some Criteria

5.12 To evaluate clearly the tradeoffs underlying the fiscal options—central financing, RSC financing, metro-wide arrangement and town-twinning—a relative ranking of the alternatives

²¹The turnover taxes are levied at .14 percent and payroll at .35 percent.

has been summarized in Table 5.4. The criteria chosen in establishing the ranking are autonomy, equity, efficiency and administrative feasibility. Each is discussed below.

Table 5.3: Fiscal Options and Sources of Revenue

Fiscal Option	Sources of Revenue
Central Transfers	Personal income tax, corporate income tax, value-added tax
RSC	Turnover and payroll tax
Metro-wide	Property tax and excise taxes on services (water and electricity)
Town-twinning	Property tax and excise taxes on services (water and electricity)

Criteria

* *Autonomy* is defined here as the ability of the municipalities to adjust tax rates or bases for revenue purposes without being regulated by another tier of government. In this context autonomy and accountability are assumed to be correlated.

* *Equity*²² issues generally have several interpretations. Interpreted in terms of redistribution equity would imply that the ability to pay should play a determining factor in financing public investments. In other words, the beneficiaries of public investment and those who bear the fiscal burden are different households generally differentiated by income class. In addition, equity issues can also be defined in terms of differential treatment of households in the same income group.²³

* *Efficiency* considerations also cover several dimensions. As discussed earlier, the impact of financing strategies on locational decisions of households and firms will be an important consideration in the choice of fiscal instruments. The broader the geographic coverage of the fiscal instruments, the smaller is the potential for impacting on locational decisions. Secondly, and interlinked with the locational decisions, is the efficiency impact of increasing

²²Equity can also be defined in terms of the benefit principle of taxation. In other words, it can be argued that equity is best served if households pay according to the level of services received. This principle can be applied in various ways such as across income classes or across space. More centralized structures would generally work against the benefit principle.

²³In public finance literature this distinction is discussed under the topics of vertical and horizontal equity. Each can be applied to the issue of service *financing* and that of service *provision*. A policy that imposes heavier burdens on upper-income households may achieve vertical equity objectives. But the distribution of service benefits across income classes is also important. It is really the net impact of tax burden and distribution of benefits that ultimately enhances or detracts from vertical equity. The same is true for horizontal equity: unequal service provision for identical people may be perceived as unacceptable as the principle of unequal taxation.

tax rates. Generally, a broader tax base implies that a lower increase in rates will be needed to generate a given revenue requirement and hence result in lower allocative efficiency losses.²⁴ However, taxes on residential property (land), though not necessarily broad in its base, also have strong efficiency characteristics. The third element of efficiency discussed here is the impact of the financing scheme on the expenditure side of budgets and whether a particular financing strategy can provide effective incentives for municipalities to rationalize their existing expenditure patterns. This is called budgetary efficiency.

* *Administrative feasibility* is an equally important consideration. During the transition, it may be necessary to depend on current administrative set-ups to quickly finance the public investment requirements. The need to create new tax administrations may impose delays in the delivery and financing of services that may not be politically acceptable..

Ranking the Options

5.13 In terms of autonomy, the twinning arrangement receives the most favorable ranking and central transfers the lowest. The underlying argument is that the flexibility of municipalities to change tax bases and rates is reduced if the fiscal instruments are under the control of upper-tier governments. In addition, even if transfers from upper-tier governments are predictable and constitutionally guaranteed, thus allowing them to be considered as "own revenues", it may be argued that if local taxpayers are not directly confronted with the cost of financing public investments, accountability is also diminished. Accordingly, in terms of autonomy and accountability the twinning and metro arrangements would be preferable to other sources of finance.

5.14 The administrative feasibility criteria would suggest that upper-tier financing schemes are more preferable. Effective administrative organizations already exists for the collection of taxes at the central level and at the RSC level. Any metro-wide or twinning arrangement will require new administrative systems. However, given the effectiveness of the property tax and trading-account systems at the local level, the relative disadvantages of creating metro-wide or "twinning" arrangement for fiscal purposes are not great. What will be difficult, and this aspect is common across the first three options considered in Table 5.4, is the establishment of rules to allocate the funds across municipalities.

²⁴As a first approximation and for the purposes of this discussion this is a fair rule-of-thumb to follow. Several additional considerations may however apply. The rate change required to produce a given level of revenue is generally smaller for the broad-based tax. The welfare loss will however depend on the extent to which the tax base is already being exploited. Adding even a small increase to a tax rate that is already high may create significant efficiency loss, whereas a larger increase in a rate that is small to begin with may not cause much distortion. In addition, relying on a narrowly-based tax to generate revenues, may under certain conditions, increase the efficiency of the overall tax system. For example, it is sometimes argued that personal income tax in practice contains so many loopholes or other defects that capital income is not taxed as heavily as wage income. In this case, property tax, which can be seen as a tax on capital, might be a very good supplement to the overall tax system, precisely because it falls differentially on a narrow category that is getting relatively more favorable tax treatment to begin with. These points illustrate the rationale for considering the tax system from a more integrated perspective.

