

Submission on the Division of Revenue

2002 - 2003



Financial and Fiscal Commission

Recommendations 2001-2004 MTEF CYCLE

May 2000



For an Equitable Sharing of National Revenue

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Foreword

*T*his Report is the product of considerable research and collaboration. The Commissioners and Executive of the Financial and Fiscal Commission would like to thank the members of all the departments, intergovernmental forums and relevant Ministries who contributed to this document with their information and insights. We would like to note our appreciation of the work of the officials from Statistics South Africa who, notwithstanding their busy schedules, were able to accommodate the Commission's data and information requirements.

There was considerable interaction between the Financial and Fiscal Commission and its technical advisors, whose wealth of international experience enriched the debates and contributed significantly to the development of the Commission's approach. These advisors included Giorgio Brosio (Italy), Andrew Reschovsky (United States), Howard Chernick (United States), Jeff Petchey (Australia), Michael Rennie and Ronald Neumann (Canada), and Raja Chelliah (India). The enthusiasm, support, and intensive engagement of Andrew Reschovsky and Howard Chernick from initial research to final product was greatly appreciated, and the guidance provided by Michael Rennie and Ronald Neumann in the production of the document was invaluable.

The researchers at the FFC, namely Rossana Achterberg, Dirk Besdziek, Selwyn Jehoma, and Bongani Khumalo, carried responsibility for conducting research, formulating approaches, interacting with the technical advisors, and revising their findings in response to the consultation process. In short, their work and dedication provided the foundation for this Report. Hildegard Fast edited the preliminary and final reports, Cindy Bruce co-ordinated the production process, and Annaleeze Prosee, Lyn Desai, Paul Ledwaba, Deliswa Schoeman, Antonette Smit, and Annah Mosiane provided administrative support. The Commission is highly appreciative of budget analysis provided by Albert van Zyl (Idasa).

This Report reflects the inputs received during the consultation on The Preliminary Recommendations document released in February 2000. Although this Report presents the Commission's recommendations for 2001, it should be viewed as a living document that will benefit from further interrogation and debate following the Parliamentary Public Hearing Process.

As Commissioners and the Executive of the Financial and Fiscal Commission we, the undersigned are pleased to submit this Report in accordance with the obligations placed upon us by the Constitution of the Republic of South Africa.

For and on behalf of the Commission

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INTRODUCTION

This Report is presented in terms of Section 214(2) of the Constitution of the Republic of South Africa Act of 1996, read together with Section 9 of the Intergovernmental Fiscal Relations Act of 1997.

In taking account of Section 214(1) and (2)(a to j) of Chapter 13 of the Constitution, the Financial and Fiscal Commission (hereafter, FFC or Commission) is mindful of its responsibility to make recommendations that may inform government's intergovernmental policy-making process. The FFC recognises that it is the three spheres of government and their corresponding legislatures that determine fundamental policy objectives and set policy targets and norms and standards after having assessed the current situation.

In this process government and the legislatures are also responsible for developing the appropriate legal and administrative instruments necessary for the attainment of these fundamental policy objectives and policy targets. The role of the FFC, in turn is to make recommendations which will ensure an equitable sharing of national revenue such that all spheres of government may meet any legal requirement for equity in the provision of constitutionally mandated basic services. The FFC is also expected to assess the financial implications of new policies and to develop mechanisms to support the effective and efficient funding of these policies.

The recommendations contained in this Report are made against the backdrop of an evolving intergovernmental fiscal framework and are aimed at advancing the FFC's initial recommendations for revenue-sharing submitted in 1996. The Commission believes that the costed norms approach elucidated in the Report will give substance to the recent developments in public finance management as contained in the Public Finance Management Act of 2000, particularly with respect to facilitating the development of an outcomes-based and cost-sensitive budgeting regime.

The Commission is of the view that arbitrariness should be eliminated from the system and that an approach which encourages policy-makers to place costing at the centre of their decision-making processes will go a long way in achieving this. It is good fiscal practice for policies and norms and standards to be formulated with due regard to their financial and fiscal implications. This is especially critical where more than one sphere of government is affected by those decisions.

However, the FFC is mindful of the practical difficulties in applying the costed norms approach to calculate all elements of the equitable share formula to meet the financial needs of all three spheres of

government. As discussed elsewhere in this Report, there is an absence of adequate data and a lack of clearly defined policy targets and norms and standards. In addition, the nature and structure of government functions such as defence, foreign affairs, and safety and security present a serious challenge to costing these services with any degree of certainty and predictability in the near future.

The application of the costed norms approach in the FFC recommendations for 2001 has highlighted the shortcomings of current public sector data. Nevertheless, the approach will have the benefit of helping define the data requirements of the system more comprehensively than has been the case to date. Of greater significance will be the fact that the agenda for negotiations between the different spheres of government will become that much clearer.

In the spirit of Chapter 3 of the Constitution, the FFC initiated a consultative process with governmental and legislative stakeholders following the release in February 2000 of its *Preliminary Recommendations for 2001*. Initial responses from these stakeholders have been largely favorable. This final Report accommodates some of the issues raised during the consultative engagement, although the Commission did not respond in the affirmative to all of them. For those who might feel that their specific concerns have not been adequately addressed in this Report, there will be further opportunity to engage with the Recommendations through Parliamentary processes. Thereafter the FFC will await the Medium Term Expenditure Framework (MTEF) budget estimates for the period beginning 2001 in order to make its inputs for the annual budget for the MTEF period.

What follows are some of the more fundamental revisions that were made to the Preliminary Recommendations following the consultative process.

General revisions

- The Commission agreed that its revisions to the Preliminary Recommendations document should be based upon the prescription of the Constitution that provinces have an obligation to provide certain levels of basic services.
- The equitable share will be divided into a constitutionally mandated social services (S) Element, a Basic (B) Element, and an Institutional (I) Element.
 - The Social Services Element caters only for those services that provinces have an obligation to deliver at a minimum in terms of constitutional or policy prescriptions, that is, basic education, primary health care and social security. It is for the provision of these basic services that provinces can be held more accountable.

- The correspondingly enlarged Basic Element will continue to allow provinces flexibility of expenditure for their respective overall competencies.
- The Constitution provides for progressive realisation of the provision of basic services. Government policy provides for the definition of basic services and the specific programme parameters for which provinces are held accountable. These will change over time with the progress of the nation, the needs of the population and the local to world environment which shapes the pattern of public program requirements. The changing definition of “basic services” should be reflected in the quantum of the “S” grants and therefore also in the split between the “S” and the “B” grants.
- The section regarding the Preliminary Recommendations document that discussed conditional grants has been removed. The FFC will dedicate a separate study to conditional grants in the near future. In the interim, it is acknowledged that conditional grants may be appropriate in certain circumstances, such as to address social infrastructure backlogs. In this respect the FFC notes that the Department of Finance currently has a study underway relating to the same issue.
- The capital grant model presented in the Preliminary Recommendations document will be developed further and remains a work in progress. It is introduced in the document to indicate strong intent and to underline its significance for the system as a whole.
- The use of the costed norms approach is not presented as a pre-eminent recommendation. The FFC’s recommendation has been reformulated to recognise that basic social services must be provided for in the equitable share and that provinces should be held to account for the delivery of these basic services. The use of the costed norms approach, therefore proposed as a best practice mechanism for ensuring that the equitable share does provide adequate resources for the delivery of basic services.



SPECIFIC REVISIONS TO THE SOCIAL SERVICES ELEMENT:

Education:

- Concerns were raised about the adverse effects of using learner-educator ratios as input indicators in the education formula. The learner-educator ratios have thus been substituted with relative weights which reflect different resource needs for the various learner groups.
- Concerns were also expressed about the distinction made between personnel and non-personnel costs in the formula. The formula has been revised to accommodate this concern, introducing instead a parameter for per-learner personnel and non-personnel expenditures.

Health:

- The health formula component has been refined to its essentials, and now provides only for primary health care. The formula retains the use of a single cost indicator.
- The cost indicator for primary health care has been revised upwards by 30 per cent. This is to accommodate the concern that the FFC's original cost indicator was too low.
- The weight given to relative poverty in the formula has been scaled down. The formula is thus constructed to err on the side of caution. However, by increasing the weight of relative poverty as and when necessary the redistributive nature of the formula may be enhanced.
- The formula arrangement catering for secondary and residual costs has been removed so that these elements are now accommodated in the Basic Element.

Welfare:

- In the welfare formula only the constitutionally obligatory social security grants are costed. Social welfare services are no longer explicitly catered for in the formula but form part of the Basic Element.
- The formula has also been revised to estimate as accurately as possible the number of individuals eligible for grants and to multiply this population by the value of the grants.
- The means-test average for old age pensions and disability is no longer being used for the costing of these grants, as the FFC acknowledges that the means test has so far proved burdensome and has been inconsistently applied.
- The specific values assigned to the phase-in parameters have been

revised in response to new data on eligible populations, updated take-up rates, and more assertive campaigns to increase the utilisation of the child support grant.

SPECIFIC REVISIONS TO THE BASIC (B) ELEMENT:

- The FFC has added more descriptive detail to the Basic Element. This Element is an important component of any province's equitable share allocations.
- The Basic Element indicates more explicitly that it is the Commission's intention to reconcile its recommendations with the overall allocations to provinces made in terms of the MTEF projections.
- The Basic Element is redefined as the amount remaining after the Social Services (S) and Institutional Elements (I) have been deducted from the total equitable share pool for provinces as determined by the MTEF.
- Recognizing that concentrations of poverty result in additional responsibilities for provincial governments, the Basic (B) Element should be distributed among provinces on the basis of population weighted by the poverty rate. In acknowledging that costs and needs of some provincial public services increase as provincial income rises, the FFC recommends that the poverty weight used in the B Element be relatively small and that it be adjusted as future research provides information on the relationship between income and the costs of delivering public services.

This Report is being released in two documents, with the first containing the final recommendations for the MTEF period 2001/2002 – 2003/2004 and the key principles informing them. In a separate document will be included the various research papers that informed the Report as well as auxiliary information necessary for the readers' understanding of the development of the FFC's Project 2001.

It is the Commission's hope that this Report establishes a sounder basis for its engagement with the executive and its institutions and with the legislative branches of national, provincial, and local government.

EXECUTIVE SUMMARY

The Financial and Fiscal Commission has conducted a review of various aspects of intergovernmental fiscal arrangements in South Africa. After extensive consideration of the research conducted throughout 1999 and evaluation of options in the light of the provisions of the Constitution and international best practice, the FFC developed numerous proposals for appropriate fiscal arrangements. These proposals served as the basis for a consultative process that the Commission embarked upon with stakeholders and commentators between February and April 2000. The Preliminary Recommendations were thus revised in line with the inputs received.

This Report therefore presents the Commission's recommendations and advisories for the 2001/02 and subsequent fiscal years of the MTEF Cycle.

A costed norms approach to the allocation of national revenues

The Financial and Fiscal Commission has applied a costed norms approach to the allocation of national revenues for the provision of constitutionally mandated basic social services. **The costed norms approach is a formula-based method for calculating the financial resources necessary for the provision of basic social service levels, given nationally mandated norms and standards.**

In this Report, the Commission demonstrates the manner in which such an approach can be applied to the provincial sphere in particular. By starting with an estimate of the costs, each province would be required to meet a set of nationally determined minimum norms and standards for basic social service delivery. The approach establishes a principled basis for a process to determine the horizontal division of revenue and to evaluate these costed norms and standards against the Medium-Term Expenditure Framework (MTEF).

The main objective of the Commission's approach is to ensure that each province has sufficient financial resources to provide constitutionally mandated basic social services to all its citizens. It can be used to ensure that norms and standards so chosen are affordable within the national fiscal framework. The main difference from the current provincial grants system is the clear link between any tentative proposal for the provincial equitable share and what that amount will buy in basic social services in each province.

The Constitution provides the foundation for the approach. The Bill of Rights stipulates that certain basic social services, including education, welfare, and health, are to be provided to all South African citizens regardless of their place of residence. The Constitution specifies that provinces carry responsibility for delivery of these services, and that national revenue shall be shared equitably in order to finance these basic social services.

The approach may be viewed as an extension of previous FFC recommendations, and draws on information and processes which characterise good planning and budgeting systems. Indeed, this approach should bring the decisions on equitable shares much closer to other government decisions than is the case with existing resource-sharing practices in South Africa and in most other countries with dual- or multi-sphere governments.

However the FFC is mindful of the limitations to applying this approach to the equitable share formula for allocations to all three spheres of Government. The absence of adequate data, the lack of clearly defined policy targets and norms and standards, and the inability to cost with certainty and predictability government functions such as foreign affairs and defence will militate against the general use of the costed norms approach in the short- to medium-term. Nevertheless, the FFC recommends that this approach be considered as an analytical tool to ensure objectivity in the calculation of estimates and to monitor the extent to which funds were spent to achieve the policy targets for which they were intended.

Local government

In this Report, local government is not given explicit consideration. Pending a major review of the entire grant system for the 2001/02 allocations, the Budget Council, at its January 2000 meeting, decided that significant changes in grants to local government should not be entertained for the upcoming fiscal year. This was in response to a Department of Finance recommendation that there should be a temporary moratorium on major changes to the local financing regime. The FFC concurs, and stands by to assist with the process of local government finance reform.

Preconditions for substantive reforms in this area include improvements in data collection and the development of a coherent and sustainable system of revenue sources. Government has established mechanisms for addressing these issues, and once they are resolved, consideration may be given to the role that may be played by costed norms and other approaches.

The national sphere

In keeping with one of the FFC's first recommendations national government has already taken a significant step in creating a macro-economic framework with the adoption of a three year Medium-Term Expenditure Framework. The allocation of resources to the main expenditure categories (such as education, health, and defence) is a logical component of a planned norms-based system of intergovernmental fiscal relations. The FFC supports the evolution of a national policy-making process that alternates between the costing of nationally determined norms and the economic priorities set by the

MTEF, until a solution is found that brings the norms and the MTEF into alignment with each other. This is called the “iterative process” in this Report.

The essence of the costed norms approach

The research undertaken by the Financial and Fiscal Commission has focussed on the provision of constitutionally mandated services (education, welfare, and health). Total expenditure on these three programme areas constitutes 85 per cent of total provincial expenditure.¹ However, the FFC focuses only on basic education, primary health care and social security as mandated in the Constitution as “basic social services”, leaving the rest to be provided for via the B Element of the formula.

The first step in the costed norms approach is to establish basic social service levels, expressed in the form of norms and standards, for each programme area. These levels may be provided explicitly in government legislation or implicitly in government policy. Once the norms and standards are established, the resources needed to deliver these social services are calculated by taking account of the structure of the provincial population. This should provide a more objective measure of the financial resources necessary to attain the norms and standards that have been nationally determined.

Issues and advantages in the application of this approach

The most important issue to be addressed is the reconciliation of programme norms and standards with financial constraints. It is with respect to this issue that the FFC believes its approach has great value. The approach not only establishes the horizontal division of the provincial equitable shares among provinces but also informs the vertical division of revenue amongst the three spheres of government. Using different parameters, a range of costed norms can be established. Then, through the iterative approach described above, the effects of alternative political choices can be measured and programme mandates can be weighed against other political priorities and financial constraints.

Other advantages of the approach include:

- At the end of the political process establishing the vertical division, the horizontal division of the provincial share is derived directly and objectively from the choices made;
- By providing a yardstick for measurement, accountability with respect to both national and provincial decisions can be improved;

¹ Department of Finance, *Intergovernmental Fiscal Review* (1999), p. B6.

- Where progressive realisation of basic rights is explicitly endorsed in the Constitution, and the rates of realisation of norms and standards for basic services can be identified this approach can be used;
- The link between budgetary decisions and programme standards is stronger and more transparent.

There are technical and political issues which arise in this approach. Setting norms and standards is a political process, and norms are subject to change over time. It is necessary to establish an appropriate linkage between the standard adopted and the fiscal resources required. Experience and judgement are often necessary to establish these linkages. Data availability and quality must also be considered. These and other issues are dealt with in the proposed application of this approach.

Application of the costed norms approach to social sector programmes

Continuous refinements of formulae designed by the FFC for the basic social services will occur through better data and further analysis. However the FFC believes that applying these prototype formulae to the basic social services would be an improvement on current practice.

In devising formulae in each area, the guiding principle has been to choose as cost factors only those characteristics that are beyond the influence of provincial authorities. The total cost of the “norm” is calculated by using a series of benchmark parameters applied to the different groups within the population which each programme is expected to serve. Population is weighted when different groups are expected to require different amounts of resources for similar or comparable service standards, based on factors such as age and relative poverty.

Judgement calls had to be made in some instances. Resource need ratios had to take the place of output standards owing to the absence of output data. Parameters such as the poverty level were chosen. These parameters are contained in the detailed sections of this Report, and they could be discussed and revised if they do not fully reflect current realities in South Africa. Policy choices and changes would not however negate the costed norms approach. They would in fact strengthen it.

As mentioned earlier, an iterative process is proposed to reconcile the costs of benchmark norms and standards to the fiscal constraints arising from the vertical division of national revenue.

Capital grants

This Report introduces a capital model which seeks to address the low level of capital spending in South Africa. It also discusses how provinces' capital spending could be supplemented through the use of a conditional capital grant from national government. Current work to compile data on issues related to capital stock - such as differences that arise between provinces - must be advanced to serve as a primary input into this model.

Background to the recommendations

In 1996, the Financial and Fiscal Commission recommended the application of a formula-based system to achieve:

- an effective division of revenue between provinces;
- an efficient allocation of resources;
- fiscal equity in the provision of services; and
- the development of fiscally sound and democratically responsive provincial governments.

The Formula recommended in 1996:

$$\mathbf{P = S + m + T + I + B}$$

Where: **P** is the provincial allocation

S is a minimum national standards grant to support provincial education and health care services;

m is a spillover grant to provide financing for services with interprovincial spillover effects;

T is a tax capacity equalisation grant;

I is an institutional grant to finance the core legislative functions; and

B is a basic grant to fulfil constitutional responsibilities.