Table 5.4: Ranking of Options

	Autonomy	Admin.	Efficiency			Equity
			Location	Allocation	Budget	
Central Transfers	4	1	1	1	?	1
RSC	3	1	2	3	?	2
Metro-wide	2	2	2	1	2	1
Twinning	1	2	3	1	1	2

5.15 In terms of efficiency, several different considerations apply. One option is to use residential property²⁵ and only the land base as the source of additional revenue for the metro arrangement or the twinning exercise. In other words, the tax instrument available for financing public investment at the local level is, at the margin, the residential property tax rather than taxes on the consumption of trading services and the tax is on land instead of structures. This option would in effect avoid taxing a narrow base (consumption of water and electricity) and capital (taxation of structure) and may be as efficient as using central taxes (the broadest base of all). On the other hand, if taxes on businesses, building structures and trading accounts are further increased, central transfers may become the preferred alternative. RSC levies would rank last primarily because of their reliance on turnover taxes, which not only have a cascading impact but are a source of double taxation in conjunction with the VAT. But this conclusion would very much depend on the rates applied to turnover taxes. At present, the rates are low and the efficiency losses presumably likewise. If the levies were raised to cover even the minimum investment package, however, the required level of taxation could become highly distortionary.

5.16 In terms of locational distortions, the ranking presented above would change substantially. The twinning arrangement would score the lowest while the central financing because of its coverage at the national level would be the most efficient. Both the metro arrangement and RSC alternative would be equally preferable to the twinning option but inferior to any central transfers-- again the geographic coverage of the tax base being the determining factor.

5.17 Budgetary efficiency is perhaps best enhanced at the local level--municipalities directly confronting additional costs will have all the incentives to prioritize their expenditures better. In this context, it may be argued that transfers from upper tier governments may dampen that

²⁵In practice, revenue needs may require increasing rates for both business and residential property taxes.

incentive. However, this conclusion is not completely self-evident. Central or regional transfers may be designed to promote changes in local budgets either on the expenditure or revenue side by making the release of money conditional on these adjustments. Whether such conditionalities lead to unpredictability in the flows cannot be decided a priori. As a result, central and RSC flows are not ranked in Table 5.4.

5.18 Finally, equity considerations suggest yet another ranking. Twinning arrangements score poorly on horizontal equity considerations. Metro arrangements relying on residential property taxes, on the other hand, are preferable on both vertical and horizontal equity grounds. A comparison of the metropolitan option and the central and RSC alternatives, however, is not straightforward. If, at the margin, personal income taxes are used to finance the transfers, the progressivity of the income tax system would ensure a high level of equity in the financing scheme. As a result, on equity grounds central financing would be more equitable than RSC funding and perhaps at par with the use of residential property taxes. However, the favorable ranking of the center option would be lost if at the margin, the VAT was used to finance the back-log. Both the VAT and turnover taxes may be relatively regressive. However, given that the VAT base is broader and that the increases in rates required would be smaller, the central option is perhaps more equitable than the RSC option.

Summing Up

5.19 In the final analysis, the fiscal option chosen will depend on the weights attached to efficiency, equity, autonomy and administrative considerations. Secondly, given that the various financing schemes have different strengths, a combination of strategies and fiscal instruments may be more effective than any one alternative. Within these broad guidelines the following conclusions seem relevant for the debate on South African cities.

5.20 **Town-Twinning.** This option as a fiscal scheme may be costly on both locational and equity grounds. The potential impact of these effects are strong enough to outweigh other considerations. As a management arrangement, however, the twinning option may be a sound proposal. The administrative strength of white municipalities can be tapped for the technical and organizational aspects for delivering services. In addition, a twinned structure would preserve the advantages of smaller-sized municipalities by keeping government closer to local constituencies. It would also allow local governments the flexibility of promoting smaller formal or informal representations within the municipal structures. The question is, therefore, what type of fiscal set-up could support a twinning arrangement?

5.21 **RSC and Metro-wide.** One option for supporting the twinning arrangement is to draw upon RSC levies. Turnover and payroll taxes could be collected across a metropolitan boundary and transferred back to the twinned municipalities using specific criteria. These could include, for example, a combination of fiscal need and effort indicators. Or alternatively, the transfers could be released against the implementation of investment programs to upgrade the black communities. A second option would be to collect a portion of the property-taxes and trading account surplus over a metropolitan boundary and again redistributing back to the municipalities based on a set of indicators.

5.22 Both the RSC and metro-wide options provide a metropolitan boundary to minimize any locational distortion and internalize the exporting of tax-burden as a result of labor and product market linkages. Equity is also better served as the burden of financing urban services is evenly distributed across the metropolitan area. Finally, accessing RSC levies and property taxes over a metropolitan area serves two purposes. First, turnover and payroll taxes offer an alternative way of deriving revenues from future beneficiaries of public investment. Second, the use of property taxes would allow local governments to pursue redistributive policies.

5.23 For either RSC and metro-wide option to provide sufficient revenues, however, turnover taxes and trading account taxes will need to be increased quite a bit. As explained before, at high rates both these sources of taxes are highly inefficient. To limit the need for such increases it would be preferable to broaden the revenue base by merging both these options: allow a metropolitan administration access to both RSC levies and a share of property taxes. Together these taxes would provide a strong revenue base to support the twinned municipalities.