The new FFC recommendations build on the previous formula as follows:

$$\mathbf{Provincial\ Equitable\ Share\ (PES) = S + I + B + T}$$

Where: **S = (E + H + W)**

S is a national standards grant to support the provision of constitutionally mandated basic education, primary health care and social security for provinces;

E is a allocation for basic education;

H is a allocation for primary health care;

W is a allocation for social security;

I is an institutional grant to finance the cost of running provincial governments;

B is a combined basic grant to fulfil Constitutional responsibilities at the discretion of provincial governments; and

T is a tax capacity equalisation grant

Recommendations for the 2001 to 2004 MTEF Cycle

Having considered the proposals contained in the Project 2001 Preliminary Recommendations Report submitted by technical advisors and researchers, and having considered the responses of all principal stakeholders following an extensive consultation process in the spirit of Chapter 3 of the Constitution, and having taken account of all considerations listed in Section 214(2)(a to j) of the Constitution, the Financial and Fiscal Commission hereby presents its set of recommendations for the Medium-Term Expenditure Framework and financial year beginning 2001.

1. Constitutionally mandated basic levels of service in basic education, primary health, and social security be provided for in the provincial equitable share allocations, and that provinces be held accountable for the delivery of such services. Furthermore, that where possible the costed norms approach be used to ensure the adequate provision of constitutionally mandated basic levels of service in education, welfare, and health. Implementation should be as early as possible, taking into account the Medium-Term Expenditure Framework cycle.
2. The FFC has used the costed norms approach in arriving at the formulae for constitutionally mandated basic social services in education, welfare, and health in this report such that the recommended formula:

2.1 for basic education takes into account:

- the mix of different types of learners actually enrolled in each province;
- a normative weighting indicating relative resource need for each of these learner types;
- an optional adjustment to reflect the government's desired policy with respect to funding inappropriate-age learners;
- an adjustment to provide additional funding for provinces with a high proportion of poor individuals in their populations;
- a per learner cost parameter indicating personnel and non-personnel expenditure; and
- provincial support for independent schools.

2.2 for social security takes into account:

- the number of individuals eligible for each of six separate social security programmes and the entitlement amount of each;
- an allowance for administrative expenses; and
- phase-in parameters for social security programmes with low take-up rates, to provide for gradually increased utilization.

2.3 for primary health care services takes into account:

- the number of individuals in each province falling into each of four age and gender groupings;
- the relative costs of providing primary health care services to each of these groupings;
- the poverty rate in the province relative to the national rate;
- a national per capita norm for provision of primary health care services; and the relative cost in each province of secondary care; and
- the population density of the province relative to a norm.

3. Each province should be allocated:

- a Basic (B) Element, which will include the provision of all services not defined as constitutionally mandated basic services and any other functions negotiated by the three spheres of government. The B Element is determined in a manner that is consistent with the principle that both the vertical and horizontal divisions of revenue be based on clear and transparent norms where possible, and it is net of the Institutional Element; and
- an Institutional Element set equal to the minimum cost of operating government institutions.

4. The remaining grants in the 1996 provincial equitable share formula be treated as follows:

- The T grant continues to be treated as part of the formula, but remains at zero as in current practice;
- The m grant is dropped from the formula, as it may now be provided through the B Element or through various conditional grants financed from the national sphere.

5. As an interim solution and in view of urgent need, conditional grants be allocated to provinces out of the national equitable share to support the reduction or elimination of social infrastructure backlogs.

Part I

RECOMMENDATIONS FOR THE MTEF CYCLE 2001-2004

1. THE COSTED NORMS APPROACH

A key component of the system of fiscal arrangements in South Africa is the division of national revenues into national, provincial and local equitable shares. This involves both the division among provinces and municipalities (the *horizontal* division), and the three-way aggregate division (the *vertical* division).

The approach that the FFC uses to partially determine these two divisions is called the *costed norms approach*. It is based on the obligation set out in the Constitution that the provincial equitable share should be sufficient to enable provinces to provide basic education, welfare, and health services up to the mandated national standard within the resources available.

1.1 The case for a costed norms approach

The case for a costed norms approach arises from the requirement that provinces deliver basic programmes of education, welfare, and health. Once the level and quality of services, the potential numbers of recipients, and the relative need for these services have been assessed, it becomes possible to “cost” the amount that will be required by the provinces to finance these, were they to provide them efficiently and to the chosen norms and standards.

The logic of this approach emerges from the Constitution itself:

- The Bill of Rights requires that certain basic services be provided to all citizens, among which are health, welfare, and education (Sections 27(1) and 29(1));
- Some basic services are to be provided concurrently by national and provincial governments (see Schedule 4);
- The minimum levels of these services are determined nationally (Section 146(2)(b)); and
- Basic social services are to be financed by an Act of Parliament, according to which the “revenue raised nationally among the national, provincial and local spheres of government” is divided equitably (Section 214(1)(a)).

The costed norms approach is designed to enable all provinces to achieve the nationally-set standards of basic services while at the same time retaining their autonomy to design programmes in ways which suit their particular circumstances.

1.2 Essence of the costed norms approach

The costed norms approach suggests the following schematic approach to developing the provincial equitable shares:

- **The mandated basic level of service should be determined nationally and should be expressed in terms of norms and standards for each programme area.** The basic service levels may or may not be legislated, but since all spheres of government share the commitment to provide these services to citizens, service levels are determined through consultation among the spheres of government.

For example, in the area of education, the standard could be defined in terms of output measures, such as examination levels, reading proficiency levels, or the attainment of a certain grade level of schooling. In health, output might be measured by rates of infant or young child mortality, or rates of morbidity. In practice, measuring the outputs involved in the norms and standards might be difficult given the existing data available, so input measures, such as learner-educator ratios or other proxy indicators, might be used instead.

- **Against the norms and standards established, fiscal requirements should be determined by taking account of factors affecting provincial conditions.** These factors describe the environment in which government operates within each province, and they should represent characteristics of each province that are beyond the direct control of provincial authorities, such as the age structure of the population, the rate of poverty, and the rural-urban mix of the provincial population.

Measuring costs involves estimating the resources required to achieve the norms and standards if the basic services were delivered efficiently. These costs should not directly reflect the actual level of spending in any particular province. Instead, costs should reflect the minimum amount of spending necessary to provide the desired social sector outcomes.

Basing cost estimates on actual expenditures holds the following risks: if high-spending provinces were chosen as the norm, this would introduce into the system an incentive for overspending. By contrast, if the lowest-spending and/or most efficient province were chosen as the norm, higher spending provinces might be unfairly penalised for factors which are beyond their control, or held to standards of efficiency in service delivery which cannot be met, at least in the short term.

- **The total costs of providing basic education, social security, and primary health care should be calculated for each province.** The aggregate costs of basic services will then serve as the basis upon which a good proportion of the horizontal split of national revenues into provincial equitable shares is estimated.

Although the application of the costed norms approach is straightforward in principle, its full implementation requires a considerable amount of information about both public sector performance and costs. In the last few years, South Africa has made great strides in generating high quality data on many aspects of private and public life.

However, there is much that remains unquantified and inaccessible to the researcher. In particular, there is insufficient data on provincial government performance in a wide range of areas. For this reason, the prototype formulae proposed here will draw on available knowledge of the costs that are necessary to achieve desired public sector outputs. These formulae should, in themselves, provide further impetus for the collection of more data, which will in turn improve the ability to implement the costed norms approach.

1.3 Advantages of the costed norms approach

Its data-intensive nature notwithstanding, the costed norms approach has a number of advantages:

- **The approach promotes efficiency.** It should encourage provincial governments to make the most efficient resource allocation choices possible. This is all the more desirable because provincial governments are constrained by their lack of revenue-raising ability, and national government is unable to encourage efficient use of resources through the use of matching grants.

It is therefore important to develop funding mechanisms that encourage provinces to recognise the true *opportunity cost* of reallocating resources. The cost-based approach, by providing a rational basis for a firm and binding provincial budget, encourages provincial governments to take account of the corresponding reduction in other services implied by an increase in any given service. Thus the approach provides the best available instrument to ensure that provinces make efficient budgetary decisions.

The incentive to provinces to find innovative, cost-saving ways to meet social service goals is reinforced by the method for the allocation of nationally-raised resources to each province on the basis of the underlying social conditions in each province (for example, the number of scholars and the rate of poverty).

Equitable share allocations to provinces that develop more efficient methods for delivering government services should not be reduced. Over time the costs of providing social services in South Africa may well decline due to improvements in public sector management and the increased use of technology in the

delivery of social services. These long-term reductions in costs will eventually need to be reflected in the formulae used to allocate the equitable share to provinces. As efficiencies are realised, norms and standards may be raised, or the realisation of existing norms and standards may be speeded up.

- **The approach will provide an incentive to provincial governments to achieve output goals.** An essential part of the South African intergovernmental fiscal framework is the central monitoring of provincial government performance. A costed norms approach is based on specific public output standards (for example, a specified pass rate on matriculation exams), making it easier to determine whether provinces have met national service provision goals. Against the backdrop of clear goals and appropriate resource allocations from national government, it is easier to identify the reasons why outputs have not been achieved in certain provinces and the steps necessary to enhance provincial service provision.

An advantage of allocating the equitable share in the form of unconditional grants to provinces is that it allows provincial governments freedom to determine how best to provide public services appropriate to provincial conditions. Shared responsibility, however, requires that national government retain the overarching responsibility of ensuring that basic services are provided in each province. This implies not only that national government sets the necessary norms and standards, but, when provincial governments fail to meet these standards, it provides incentives to encourage provinces to deliver services adequately.

- **The approach will increase transparency.** Cost-based formulae are transparent, providing an objective rationale for the allocation of funds to provinces. This transparency and objectivity engenders system-wide confidence in the fairness of provincial allocations. By increasing the accountability of the provinces, it also encourages provinces to improve their managerial capacity. These improvements will in turn lead to increased confidence in the ability of the provinces to function as governmental units in their own right.
- **The approach will increase incentives to gather data on government performance and costs.** The costed norms approach will transform and improve the nature of the relationship between provincial and national departments, as the focus of national-provincial consultation will be on ascertaining the true costs of providing public services for which provinces are responsible. Although national government has an incentive to argue that the costs of meeting national social service goals are relatively low, and provincial governments that costs are relatively

high, both spheres of government will be able to base their interactions on the data needed to support cost-based allocation of the equitable share. The provincial and national departments thus share an important interest in the quality and timeliness of such data.

- **The approach will contribute to determining appropriate fiscal policy.** The costed norms method imposes desirable constraints on both national and provincial governments. The ability to play budget games is restricted, and there are advantages accruing to provincial budgeting and performance owing to the introduction of a more stable budget constraint. Even unfunded mandates may be less likely to occur.

Given the dominance of wage costs in provincial budgets, national wage-setting patterns have important implications for the ability of provinces to deliver required social services. The cost-based approach is particularly useful in this respect, for national wage bargain agreements are immediately translated into provincial costs of service delivery. Consequently national government must either increase the provincial equitable share, adjust its goals for the provision of social services, or raise national revenues.

- **The approach will limit the fungibility of grants.** There is an inherent tension between the use of global unconditional aid to provinces and the achievement of nationally-defined objectives for specific sectors. The costed norms approach can assist in placing limits on the ability of provinces to reallocate resources in ways that are inconsistent with national objectives.

If, on the one hand, grant amounts are linked to the cost of providing services, and service outputs are monitored effectively, then the grant amount can be used to enforce service standards. For example, if a province continually reallocates large amounts of its global share away from the nationwide norm for primary health care, and negative consequences in health outcomes or services can be documented, then these negative outcomes provide a basis for re-negotiation of the province's grant level or for changes in policy responsibility and control.

On the other hand, the global approach still allows provinces to reallocate resources to a provincially preferred mix of expenditures. The general principle which underlies unconditional grants is that provinces are not merely agents of national government, but separate and accountable democratic units. The more their choices are constrained by conditionality and “ring-fencing”, the more the system departs from that ideal and the harder it is to move towards the goal of a more decentralised public finance structure.²

² Conditional grants have more “sticking power” than unconditional grants. However, in a period of contracting budgets, such conditionality may have the same effect as “ring-fencing” and may crowd out basic services.

The ability to achieve national goals of service provision is clearly enhanced if national government can make use of both conditional and unconditional grants. The right mix between these fiscal instruments depends partly on the actual fiscal responses to grants by provinces. Systematic research on the allocative responses of provinces to changing levels and mixes of conditional and unconditional grants would be useful in informing this debate. Such research should seek to establish whether conditionality tends to divert resources from the achievement of basic goals, or allows provinces to supplement spending in specific areas.

1.4 Issues in implementing the costed norms approach

The costed norms approach will obviously take time to develop fully. A number of issues and concerns will arise as the approach evolves:

- Complexities are likely to arise in interpreting national norms and standards (especially when they are not set out explicitly in legislation), and in determining the actual costs involved in meeting them in an efficient way. Ideally, the costs of meeting these output standards would be measured directly. The inability in measuring outputs and the limited availability of data will result in the costs for health and education being estimated through the use of input standards.
- The setting of norms and standards is essentially a political process and will respond to political pressures, many of which may be anticipated. Moreover, the funds required to achieve given levels of basic services, and provincial flexibility to deliver services efficiently, may depend on policies set by national government. For example, key labour input costs will be largely determined by conditions of service set by national government and by the outcomes of national wage bargaining.
- The horizontal and vertical divisions of revenue must reconcile the need to provide provinces with adequate financial resources within national revenue limits. In the ideal conception, a broad set of benchmark norms is specified for each of the three basic services, and these benchmark norms, appropriately costed, are used to estimate the equitable shares that each province would require to achieve these norms. However, the calculation of the provincial equitable share in one simple (bottom-up) method might well define a resource need that exceeds what is available nationally.

The FFC therefore proposes that alternative national benchmarks be designed, which would provide options from which national government could choose. Alternative norms would be chosen not

only to reflect different judgments about possible norms and standards, but also to yield different provincial shares in the vertical division. Offering a menu of alternative realisation rates and policy parameters facilitates the selection of national norms and standards that can be accommodated within the fiscal policy framework. That is, it makes explicit the trade-off between the level of national norms and standards and other fiscal priorities of government.

This procedure has some additional advantages:

- By using only benchmark norms to describe its proposed formulae, the FFC does not pre-empt national government's prerogative to select national norms and standards;
- Putting explicit alternative norms on the table signals the beginning of an iterative process by which the various spheres of government can work towards consensus on the norms and standards that might apply in future; and
- By starting with an estimate of the costs each province would face to reach a set of nationally determined minimum norms and standards for basic social service delivery, the approach establishes a principled basis for a process to determine simultaneously the vertical and horizontal divisions of revenue, and to bring these into alignment with the national government's Medium-Term Expenditure Framework (MTEF).

Recommendation 1

That the constitutionally mandated basic levels of social services in education, health, and social security be provided for in the provincial equitable share allocations, and that provinces be held accountable for the delivery of such services. Furthermore, that where possible the costed norms approach be used to ensure the adequate provision of constitutionally mandated levels of social service in basic education, social security and primary health care. Implementation should be as early as possible, taking into account the Medium-Term Expenditure Framework cycle.

2. THE SOCIAL SECTOR USING THE COSTED NORMS APPROACH

In this section, prototype formulae are presented for the social sector components of the provincial equitable share allocation, namely education, welfare, and health.

2.1 General principles

It is necessary, over time, to define more precisely what constitutes “basic services” in education, welfare, and health. As noted in Section 4, in many instances national norms and standards are not in place. It therefore becomes difficult to assess the service level that is constitutionally guaranteed. For example, the government must confront decisions on:

- whether South African children should be provided with an education that would allow them to achieve, say, a tenth-grade reading level or some other benchmark;
- whether education of sufficient quality should be provided to allow every school to achieve a set minimum pass rate, such as 65 per cent, on the matriculation examination;
- whether in the health sector, basic services should be defined to include pre-natal care for every pregnant woman in South Africa; and
- whether access to primary care within an hour of one’s home should be the standard.

The FFC has chosen to interpret “basic” social services narrowly. It has relied on a descending hierarchy of instruments to determine what might constitute the basic levels of service in each of the three social sectors: the Constitution, existing legislation that prescribes standards, policy, and past practice. In addition, in order to overcome the absence of comprehensive norms and standards regimes in the sectors, the formulae proposed here have been constructed with a significant degree of flexibility. The allocation that each formula will deliver may be varied to produce equitable share allocations that more closely reflect the preferences of national and provincial governments by adjusting a series of policy/technical parameters.

Once decisions have been made about the appropriate public service outputs that will define basic services in the areas of education, welfare, and health, the costed norms approach requires that the financial resources needed to achieve these basic public output goals must be quantified for each province. In other words, how much does it cost each province to achieve basic levels of educational attainment, social welfare, and health care?

The key consideration in calculating costs of delivering any public service is to include only those expenditures that reflect factors that are beyond the influence of provincial authorities. Thus economic and social conditions in a province, which result in higher rates of disease, will increase health care costs. Provincial health authorities are unable (in anything but the very long term) to influence these conditions. On the other hand, actual provincial spending on health care may reflect not only the underlying economic and social conditions, but also inefficient government behaviour due to inadequate management.

Cost estimates should not simply mirror past expenditure patterns. Historical patterns of spending may be higher in some provinces than in others. This is often explained by the efficiency with which services are delivered. Spending may also vary because some provinces provide higher than average levels of services. Finally, spending may vary because the costs of providing a given level of service are higher due to uncontrollable outside factors. Under the costed norms approach, only the uncontrollable factors should affect the equitable share. If instead allocations are based on historical expenditure patterns, each province's share will be determined by all of these factors. Provinces that are relatively inefficient in service delivery will have little incentive to reduce inefficiencies; and funds will be directed towards provinces which exceed basic service levels, at the expense of provinces that have insufficient revenues to meet their constitutionally prescribed basic service goals. It is therefore important to use an objective measure of the costs of providing basic services as the basis for the horizontal allocation of the equitable share.

It is important to emphasise that input standards are used in the allocation of the equitable share as proxies for public sector output measures. Provincial governments must be informed that input standards are not to be interpreted as policy prescriptions. Each provincial government must determine for itself, based on local conditions, the best way to achieve basic education, health care, and welfare service goals. For example, one province may decide to reduce class sizes, while another province may choose to have larger class sizes so as to free up funds for the continuing education and training of teachers. Only with the passage of time and the careful assessment of learner performance in each province will better information evolve on the most cost-effective ways to improve the quality of education in South Africa.