5.24 Central Transfers. An alternative to a RSC and metro-wide option would be to use the fiscal resources of upper-tier governments. Given the geographic coverage and the broad base of central taxes, locational distortions would be minimized and efficiency losses would be low. This would be especially true if, at the margin, the transfers to the municipalities were financed using the VAT. While not a redistributive instrument, the use of the VAT for financing the back-log in services would not be highly regressive either. The increases in rates required would be low and on the expenditure side the redistributive impact would be high, especially if the investments are targeted towards the black community.

5.25 Central transfers have the disadvantage of making local authorities dependent on upper-tier governments with the possible loss of autonomy, efficiency and accountability of local government. In addition, even if transfers are allocated on the basis of formulae and are guaranteed by some constitutional and legal amendment, there is always a risk of having the flows reduced or eliminated on a unilateral basis. Such unpredictability may affect the ability of local authorities to plan their local budgets effectively. Finally, given the number of municipalities involved, it may be administratively cumbersome to target transfers to local authorities directly from the center or through the regions.

5.26 Combining the Options. Given the different strengths of the various options described above, a strategy of combining the revenue instruments may be preferable. Two decisions will need to be made in this context. First, policy makers will have to decide on the scope of the municipal boundaries. Second, once the decision on the boundaries have been taken, a strategy for financing the new municipalities will be needed. As suggested in Chapter 4 and in the discussion above, a system of "twinned" municipalities would need to rely on central or regional transfers for financing urban services in an equitable and efficient manner. A metropolitan boundary, on the other hand, would allow greater use of local resources and local decision-making in the delivery and financing of services. In addition, a metropolitan boundary would internalize the spillovers of costs and benefits that characterize the urban settings of South Africa. Finally it would minimize the exporting of tax burdens

that is currently common especially with the geographic scope of payroll and turnover taxes. It is taken as a starting point, therefore, that a metropolitan pooling of finances would best support the process of amalgamation of the cities and townships and provide the basis for a strong local government system in South Africa.

5.27 During the transition, a metropolitan administration could function as a "banker"²⁶ to finance the delivery of services across the "twinned municipalities." This option would permit the use of the existing administrative system of the WLAs and RSCs without having to create a new administrative tier for the delivery of services. In addition, such a transitional arrangement, as argued in Chapter 6, would provide some flexibility for the long run. It would allow policy makers the option of keeping this arrangement intact or slowly develop expenditure responsibility at the metro level. It would also permit the dismantling of this system if it was deemed unnecessary. The importance of this flexibility in face of the evolving nature of the urban sector is discussed in Chapter 6.

Trading Accounts: A Special Case

The reform of trading accounts is at the center of the debate on restructuring of local governments. Trading accounts are an important source of finance for existing white local authorities and represent a "hidden" source of taxation and cross-subsidy. The delivery and finance of basic services such as water and electricity have therefore become highly politicized. Two basic directions of reform are being debated for trading accounts. One option is to create metropolitan wide institutions for the financing and delivery of electricity and water. This option could include autonomous utility companies—either as a private or public sector enterprise— or departments within metropolitan governments. Both options would allow for a metro-wide delivery arrangement, exploitation of any economies of scale, elimination of the current fragmented and duplicative system of delivery, and provide greater scope for cross-subsidy between different income groups. Under this scenario, however, it is expected that revenues from the trading accounts would be fully utilized in the financing of the service in question and cross-subsidy within each service. Revenues would not necessarily be available to finance other municipal services or provide rebates for property taxes. A second option would be to retain the existing fragmented delivery arrangement but ensure that a proportion of the trading account funds are transferred to the metropolitan authority. This option would have the disadvantage of maintaining the drawbacks of the current system. In addition, it is doubtful that a system geared towards extending access to water and electricity for the low income community can sustain the type of surplus that can finance other municipal services. In any case, therefore, the current arrangement may not be tenable in the long run. A sharing of trading-account surplus between the municipality and a metro would be possible only during the transition.

What additional sources of finance would replace the revenues that municipalities generated through the trading accounts? First, municipalities would have to eliminate the rebates to property owners. Second, in a two-tier metropolitan system municipalities would have access to shared revenues from the metropolitan pool. However, in giving up their access to trading account surpluses, municipalities would also be giving up the expenditure responsibility for water and electricity investments.

²⁶In the context of this report, the term "banker" is used only to imply that during the transition a metropolitan administration would not have any direct responsibility for delivering services. Its primary function would be to finance the delivery of services by municipalities.

5.28 As a banker, a metropolitan government could potentially have access to three sources of finance: (i) turnover and payroll taxes currently levied by the RSCs; (ii) a portion of the property taxes collected by the municipalities; and (iii) the central transfers designated for the BLAs. In absence of user charges and property taxes, the RSC levies provide a "second-best" instrument for generating revenues from future beneficiaries of public investments. The property taxes from the WLAs are the redistributive aspect of this fiscal arrangement. As a first step, the metropolitan authority could inherit the residential rebates currently given to residents in WLAs. Subsequently, a fixed proportion of the non-residential property taxes could be designated to the metros. This would compensate for the "lock-in" effect that apartheid policies have had on the location of industries. Finally, maintaining the central flows would, as suggested in Chapter 4, assist the municipalities in their process of restructuring and also strengthen the position of the metro as a banker.