Lastly, provinces could choose to provide higher-than-basic levels of services, but the financing for these services would have to come from provincial governments' own-source revenues.

2.2 The education component

The goal of the costed norms approach as applied to education is to determine the minimum amount of money a province must spend in order to provide its learners with a *basic education*. Defining “basic education” involves the identification of a set of standards of learner performance that national government believes all (or nearly all) learners are capable of meeting. To date, these standards, presumably defined in terms of learner test scores or other similar criteria, have not been determined by national government. Based on the structure of the current formula used to allocate the education portion of the equitable share, however, it appears that national government has implicitly defined basic education in terms of the education provided to primary, secondary, and special school learners.

Adult basic education and early childhood development are also mentioned in the Constitution as basic rights. Because legislation concerning these issues is only now being developed, the FFC education formula focuses only on the financing of education for primary, secondary, and special school learners. The FFC presumes that provincial government expenditures on early childhood and adult basic education can be funded via the Basic Element of the equitable share.

It is important to emphasise that the costed norms approach does not in any way prescribe how provinces should spend their equitable share allocation for education. The formula is designed to ensure that each province is allocated sufficient funds to provide its learners with a *basic education*.

2.2.1 The current allocation

The current formula used to allocate the education component of the equitable share to provinces is based on the distribution among the provinces of children between the ages of 7 and 18, and the current enrolments in primary and secondary education. For the 1999/2000 financial year, 40 per cent of the total equitable share to provinces is targeted towards education. This percentage is based on past spending patterns on education relative to welfare, health, and other provincial government responsibilities.

In some provinces a substantial proportion of learners are either under the age of 7 or over the age of 18. This “over-enrolment” has had the effect of reducing the resources available to educate school-age (7-18) learners. To provide provinces with an incentive to reduce the number of learners who are over- or under-age, the current formula allocates the education component of the equitable share to provinces based on their share of total learner enrolment and their double-weighted share of school-age learners. This weighting scheme is equivalent to counting each school-age learner as one learner and each over- and under-aged learner as a third of a learner.

2.2.2 The FFC proposal for the education component

The starting point for the development of a costed norms formula for education is knowledge about educational costs acquired from research studies undertaken both in South Africa and elsewhere in the world. There is strong evidence that the amount of money necessary to meet any given educational standard will vary both across and within provinces for reasons *beyond the control of provincial and local school officials*. These differences in *costs* will occur in part because it takes more resources to educate some children (up to some given level of learner achievement) than other children, and because some schools operate in environments and under conditions where educating children is more difficult. Extra resources will have to be directed to these schools in order to compensate for the impact of a harsh environment on learner performance.

In sum, the international evidence indicates that learners who come to school with various “disadvantages” require more educational resources in order to achieve any given educational standard. The extra resources may be in the form of special classes, specialised teacher training, extra books and other school materials, or additional educator contact through lower learner-educator ratios. The evidence suggests that educational disadvantage occurs most frequently when learners come from families with low incomes and/or little parental education, or when learners enter school with a mother tongue different from the language of instruction.

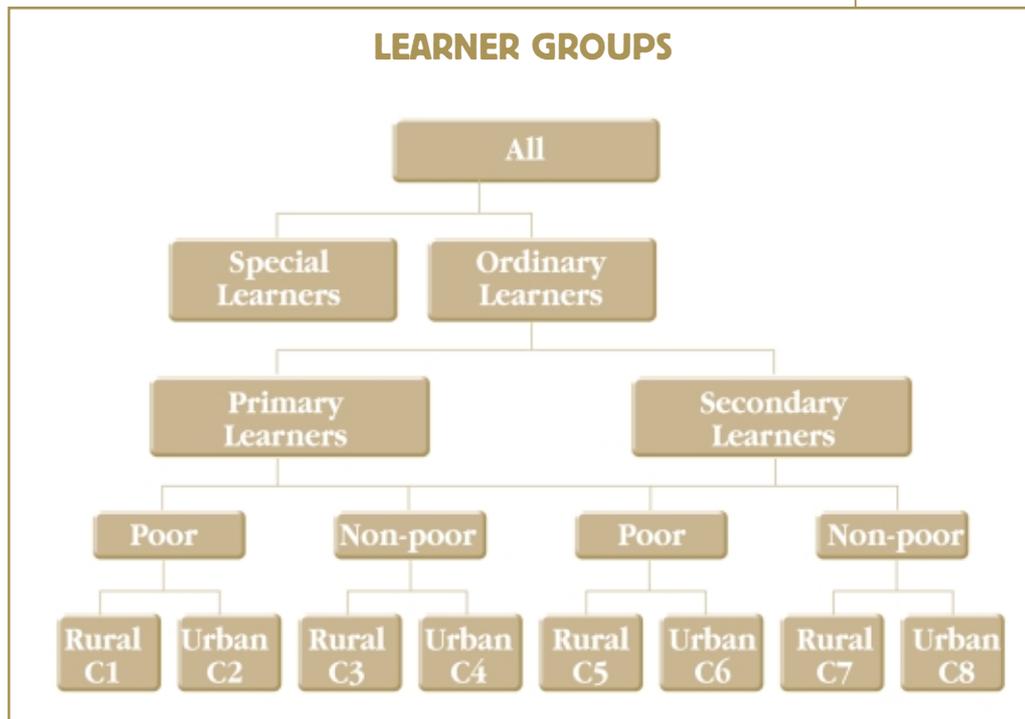
Recent education studies from Gauteng and the Northern Cape show that costs are higher for learners from poor families.³ The findings also suggest that even after controlling for poverty, costs are higher in rural than in urban schools. Based on this research, it is clear that costs are highest for poor, rural learners and lowest for non-poor, urban learners. However it is difficult to establish the exact magnitude of the cost differentials, and the FFC’s approach is thus to classify all learners into several groups and then to provide estimates of the average cost per learner within each group.

2.2.2.1 Defining learner groups

Basic education is defined in terms of providing primary and secondary education to learners in ordinary and “special” schools. Learners are separated into those attending ordinary primary schools and ordinary secondary schools, and learners with disabilities attending special schools. All ordinary school learners are then divided into those who come from poor families and those whose families are considered “non-poor”. Although poverty can be defined in a number of ways, in its initial work the FFC has defined poverty as annual household incomes below R12,000 (based on official census data). All learners are further divided into two groups depending on whether

³ L. Crouch and T. Mabogoane, “Statistical identification of over- and under-performing schools in South Africa,” Discussion Draft for Department of Education, March 1998.

their residence is classified by Statistics South Africa as rural or urban (including metropolitan). The diagram below illustrates the division of all learners into nine groups.



2.2.2.2 Specifying a basic allocation formula for education

Once all learners have been characterised as belonging to one of nine groups, the equitable share allocation for education for each province can be determined by multiplying the average cost of educating a learner in each group by the numbers of learners in that group and then summing across the nine learner groups. In algebraic form, the basic equitable share allocation for education, AE_i , can be written as:

$$A_i^E = \sum_{j=1}^9 C_{ij} L_{ij}$$

where c_{ij} = the average cost of educating a learner in learner group j in province i , and
 L_{ij} = the number of learners in group j in province i .

The next section explains the determination of the values of the c_{ij} 's (that is, the average costs of providing a basic education to learners in each province).

2.2.2.3 Calculating average costs

As explained in Section 2.2.2 above, average costs per learner vary by type of learner, with average costs for poor, rural learners (C1 in the diagram above) being higher than average costs of educating non-poor, urban learners (C8). A convenient mechanism for representing the higher costs of providing a basic education to certain learner groups is to use a series of “weights” to represent higher average resource needs. Based on international literature and the limited research conducted in South Africa, the following weights have been assigned to learner groups characterised by family income and rural or urban residence. Because the costs of providing a basic education are on average lowest for learners from non-poor urban families, these learners are assigned a weight of one.

Learner Group	Weight
Non-poor urban	1.0
Non-poor rural	1.06
Poor urban	1.23
Poor rural	1.29
Special School	2.3

These weights should be interpreted as proxies for the relative amount of resources needed to provide basic education to various types of learners. While in some provinces and schools these resources may best be used to reduce class sizes, in other provinces and schools, devoting extra resources to teacher training or to the purchase of more books might contribute most to learners’ academic performance.

There is substantial evidence that the cost per learner in special schools for disabled learners is much higher than the per-learner cost of ordinary schools. Indeed, the extra resources necessary to provide basic education in special schools is implicitly referred to in the Employment of Educators Act of 1998.

The question of whether costs are higher in primary or secondary school is controversial and the answer depends very much on how learner performance is measured. Recent research in the United States suggests that smaller classes (and hence higher costs) in the first years of schooling have relatively big impacts on learner performance in the primary grades. On the other hand, higher costs associated with specialised secondary school instruction, for example for science

laboratories, may result in higher matriculation exam pass rates. Until more research is conducted in South Africa on the relative costs of primary and secondary education, the FFC recommends that learner groups in primary and secondary school be treated as if they have identical costs. This implies that all ordinary school learners from poor, rural households are assigned the same weight, regardless of whether they attend primary or secondary school.

It is important to emphasise that these weights represent the best estimate of the relative costs of providing a basic education to various groups of learners. If future research indicates that primary and secondary school costs differ, weights could be changed accordingly. Also, the weights should be changed over time to reflect improvements in the education system as new methods of instruction are developed.

In addition to varying by type of learner, the average cost per learner may differ systematically across provinces if educators are paid higher salaries in one province than in another. As remuneration rates are nationally determined, existing provincial differences in average remuneration reflect regional variation in the mix of qualifications and the seniority of educators. Data for 1999 indicate that the average remuneration per educator varies substantially across provinces, ranging from about R86,000 in KwaZulu-Natal to R102,000 in the Northern Cape.

Allowing the allocation formula to reflect current differences in average remuneration rates across provinces will reduce the incentive for provinces with above-average remuneration rates to take steps to reduce educator costs by retrenching highly paid but ineffective educators. On the other hand, taking no account of existing cross-provincial differences in average remuneration rates will in the short-run penalise provinces that have no power to retrench highly-paid educators, and in the longer run might create an incentive for provinces to reduce (or avoid raising) the level of educator qualifications. Allowing for some inter-provincial differences in educator costs also allows the formula to implicitly take account of differences in the labour market for educators across provinces.

As a way of balancing these two conflicting incentives, the FFC proposes to *partially* account for existing differences across provinces in average educator remuneration rates. In defining the average cost of basic education per learner, the formula will reflect to some degree provincial deviations from the national average cost of remuneration. As provinces gain more control over their personnel policies, the formula will increasingly place less weight on any existing provincial deviations from national average remuneration rates.

Algebraically, the average cost of educating a learner in learner group j in province i (c_{ij}), can be expressed as:

$$C_{ij} = w_j R_i$$

where w_j = weight assigned to all learners in learner group j , and

R_i = the average unweighted cost per learner in province i .

R_i is defined to include all personnel and non-personnel costs of providing a basic education in province i .

Differences in the value of R_i across provinces reflect approximately 80 percent of the percentage deviation of average educator remuneration rates in each province from the national average educator remuneration rate.

2.2.2.4 The problem of “inappropriate age” learners

As indicated in section 2.2.1, the current formula used to allocate the education component of the equitable share makes a distinction between “appropriate” and “inappropriate age” learners. The Department of Education has indicated the “appropriate” age for learners at each grade level: learners entering grade 1 should be 7 years old in the year in which they start school, those entering grade 2 should be 8 years old, and so on. Data on enrolment from the Department of Education and the provinces indicate, however, that a substantial number of learners at each grade level are an inappropriate age for that grade. These data indicate two separate problems:

- Many parents are sending their pre-school age children to school as a means of securing child care while they work during the day; and
- Particularly at the higher grades, large numbers of learners repeat grades because of poor performance. Amongst the oldest learners are many that are unable to pass their matriculation exams. At least part of the problem of grade repetition is attributable to the poor quality of education being provided in many schools. The problem of over-age learners, especially in rural areas, also reflects past education policies and cultural-historical practices in rural South Africa.

Table 2.A

Ordinary School Enrolment and “Inappropriate Age” Enrolment, 1997/98

Province	Ordinary Primary School			Ordinary Secondary School		
	Total Enrolment	Inappropriate Age		Total Enrolment	Inappropriate Age	
		Number	Percent		Number	Percent
Eastern Cape	1,516,923	462,297	30.5%	576,909	300,660	52.1%
Free State	494,519	183,105	37.0%	278,045	177,003	63.7%
Gauteng	899,528	154,860	17.2%	486,039	160,071	32.9%
KwaZulu-Natal	1,945,390	517,228	26.6%	886,109	370,007	41.8%
Mpumalanga	576,303	141,436	24.5%	290,464	137,078	47.2%
Northern Cape	137,003	36,503	26.6%	56,185	17,368	30.9%
Northern Province	1,133,439	219,335	19.4%	660,821	308,311	46.7%
North West	546,208	209,574	38.4%	277,109	138,649	50.0%
Western Cape	576,493	160,681	27.9%	278,174	60,252	21.7%
Total	7,825,806	2,085,019	26.6%	3,789,855	1,669,399	44.0%

Source: Education Management Information System (1999).

The data in Table 2.A indicate that in the 1997/98 academic year, nearly 27 per cent of primary school and 44 of secondary school enrolment consisted of inappropriately aged learners.⁴ Some concern has been expressed that the presence of inappropriate-age learners in schools serves to divert scarce resources from the education of the rest of the learners. Although there is no evidence that inappropriate age learners are either more or less costly to educate, the FFC recommends structuring the allocation formula so that if it chooses, government can count each inappropriate age learner as less than one learner for purposes of allocating the equitable share to provinces. As is done in the existing allocation formula, the assignment of a lower weight to inappropriate age learners provides provinces with a strong incentive to take steps to reduce the number of inappropriate age learners. The proposed formula includes a policy parameter, called alpha (α), which can be assigned values between zero and one. By assigning alpha a value of one, equitable share allocations are based on total enrolment. By assigning alpha a value less than one, provinces with above-average proportions of inappropriate age learners are penalised with lower allocations.

The number of inappropriate age learners, particularly those who are older than 18, is to a substantial degree outside of the control of provincial education officials. Therefore, it is appropriate that the intergovernmental funding structure take account of the need to provide vocational training and applied education services for these groups. Funding for these programmes might come from the Basic Element or from a conditional job training grant.

⁴ In classifying learners, we count as inappropriately aged children who are below the age of six and those learners who are two or more years above the “appropriate” age at each grade level.

2.2.2.5 Independent school subsidies

A small portion (0.7 percent) of provincial educational expenditures is devoted to subsidies for independent schools. Because the number of learners in independent schools varies widely across the provinces, the FFC proposes to include in the allocation formula an amount for each province equal to its independent school learners (L_i^{IND}) during the 1997/98 academic year, multiplied by a per learner subsidy (s^{IND}) to be determined by government.

2.2.3 Specifying the final education formula

To avoid disruption in education programmes and make equitable share financing consistent with national budgetary constraints, the initial calibration of the total costs of basic education should be close to projected funding levels over the next few years.

By substituting the average cost per learner of providing a basic education for C_{ij} in the basic allocation formula described in Section 2.2.2.2, classifying learners as appropriate or inappropriately aged, and accounting for independent school learners, a final education formula can be written as follows:

Recommendation 2.1

$$A_i^E = \sum_{j=1}^9 w_j R_i \left(L_{ij}^A + \alpha L_{ij}^{IN} \right) + s^{IND} L_i^{IND}$$

where A_i^E = the Equitable Share allocation for education to province i,

w_j = weight assigned to all learners in learner group j,

R_i = the average unweighted cost per learner in province i.
 R_i is defined to include all personnel and non-personnel costs of providing a basic education in province i.

L_{ij}^A = the number of “appropriate” age learners in learner group j in province i,

L_{ij}^{IN} = the number of “inappropriate” age learners in learner group j in province i,

α = a policy parameter reflecting the weight to be placed on i nappropriate age learners,

s^{IND} = the average subsidy per independent learner determined by national government, and

L_i^{IND} = the number of independent school learners in province i.

2.3 The welfare component

For the welfare formula, the FFC defines *social security* as the basic level of service. Social security in this definition constitutes direct non-contributory social grants to individuals entitled in terms of the regulations. Although the current provincial formula makes an allocation for social security grants, it does not provide explicitly for social welfare services. Until the Department of Welfare gives a clear set of policy guidelines, social welfare services is included in the Basic Element of the provincial equitable share formula.

After a brief discussion of the current formula, the FFC's proposal for the allocation for welfare is presented.

2.3.1 The current allocation

Under the current fiscal arrangements, nearly all social security spending is included in the provincial equitable share. National government sets eligibility requirements and the payment levels of social security grants, while the administration and financing of these grants is a provincial function, with funding coming primarily from provinces' equitable share allocations.

In the current equitable share allocation, the costs of social grants are related to demographic and income differences across provinces, however, the current formula combines these elements in a manner that is not directly related to eligibility or the costs of social security. For example, the use of population in the welfare formula is based on the assumption that the proportion of the population disabled is the same in all provinces. However, this assumption is not justified. Census 1996 data on persons with disabilities indicate that while only 1.2 per cent of the population in the Western Cape is disabled, the incidence of disabilities is 4.5 per cent of the population in the Free State.

2.3.2 FFC proposal for the welfare component

To apply the costed norms approach to the distribution of cash transfers, the FFC's proposed formula determines the number of persons who are potentially eligible for each of six separate social security programmes and multiplies that number by a province's average grant amount. The average grant amount depends on the government-determined formula and the income of those people who are eligible for the grant. To implement this approach, it is necessary to develop a reasonably accurate count of the number of individuals who are eligible for each grant.

The FFC's approach is to use nationally available data sets, primarily from Statistics South Africa, to obtain an objective measure of the potential population eligible for various social security transfers. To

the census data is then applied the income-based means test specified in the grant regulations, in order to estimate the number of individuals eligible for each type of cash transfer. For example, to calculate eligibility for the old age pension, data on the income distribution of individuals characterised by both age and gender are used.