5.29 The role of "banker" for the metro during the transition is not a passive one; its ability to pass on large amounts of funds will shape the emergence of the newly "merged" municipalities. This power, however, should not be ad-hoc. The transfers to the municipalities should be guided by clear rules based on criteria such as fiscal needs and efforts and passed on in a predictable manner as grants. Legislation would have to be enacted to ensure the transparency of such a system and also to protect the interests of the municipalities.

The critical and powerful role played by the metro underscores the need for legitimate and accountable representation as a prerequisite for the effective functioning of this fiscal arrangement.

5.30 In addition to the sources of revenue mentioned above, the metropolitan areas may also need to access further central or regional transfers. First, the costs of the amalgamation process and, in particular, the cost of financing the back-log are uncertain—fiscal adequacy arguments would, therefore, suggest the need for central assistance. Second, there is a significant difference in the fiscal capacity of the different cities. Third, the creation of metropolitan areas and the financing of the back-log have national implications, with national stakes. The financing of cities should therefore not be left as a local problem only. Finally, support from the center or the regions would be even more important if redistributive policies are followed at the local level.

5.31 The fiscal transfers could be placed in a non-replenishable municipal fund to be allocated over a finite period to metropolitan areas based on criteria such as fiscal needs, capacity and ability to implement the changes needed. These funds could also be leveraged to access capital markets. The non-replenishable nature of the fund would guarantee that metropolitan areas do not get dependent on central assistance but are assisted in phasing in the changes at the municipal level. Finally, the availability of these funds would dampen the need to raise turnover taxes which are highly inefficient and inequitable.

5.32 During the implementation of a metropolitan arrangement—either during the transition or the long-run—policy makers will have to decide on the relative weights to assign to each source of revenue discussed above. Emphasis on turnover and payroll will push the system

towards local financing while a greater reliance on central transfers will promote dependence on upper tier financing. As the discussion above suggests, this decision will in turn be determined by the weights assigned by policy makers to autonomy, efficiency and equity criteria described earlier.

5.33 In addition, this fiscal arrangement would leave the municipalities under the metropolitan umbrella with a sufficient revenue base—portion of the property tax and trading account surplus—to remain independent in their functions²⁷. This independence is critical if participation of local constituencies is to be promoted. While it is being argued that the efficient and equitable financing of the back-log requires a metropolitan system, to nurture greater local participation and accountability smaller sized government is preferable. The twinned-municipalities may still be too large to promote such local participation. However, in the system being proposed the local municipalities would have sufficient revenues to promote greater participation at the neighborhood and community level by providing smaller local groups a budget for assisting in the delivery of services.

5.34 An alternative arrangement would be to place all revenues in the hand of the metro. This policy would in effect assume that the municipalities would act as administrative arms of the metro. The metropolitan government, in this case, would bear the responsibilities for both financing a basic standard and in responding to the diverse community preferences. Thus in addition to deciding on the extent of reliance on upper-tier financing (payroll and turnover versus central transfers) policy-makers will also have to resolve the issue of the "division of power" between the metro and municipalities.²⁸

Revisiting Expenditure Allocations

²⁷It could be argued on benefit principles that only the municipalities should retain the right to set property taxes. While this would be compatible with the arrangement being described above, it becomes even more important to clearly state the rules of the game. If trading account surpluses remain at the municipal level and are not shared with the metro, a municipality could, for example, hold back in raising property taxes and rely more on trading account surpluses because it is expected to share a portion of its property revenues with the metro. The metro would then have to rely further on turnover and payroll taxes. It is precisely for these reasons that the "rules of the game" need to be defined clearly.

²⁸In this sense, the debate about the allocation of fiscal responsibility between a metro tier and its municipalities is not unlike the debate on the allocation of power between the Center and Provinces. In the current system, the Provinces are nothing more than administrative arms of the Center. This option at the local level would imply that all financing responsibility would be at the metropolitan level. It is expected that in the future, Provinces will have greater powers to tax and undertake independent expenditure functions with the Center having greater responsibility for financing minimum standards and equalizing fiscal capacity across regions. As described in the main text, a metro could also perform this role of "equalizer" with the municipalities having sufficient independent sources of revenue and expenditure responsibilities to serve the needs of their constituencies. The factors affecting the design of grant systems between the Center and Provinces would also apply in the design of a transfer scheme between a metro and its municipalities.

5.35 The discussion has so far assumed that during a transitional period the allocation of expenditures between upper-tier governments and the local level will not change. In addition, it was assumed that the pressures of delivering basic services rapidly would be sufficiently strong to preclude the establishment of expenditure functions at the metropolitan level. However, as discussed briefly in the next chapter, there are strong reasons for establishing a metropolitan tier of delivery for certain expenditures. The advantages of doing so may be strong enough to create the administrative tier for the delivery of services even at an early stage. Under this option, the equalizing function of the banker described above could be performed through the direct delivery of services by a metropolitan entity.

5.36 To summarize, this chapter proposes a specific financial arrangement for the amalgamation process. It is argued that the amalgamation of cities and townships can be best supported by a pooling of fiscal resources under a metropolitan umbrella. Under this arrangement, a metropolitan administration would act as a banker to support municipalities in the delivery of services. As a banker, the metro could have access to the RSC levies, a portion of the property taxes, and central transfers. The municipalities, on the other hand, could retain the right to property taxes and perhaps trading accounts. In this scenario, the metro would play the role of "equalizer" and finance a basic level of service across the municipalities. An alternative option would be to concentrate all revenues in the hands of the metro and leave the municipalities with responsibility for delivering services only. In this more "centralized" arrangement the metro would have the responsibility for financing both a minimum standard and meeting the preferences of a diverse metropolitan community.