There is considerable variation across provinces in the rate of take-up for the various social assistance categories. To the extent that current rates of participation in social assistance programmes vary across provinces because of differences in the underlying eligibility rates (for example, higher percentages disabled in one province than in another), then the equitable share allocations generated by the proposed formula will mirror these differences. However to the extent that existing variations reflect historical differences in rates of assistance by race or region, the costed norms formula will redistribute aid from provinces with high rates of participation to provinces with lower rates. Because the cost of administration of the social grants is related to the provincial take-up rates, a percentage share allocation of 5 per cent is applied for administration, based on that province's total social security cost.

For several of the social security grants, the current number of individuals receiving that grant is a small fraction of the total number of eligible individuals. In those cases, the formula employs a phase-in parameter, beta (β), to allow the equitable share allocations designated for that grant programme to mirror more closely the aggregate expenditures under the current grant.

All provinces are likely to face a gap between available funds and the amounts that would be required if there were universal participation of persons eligible for assistance. Provinces should be encouraged to resolve this gap between resources and needs in as equitable a manner as possible. In addition, the transparency of the equitable share amount for social security under the costed norms approach should encourage provinces to search for the most equitable ways to limit welfare obligations. For example, census data indicate that, given the distribution of income among eligible persons, average grant levels should be substantially lower than the maximum grant. However, the management data from the SOCPEN⁵ system indicate that almost all recipients of old age assistance and disability assistance receive the maximum grant. Hence, the gap between needs and resources could be reduced by a stricter application of the means test for determining grant amounts. In the case of disability grants, the costed norms approach will encourage provinces to award grants based on the severity of the disability, and to provide periodic reviews of eligibility.

Below, the FFC's formula approach to each of the six social security programmes is described.

⁵ SOCPEN: Social Pensions Information System of the Department of Welfare.

2.3.2.1 Old age pensions

Subject to a means test, all males over the age of 64 and females over the age of 59 are entitled to receive an old age pension. The old age pension system is non-contributory, with all eligible persons entitled to a monthly cash transfer. The maximum pension is currently set at R540 per month.⁶ The grant amount each individual is entitled to depends on his or her income, assets, and marital status.

The number of persons eligible for old age pensions in each province is calculated using 1996 census data that classifies individuals by age, gender, and income. For each province, the size of the average old age pension to which eligible individuals are entitled was calculated using data on the 1996 income distribution by age and gender in each province, and applying the old age pension grant-determination formula as specified in Department of Welfare regulations.

However, the SOCPEN management reports indicate that almost every individual who receives an old age pension is receiving the maximum R540, despite the intended reduction in actual grant awards implied by the clawback effect of the means test. This state of affairs attests to the fact that provinces do not have the resource capacity to apply the means test, which is in any case extremely complicated. And even where attempts are made to apply the means test more strictly, the cost will far outweigh the benefits at this stage. The FFC further recognises the real risks to individuals that would result from abrupt changes in provincial allocations for welfare. Hence, in the proposed welfare formula the value of the average old age pension in each province is an average of the current grants.

According to FFC calculations, nearly 88 per cent of individuals who are eligible for old age pensions currently receive them. International evidence indicates that in most countries, even with generous welfare benefit systems like Scandinavia, the take-up rates rarely exceed 90 per cent. The FFC therefore assumes that this take-up rate will increase only modestly for the foreseeable future and proposes that the beta for old age pensions is given a value of .90.

2.3.2.2 War veteran pensions

According to SOCPEN management reports, only about 7,962 war veterans (combatants between 1915 and 1945) are currently receiving war veteran pensions. Because this pension is being phased out, the current spending level is used as the basis to cost this programme.

2.3.2.3 Disability grants

All individuals of working age who are unable to support themselves because they have a physical or mental disability (and have no other source of income) are entitled to a grant of up to R540 per month. For

⁶ All grant amounts and take up rates have been updated to reflect the March 2000 Management Report.

the purposes of the disability grant, working age is defined as over 18 and under 60 for females and 65 for males. In order to receive a disability grant, an individual must undergo a medical examination to certify that his or her disability is serious enough to prevent gainful employment. As with the old age pension, eligibility for disability grants is restricted to those with low incomes.

While the administrative task of determining eligibility for old age pensions is reasonably straightforward, the same cannot be said for disability grants. Although some disabilities, such as blindness and severe mental retardation, are relatively easy to identify, a determination of the extent to which any given physical or mental condition reduces or prevents employment is both difficult and inherently ambiguous. It is thus not surprising that throughout the world, eligibility for disability is a difficult and contentious issue. The key to allocating revenues to provinces for the purposes of funding disability grants is the use of measures of disability that are not subject to influence by provinces.

One important goal in designing the disability allocation rule is to provide all provinces with a strong incentive to adhere closely to national standards for eligibility for disability grants, and to apply these national standards in a uniform and consistent way. If procedures for determining eligibility are similar across provinces, then the actual rate of disability becomes a good indicator of need. As noted above, by determining the equitable share for disability in this transparent fashion, each province will be encouraged to adopt uniform eligibility criteria and to allocate the limited funds based on the severity of the disability.

The only available measure of disabilities (other than a count of those receiving disability grants), is self-reported data on disabilities from the 1996 census. Although self-reported data are not perfect, they do provide, when combined with data on income, an independent measure of eligibility for disability grants. Individuals with one of the following five categories of disability are included in the FFC's count of the disabled: sight, hearing, physical, mental, and multiple disabilities. The final count of the disabled appears to be comparable with international trends.

The latest data from the Department of Welfare indicate that about 611,000 individuals currently receive disability grants. This figure is only 53 per cent of the FFC estimate of the total number of persons eligible for disability grants. In the proposed equitable share allocation formula, the cost of disability grants is calculated as the average of the SOCPEN number. In order to reflect that eligibility for disability benefits exceeds the actual number of disability benefit recipients, the phase-in parameter for disability grants (**b**) is set equal to 0.60 in the formula.

2.3.2.4 Child Support Grant

The newest social security grant is the Child Support Grant. It replaces the Child Maintenance Grant and is directed towards providing financial assistance to children under the age of seven who are being raised in poor families. All eligible children are entitled to a flat grant of R100 per month. Again, the availability of census data on age and household income, combined with rural/urban distinction, makes it possible to estimate the number of children that are eligible for the Child Support Grant.

The FFC estimates that in mid-1999, there were a little over four million children eligible for the grant. According to the latest SOCPEN data, 369,000 children are currently receiving the grant. This low (9 per cent) “take-up” rate has increased dramatically over the past year, indicating that provincial welfare departments are now more aggressive in signing up new grant recipients.

In calculating the full cost of the child support grant for each province, the number of eligible children is multiplied by R100. In order to account for the anticipated growth in this programme, the phase-in parameter is given a value of 0.20.

2.3.2.5 Foster care grants

These grants are intended to provide basic economic support to children requiring foster care. Children below the age of 19 are eligible, and as with the other social security grants, eligibility is means-tested. All eligible children are entitled to a monthly grant of R374.

Unfortunately, there are no data available on the number of children who should qualify as recipients for foster care and who are potentially eligible for this grant. As an approximate mechanism for determining the number of children eligible for the foster care grant, the number of orphans listed in the 1996 census that passed the means test was tallied. To reflect the fact that a number of children who receive foster care do not live in orphanages, the number of children eligible for foster care grants in each province was assumed to be two times higher than the number of orphans living in that province.

Based on the FFC's estimate of the number of eligible children, only about 29 per cent of those eligible are currently receiving foster care grants. The phase-in parameter for foster care grants in the proposed formula has been set at 0.35.

2.3.2.6 Care dependency grant

Subject to a means test, families (or other caregivers) of children under the age of 19 who suffer from disabilities are eligible for this grant. Combining data on age, household income, and disabilities from the census, it is possible to estimate the number of children who are eligible for a child dependency grant. The census data indicate that approximately 500,000 children under the age of 19 have some form of disability. Since the care dependency grant targets those with more severe physical or mental disabilities, the FFC estimates that approximately five per cent of the disabled population under 19 is eligible for this grant.⁷ Of this number, about 23 per cent are currently receiving the grant. In costing this grant, the number of eligible persons is multiplied by the value of the grant. In the formula, the phase-in parameter has been assigned a value of 0.30.

2.3.2.7 Grant-in-aid

The Grant-in-aid is available to individuals who care for the mentally and physically infirm. The latter includes the aged, disabled adults and severely disabled children. Since the management report from SOCPEN has since late 1999 included the cost of the Grant-in-aid along with pensions, disability and care dependency grants, there is no need for a separate costing.

2.3.3 Specifying the integrated welfare formula and estimating costs

Recommendation 2.2

The Formula for the social security component

$$A_i^w = \sum_j \beta_j E_i^j G_i^j (1 + P_{Adm})$$

where:

- A_i^w = the Equitable Share allocation to province i,
- E_i^j = the number of individuals eligible for Social Security grant type j, where the j's include Old Age Pensions, War Veteran Pensions, Disability Grants, the Child Support Grant, Foster Care Grants and Child Dependency Grants.
- G_i^j = the average grant amount distributed as grant type j,
- β_j = a phase-in parameter for grant type j, and
- P_{Adm} = the share of total social security allocations to be added for administrative expenses

Based on the most recent available data and on the parameter values specified in the discussion of the formula, the proposed welfare formula allocation would be slightly more than the current equitable share allocation for social security. This total could be increased or decreased as a result of parameters set by national policy-makers.