Chapter 6: The Elements of A Strategy: The Long Run

6.1 Focussing on the transition, the previous chapter elaborated on various options for financing the amalgamated cities of South Africa during a three to five year period. This chapter looks at institutional and fiscal reform of cities from a longer-run perspective. Several differences distinguish the long-run conditions from the context of the transition. In addition to more political certainty, it is also assumed that the economic circumstances will be more stable. In particular, it is expected that a larger portion of the black community will form part of a property tax base and will be paying user charges. Secondly, it is expected that the scale of the investment needs over any one period will be more stable; cities are, however, expected to continue to grow though less from migration and more from natural birth rates. Thirdly, cities will have greater flexibility to reform their administrative and fiscal arrangements including introducing new revenue instruments if necessary. Finally, and this issue is common to both the long-run and the transition, cities will continue to face the pressures of decentralization of their fiscal base.

6.2 The chapter first addresses the issue of continuing decentralization of employment nodes and higher income bases. Alternative institutional and legislative options for limiting the decentralization of fiscal bases are discussed. The discussion then identifies different revenue instruments for strengthening the fiscal base of a metropolitan system. Finally, the chapter raises some issues regarding the allocation of expenditures and revenue sources between the metropolitan government and the municipalities.

Preventing the Fragmentation of Cities

6.3 International experience with city growth indicates that, over time, there is an outward movement of industrial and commercial nodes from the centers of the core cities. This movement parallels the flow of higher income population towards the suburb. In the context of South African cities, there may be added pressures for households and firms to escape the impact of fiscal transfers if local governments pursue strong redistributive policies. Over time, such decentralization may weaken the fiscal base of a metropolitan system.

6.4 By itself, the emergence of new municipalities and urban agglomerations outside the boundaries of established cities is neither inefficient nor inequitable. Efficiency is well served by smaller-sized local governments providing a level of service that reflect the preferences and income of their communities. What is critical from a fiscal perspective is to ensure that the new municipalities continue to meet the fiscal obligation of sharing revenues within the broader urban conurbation. This is particularly important if the policy of horizontal financing suggested in the previous chapter provides the fiscal foundation for the metropolitan governments of South Africa.

6.5 Two different options are available for preventing the fragmentation of the metropolitan fiscal base. First, given that households or municipalities generally fall within the scope of regional or national tax instruments, metropolitan governments can always rely

on central or regional transfers to meet their fiscal needs. While in theory such an option may seem appealing, in practice it may well leave the metropolitan areas susceptible to the discretion of upper-tier governments. In addition, there would be progressive loss of accountability to local constituents as the center, instead of the metro, becomes the "banker."

6.6 An alternative option would be to give metropolitan governments the right to annex or veto the incorporation of new municipalities and communities outside their boundaries creating, what in the United States context has been called, "cities without suburbs".²⁹ The international experience with such legislation is limited. New York city, to take a page from US urban history, was formed by combining the five boroughs—an act approved over fierce lobbying opposition from wealthy suburbanites³⁰ but one which led to the creation of the country's first metropolitan government. In general, municipal annexation is authorized by law in forty one states in the US but often with attached conditions which, in practice, make annexation a difficult process.

6.7 If annexation laws to facilitate local government consolidation are judged to be suitable in the context of South Africa, a national law may be needed to ensure that such policies are binding over regions in the future. It may well be argued that the fiscal integrity of metropolitan areas has national implications and should therefore not fall prey to regional discretion. While such legislation may not be controversial in the context of metropolitan areas located well within one regional boundary, like Cape Town or Durban, it would be harder to implement in a multiple urban conurbation like the PWV. In the case of the PWV, a preferable solution may be to give this greater metropolitan area a "regional" status with a large enough boundary to internalize its suburban growth.³¹ The PWV would then, be best placed to play the role of "banker" for the various urban agglomerations within its borders.³²

²⁹David Rusk, "Cities Without Suburbs", John Hopkins University Press, 1993.

³⁰Rusk in his book argues convincingly that this annexation led to an era of urban success for New York. "When it was truly a metropolitan government, New York city was enormously successful. When it slipped into being the central city of a metropolitan region expanding far beyond its borders, its fabled problems began. New York city needs another 'Generation of 1898'."

³¹This proposal goes counter to the argument that the PWV should be separated into smaller areas with portions of it being incorporated into adjacent regions. Clearly the political aspect of creating regions and not necessarily the economics of urbanization may be the critical determinant of the status of the PWV complex.

³²It should be stressed that the argument being presented here is not one of preventing the growth of new municipalities. Rather, it is one of ensuring that new municipalities remain within the fiscal boundaries of the metropolitan setting. In addition, it is also not being argued that over time the urban boundary and the regional boundary become one and the same. Clearly, an urban boundary will be marked in terms of the strength of its labor market integration and other linkages .

Strengthening the Fiscal Base: Fiscal Instruments

6.8 In the previous chapter, it was suggested that during the transition metropolitan governments should have access to a combination of central transfers, RSC levies, and property taxes. Each of these fiscal instruments has implications in the long-run that suggest that additional and even alternative revenue instruments may be more suitable.

6.9 First, as suggested above, central transfers may diminish the fiscal autonomy of cities and introduce an element of discretion in the availability of funds. While it is true that upper-tier transfers can and should be tied to rules that are protected by legislation and perhaps even the constitution, clearly if suitable fiscal instruments are available that can be devolved, metropolitan governments would naturally express a preference for the latter.

6.10 Secondly, the turnover tax, which comprises the major share of metropolitan revenues, is a highly inefficient source of revenue—especially given its cascading impact. In addition, it is an easy source of money for local governments. Turnover taxes are perceived to fall on businesses and thus generally accepted by communities. On the other hand, businesses are tolerant of increases in turnover rates because of their ability to pass at least some of the additional cost on to consumers. As a result, it would not be surprising that, at the margin, metropolitan governments resorted time and again to increases in turnover rates. For this reason an alternative fiscal instrument would be preferable.

6.11 Finally, international experience suggests that property taxes are not a buoyant source of revenue. This is partially because of the administrative difficulties of valuing property and partly because of the politics of property taxes. While the accountability inherent in property taxes is its strength, it is also its weakness as evident from the type of resistance that has resulted from increases in property rates. Proposition 13 in the State of California is a good example of this behavior. Thus, even with strong property tax administration, it can be argued that revenues from this base may not match the increases needed for sustaining the expenditure requirements over the long run.

6.12 **Alternatives.**³³ Several alternatives may be particularly relevant for South African cities. One option is to replace the turnover tax with a retail sales-tax or a surcharge on the individual-income tax. A second option would also entail looking at the tradeoffs between a sales tax and the individual income-tax but in a context where regions would also have access to these taxes while the central government would retain the VAT. It is argued below that in a context where central-regional allocation of taxes change, the alternatives for local governments are different.

6.13 As in the previous chapter several criteria may be used to evaluate the alternatives. Primary amongst which are (i) administrative feasibility of implementing the tax system; (ii)

³³The use of automotive taxes and excises—for example on cigarettes and alcohol—are addressed in a forthcoming paper on intergovernmental finance. Both these taxes would be important sources of finance for metropolitan areas. The tax rate would however need to be fairly similar across regions to avoid evasion.

efficiency (in terms of the broadness of the tax base);(iii) equity; and (iv) revenue adequacy. A sales tax would have a broader base than an income tax and provide a more effective way for generating revenues from the informal economy. In addition, consumption is more stable than income suggesting that sales tax is a more predictable source of revenue. Both are fairly buoyant with inflation and growth of income. In terms of equity, however, income tax would be preferable. However, a graduated rate at the local level may result in locational distortions especially if the rates differ between cities . Overall, therefore, a sales tax because of its broad coverage may be a preferable alternative.

6.14 Complications, however, arise when we consider that regional governments may also have access to sales tax and that the VAT will remain at the center. A regional and local sales tax with a central VAT not only leads to double taxation but also creates administrative and compliance costs for the economy. An alternative to a VAT-Sales tax arrangement is a system of piggy-back on the central income tax and central transfer of the VAT. This arrangement would have the advantage of providing revenues to the cities and allowing for some autonomy and independence if the surcharge on individual income tax can be varied within certain limits (e.g. a 3-6 percent range). Given the concentration of the personal income tax base in the four metropolitan areas, access to the local income tax within such a band would provide a sufficient cushion for the metropolitan areas. In addition, a surcharge system would allow local governments to draw upon the administrative machinery of the central government without using local resources to create a separate tax administration.

6.15 Several important considerations need to be raised regarding a system of surcharge on central-income tax. First, as regions and metropolitan governments get access to surcharge facilities, the central rate will have to be adjusted proportionately to keep the overall income tax burden constant. Any shortfall in central revenues, on the other hand, may need to be compensated through increases in alternate taxes (e.g. the VAT), reduction of expenditures, or devolution of expenditures. Secondly, if autonomy of cities is to be increased, flexibility of adjusting the surcharge needs to be maintained. However, this option would automatically require that income tax is collected at the place of employment. Otherwise, individuals will have the incentive to declare the lowest taxed region as their place of residence. Thirdly, given the spillover impact, especially in the case of South African cities where communities have been placed beyond the city boundaries, it would be appropriate that metropolitan governments and not municipalities have access to income tax. Finally, given the view that the regional and local surcharge is intended to pay for generalized benefits³⁴, it might be appropriate to allow a different tax threshold than that allowed in the income tax of the central government. While this would complicate administration and compliance somewhat it would presumably not be more difficult to implement a two part income tax with differences in threshold than to implement a combination of payroll and income tax. It is therefore

³⁴This view of the surcharge on individual income tax also suggests that local governments should levy a flat rate. Besides, graduated rates would have the disadvantage of accentuating fiscal disparities and distorting locational decisions.

assumed that in introducing a surcharge on individual income tax as a replacement of the turnover tax, the existing payroll tax would automatically be discontinued.³⁵

6.16 It is important to note that there is no one "correct" set of fiscal instruments that could replace the turnover tax. Ultimately, the fiscal options available for metros will be determined to a large extent by the broader reform of the system of intergovernmental finance. It is important therefore that the current debate on regional governments at the national level is conducted in tandem with the negotiations on the restructuring of local government.

Rethinking the Role of A "Banker"

6.17 So far, the discussion has assessed the different options of strengthening the fiscal base of metropolitan governments either through legislation that support annexation of municipalities or by accessing new sources of revenue. It has been assumed throughout this analysis that a metropolitan government will continue to function as a financier. To what extent is the role of "banker" appropriate in the long run and to what extent should the metro begin to inherit direct responsibilities is an important area of analysis which will be pursued in future sector work. A few issues, however, need to be raised at this stage.

6.18 Any firm conclusion about the desirability of one form of urban governance and one form of urban public finance must be tentative and provisional. There are profound uncertainties about the demographic and economic evolution of urban areas in the years to come. Apartheid has created significant economic distortions and the existing urban structures are far from those that would have arisen under free market conditions. The liberalization of markets is surely one of the major benefits to be anticipated from the ending of apartheid. But the rapid economic and social changes that this may entail will create many challenges for urban public finance especially as urban labor and housing markets begin to respond to the needs of post-apartheid government.

6.19 In this context, flexibility in the structure of urban governance is an advantage and the metropolitan "banker" described in the previous chapter may very well provide this flexibility.³⁶ Rethinking the role of the metro banker and providing direct expenditure

³⁵In addition, the payroll tax is a tax on labor. A surcharge on income tax could include a surcharge on both the labor and non-labor component to reduce any incentive for tax-induced substitution of capital for labor.

³⁶This raises a more general point. New governmental structures tend to become permanent, except when faced with a crisis, and we certainly hope that South Africa will not face such a crisis in the future. But one can well imagine situations in which some of the arguments for metro-wide governments may become less compelling in years to come as the fiscal resources of the black areas become better established, as the administrative expertise in the black communities improve, and the division of responsibilities among different levels of government becomes more clear and the system of intergovernmental relations is adapted accordingly. It may be desirable to establish some sort of "sunset" provision according to which new institutions would require specific reauthorization within 5 years or so, so that the system does not become locked into an institutional structure that then becomes

responsibilities should be done at a point when it is felt that the dynamics of urban change have become more predictable. How to assess when this point has been achieved is a judgement call that only South Africans can make.

6.20 However, there are two important reasons why the role of the banker needs to be revisited at an early stage. First, without a clear assignment of responsibilities between the metro and the municipality, accountability in the delivery and financing of services will be blurred. Residents of metropolitan systems need to know who to challenge when the delivery of services is failing and local governments are not responding. How to establish this line of accountability is an important area of concern and critical to the successful implementation of municipal reform.

6.21 Second, there may be substantial gains in economies of scale, efficiency, and equity in assigning the delivery of certain services to the metropolitan level. Transportation and distribution of electricity and water may be candidates for metropolitan functions. However, it is not clear at this stage whether these should be delivered through metropolitan utilities—either as regulated private or public entities—or through a general purpose metropolitan government (see also box in Chapter 4). It is expected that future sector work will address this issue.

6.22 To summarize, the discussion in this chapter has identified some issues that may be important for the metropolitan areas to address over a longer horizon. These include addressing the fiscal implications of household and firm mobility and identifying more effective sources of revenue for metropolitan governments. It is also suggested that the assignment of responsibilities between the metro and municipal tiers is a critical determinant of establishing accountability and efficiency of a metropolitan system. While this issue has not been elaborated in this report, it has been identified as an important area of future sector work.

part of the problem instead of being part of the solution.

Chapter 7: Conclusions and Caveats

7.1 Summary The design of a fiscal strategy for the metropolitan areas of South Africa will be influenced to a large extent by how the boundaries of future municipalities are drawn. A strategy of amalgamation that is based on drawing narrow boundaries across existing local authorities will require fiscal transfers from upper-tier governments as the primary source of revenue for future local governments. Pooling of resources across several municipalities on a metropolitan basis will, however, enable local governments to depend primarily on local resources—user charges, property taxes, and payroll and turnover or individual income taxes.

7.2 In establishing a metropolitan sharing of resources a two-fold strategy was proposed. During the transition, a metropolitan administration could function as a "banker", assisting municipalities to finance the delivery of basic services. Under this scenario, the metropolitan administration would not inherit any expenditure functions. Over a longer horizon, local governments could reassess the need for a metropolitan administration to inherit expenditure responsibilities. Other options for expenditure functions—such as special purpose districts or metro-wide utilities—could also be explored. Sequencing the role of a metropolitan administration in this manner would allow for maximum flexibility in a context of rapidly evolving dynamics of urban economies in South Africa. Equally important, the transitional arrangements would enable the rapid financing and delivery of the back-log in services by drawing on existing administrative strengths of local governments. Overall, a two-tier metropolitan system seems appropriate for the major metropolitan areas of South Africa with the metro-tier taking on the responsibility for playing the role of "equalizer" and financing a minimum standard of urban services across all municipalities. The municipalities would, on the other hand, respond to the specific needs of their constituencies.

7.3 Managing Uncertainties On the fiscal side, the process of restructuring local governments is likely to be buffeted by uncertainties at several levels. First, there is a possibility that economic constraints at the macro-level may substantially reduce the flows of intergovernmental fiscal transfers to the metropolitan areas. Second, cities may find that the dynamics of household and business mobility are rapidly depleting the fiscal base of some municipalities. Third, beneficiary taxes and user charges may not, in the short run, provide substantial sources of revenue for local government. Fourth, municipalities may not have the institutional capacity, including the manpower, to manage the process of restructuring and delivering the back-log in services. Finally, the economy may continue to experience low growth rates.

7.4 The metropolitan structure outlined in this report provides a greater buffer against these uncertainties than the alternative proposals for restructuring local governments. By having access to the three sources of financing—intergovernmental flows, property taxes and user charges, and turn-over and payroll taxes—a metropolitan system would be diversifying its income base. Given that most of the personal income tax is generated in the four metropolitan areas, access to the personal income tax base would provide the greatest security

for metropolitan governments. In addition, by having a metropolitan boundary, cities would minimize the fiscal impact of locational changes by households and businesses. If the boundaries are drawn fairly widely and redistributive policies are well-balanced, locational changes will tend to be captured within metropolitan jurisdictions. Finally, by implementing expenditure responsibility at the metropolitan level only gradually, it may be possible to use the existing institutional capacity to deliver basic urban services as rapidly as possible.

7.5 Slow growth in the economy or the chance of a major down-turn will severely restrict the potential for financing public investment not only at the local level but at all levels of government. Pooling of resources, as suggested in the metropolitan arrangement, becomes even more important in the case of a major shock to the macro economy. While the effect of the macro economy on the finances of local governments is an important policy issue, it is equally critical for policy makers in South Africa to be cognizant of the reverse linkage—the impact of local government policies on the macro economy. This report suggests that the financing of the back-log in urban services has the potential of affecting the stability of the macro economy. Policies will have to be enacted that put a constraint on the growth of expenditure and borrowing of subnational governments while allowing the same sufficient autonomy to establish accountable and efficient government systems. Monitoring of local government borrowing and control over their total expenditure growth are important policy measures in this regard.

7.6 Critical Assumptions Several important assumptions form the basis of the analysis. First, the analysis was focused on the design of a financing strategy given the *existing* expenditure allocation. Throughout the analysis it was assumed that local governments would not inherit new expenditure functions. The caveat was raised that in order to avoid any fiscal mismatch devolution of new expenditure items would need to be matched with access to additional sources of finance. Anticipating the potential for a fiscal mismatch, it was suggested that metropolitan areas have access to additional amounts of transfers in the short-run and a share of the personal income tax over the longer-run. It was also emphasized that given the linkages with upper-tier governments, local government reform needs to be undertaken in the context of and with reference to the restructuring of the intergovernmental system in general.

7.7 Second, in favoring a metropolitan system that relies primarily on local sources of finance it was assumed that local rather than central financing has greater potential for promoting a more efficient and accountable system of government. Reliance on local financing is, however, only one aspect of developing accountability at the local level. Other important factors include bringing service providers into closer proximity to clients—the counterpart of bringing finance closer to residents— and ensuring that the political process is capable of promoting electoral choice making and of regulating the behavior of political leaders.

7.8 Third, the analysis assumed that even as the fiscal arrangements of local government are altered, emphasis would be placed on promoting greater reliance on user charges and property taxes. Ultimately, these sources of finance are the most efficient source of local

government revenues and ones which have the best potential for fostering an accountable local government system. Allowing property ownership to emerge in the black community and fostering local government systems that are representative of South Africa's diverse urban communities are necessary conditions for enabling future local governments to rely further on local sources of revenue.

7.9 *The Next Steps* Several areas—analysis of capital market capacity to serve the needs of local governments and an international comparison of expenditure functions of two-tier metropolitan governments—have been identified as important areas of future work. Three further areas also need to be analyzed: institutional reform, design of fiscal transfers, and the financing of secondary cities. The fiscal arrangements described in this paper suggest a need for implementing a metropolitan administration first as a "banker" and then as a direct deliverer of services. The institutional arrangements that can support the roles outlined have not been discussed in any detail. For example, the paper does not look at the trade-offs of introducing a general purpose metropolitan structure versus creating independent service agencies at the metropolitan level. The paper also does not describe potential alternative arrangements for the "banker" and, in particular, the legal and constitutional frame works that may guide its daily operations. These issues will form important elements of the future dialogue with counterparts in South Africa.

7.10 Secondly, focus will also have to be placed on the design of intergovernmental transfers between upper-tier governments and local authorities (metros and municipalities) and between the metro and municipalities. No tier of government will be fully self financing especially given the extent of regional disparity in South Africa. Fiscal transfers will ultimately play some role, and for smaller urban areas perhaps a greater role, in the finances of urban governments. How to ensure that fiscal transfers will enable local governments to efficiently and equitably deliver and finance local services will depend critically on the design of transfer schemes be it at the intra-metropolitan level or between upper-tier governments and local authorities.

7.11 Finally, it is important to emphasize that the fiscal arrangements suggested in this paper are relevant primarily for the metropolitan areas of South Africa. The options described in this paper may not be suitable for the smaller secondary cities of the country. For example it may be hypothesized that for secondary cities fiscal transfers from the regions might form a more important source of finance than for metropolitan areas. In this case, the region would play the role of "equalizer" and financier of basic standards—roles assigned to the metropolitan administration in the fiscal arrangements outlined in this paper. The design of transfer schemes would be of critical importance for the secondary cities.

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