⁷ The basis for this estimation is the World Health Organisation's estimate of severe disabilities amongst children.

2.4 The health care component

The proposed formula for the provincial equitable shares for health is based upon provincial populations weighted for differential utilisation rates according to age and gender differences and adjusted for relative poverty. The formula applies a preliminary cost-norm for primary health care services. As with the approach adopted for the other social sector allocations, this formula only attempts to cost out the most basic health services to be provided by provinces – in this case, those services defined as “Primary Health Care” (PHC) services. The remainder of a province’s budget for health must be sought in the Basic Element, and, for tertiary services, from conditional grants.

2.4.1 The current allocation

Since 1994 the Department of Health, the FFC, and the Department of Finance have proposed formulae to determine the health equitable shares to provinces. The previous methods were submitted in a changing environment, were designed with some urgency, and are the simplest and most direct route to allocating financial resources for health services to provinces. The result has been that these formulae reflect only very indistinctly, if at all, the public health policy frameworks that the Department of Health has developed.

Since the 1998/99 division of revenue process, the social sector equitable share components (education, welfare, and health) have been weighted according to their previous relative sizes in provincial budgets. This exercise indicates that primary and secondary health spending usually consumes approximately 18 per cent of a province’s budget. The pool of revenue determined by this 18 per cent of the global equitable share is then divided between provinces by means of a population-based needs assessment. Relative provincial need for public health care is determined according to the proportions of people that benefit from private medical aid/insurance and those that do not. To ensure a bias towards the most needy, people without medical aid are given four times the weight of those with medical aid.

2.4.2 The FFC proposal for the health-care component

The methods used to arrive at the health grants to provinces over the last four years have been annualised and short-term ones. It is desirable to have a method in place that endures over a longer period and which simplifies any assessments of progress towards interprovincial equity in health services.

The prototype formula that follows is the FFC’s first attempt to estimate the cost of providing the most basic public health services across provinces, and to satisfy the requirement for a long-term approach to the equitable share allocation for health.

Even basic health services, broadly defined as Primary Health Care, include a complex bundle of different types of services. This range of basic services is, in turn, delivered by a number of different providers – community health centres, clinics, district hospitals, and even provincial hospitals. The costs of providing PHC services may vary in terms of which public institution delivers these services. Costs are also likely to be influenced by the degree of ruralness in a province, the incidence of poverty, various disease profiles, and the extent to which provinces can exploit economies of scale in service provision.

It should be reiterated that the cost-based approach seeks to take account of such differences in need. However, the efficiency with which services are delivered may also vary across provinces, and the proposed formula is designed to encourage all provinces to provide services in the most efficient way possible.

The task of costing health services in a way that separates actual spending from required spending is a long-term endeavour. However, a number of initiatives in the Department of Health are already under way that will facilitate the process of calculating the costs of basic health care. These include:

- agreement on a basket of services for each of the service levels – PHC, secondary (specialised) health services, and tertiary (academic) health services;
- the application of appropriate accounting systems;
- the introduction of uniform billing regimes;
- the introduction of revenue collection (and retention) mechanisms;
- the introduction of data capturing and processing systems;
- the design of uniform service delivery indicators and output measures; and
- the design of realistic service unit-cost indicators across all levels of health care in the Republic.

The formula proposed below relies in part on a 1995/96 primary health cost and utilisation study, conducted at a selection of community health centres and clinics by the Centre for Health Policy (CHP).⁸ The study was updated to 1997 by the CHP. At the time of writing, a 1999/2000 revision and update of the study was being undertaken by staff at the Department of Health.

The 1997 CHP study indicates that for a typical urban population of 100,000 people, the annual direct per capita cost of providing a PHC package is R127. The indirect service costs of the package amount to R31 per capita (these would include rehabilitation services, which are provided by community-based rehabilitation nurses to people with

⁸ L. Rispel *et al* (1996), *Confronting Need and Affordability: Guidelines for PHC Services in South Africa*; Centre for Health Policy, Johannesburg. A qualification should be noted: the results of the study do not have the endorsement of the Department of Health. The study assumes a fixed cost for a service without taking scale into account and does not cost out some services that would be included in the PHC basket of services.

disabilities; as well as the support services that accompany the delivery of the PHC package, such as management and administration). The cost indicators provided by the study have, for the purposes of the formula proposed here, been updated to 1999, and inflated again by 30 per cent. The total inflation was applied to accommodate for actual inflation between 1997 and 1999, and to address the concern that the original CHP study may have yielded a conservative cost estimate. The figures now read R177 and R43 for direct personal and indirect non-personal services respectively for the budget year 1999-2000.

These cost indicators must be treated with caution. The indicators were taken from selected “case-study” clinics and community health centres; were from the outset based on a number of assumptions (for example, utilisation rates) that may no longer be appropriate; and have in turn been subject to additional manipulations that reflect further assumptions. However, these figures are currently the only cost indicators for PHC services that are available. As better cost indicators are developed, these can be entered into the formula to deliver more appropriate allocations.

The proposed formula is intended to cost and provide for a *level of service* (PHC), *rather than for particular institutions or budget programmes* (district or provincial hospitals). It is acknowledged that there may be a broad coincidence between levels of service and institutions (and the District Health Services budget programme allocation has at times been used as a proxy quantification of the allocation to PHC). However, PHC services, as pointed out above, are delivered across a range of public health institutions, each of which supply these services at a different cost. Any aggregate cost indicators for PHC need to reflect this reality if they are to cater adequately for the true costs to provinces of supplying these services.

Lastly, it should be pointed out that the proposals made here coincide with a transfer of the responsibility for PHC service delivery from provincial to local government (although currently PHC services continue to be delivered at both local and provincial levels). Ideally, municipalities should provide PHC services and should be assured of the necessary financial resources to fulfil this responsibility. However, the transitional state of affairs complicates the design of any definitive recommendations in this regard. The FFC suggests that urgent attention be given to the design of protocols and measures by which equitable share portions for PHC could be diverted to municipalities.

2.4.2.1 Cost factors

The implementation of the costed norms approach involves the calculation of the average costs of providing the set of health care services that are considered necessary requirements of basic health care. A large body of international research indicates that to maintain adequate standards of health, certain demographic groups must utilise

more health care than other groups, in the form, for example, of more frequent visits to health care professionals. On the basis of these findings, the FFC's proposed health formula begins by dividing each province's population into four separate demographic groups. The per-person cost of providing basic health care services to each group is calculated separately. To reflect an assumption that, on average, young children need to utilise health care services more frequently or intensively than, for example, working-age males, the formula assigns a "weight" of 1.5 to all children. Higher-than-normal weights are also assigned to women of child-bearing age and to the elderly.⁹

In summary:

Group 1: Weighting = 1.0

- Men between the ages of 5 and 65
- Women between the ages of 5 and 15
- Women between the ages of 50 and 65

Group 2: Weighting = 1.5

- Children under the age of 5

Group 3: Weighting = 1.3

- Women between the ages of 15 and 49

Group 4: Weighting = 1.2

- The aged over 65

Evidence also suggests that the incidence of disease is linked to economic well-being - poverty correlates strongly with low levels of education, nutrition, and sanitation. Therefore, individuals living in poor families are more likely to require medical care to maintain a basic level of health than those who enjoy relatively wealthier circumstances. To reflect this finding, the formula utilises a poverty margin, and the impact of poverty on costs may be adjusted by using a variable parameter (in this case, the exponent $1+\alpha$). In the formula a benchmark weight of -0.8 is assigned to α . The benchmark weight errs on the side of caution and downplays differences between provinces in terms of relative poverty. As the value of α is increased and the exponent becomes larger, so the allocations to provinces will become more redistributive.

Assessments of the demand for health care in South Africa are complicated by the existence of a sector of the population (generally employed and wealthier people) that enjoys private medical aid coverage.¹⁰ Poverty rates are inversely correlated with rates of private medical aid coverage in South Africa by a correlation co-efficient of -0.91 . Demand for publicly provided health services is assumed to be lower in provinces with more widespread access to private health providers, and private medical aid coverage has been used previously as an indicator of the degree to which demand is lessened. Given the close inverse correlation between medical aid coverage and poverty, no distinction of those provincial populations that benefit from medical aid membership is made in the proposed formula (see below).

⁹ The general assumption of higher utilisation and demand for public health services by age and gender is reinforced by international experience. See J. Doherty and A. van den Heever, *A Resource Allocation Formula in Support of Equity in Primary Health Care* (Centre for Health Policy, 1997).

¹⁰ According to the October Household Survey (1995), the average rate of coverage by medical aid schemes was 18 per cent in South Africa, varying across provinces from a high of 40 per cent in Gauteng to a low of 8 per cent in Northern Province and Eastern Cape.

To obtain the cost-based grant amount for direct services to individuals, the provincial weighted population totals are multiplied by the estimated per capita cost of personal primary care services, in this case R177. Again, it must be emphasised that this figure is preliminary and should be adjusted according to newer research or a consensus between public health providers.

The cost of delivering primary health care to provincial populations will vary according to particular provincial conditions. For this reason, the indirect services component of the per capita cost for PHC is adjusted by provincial population density. The assumption is made that economies of scale can be most efficiently exploited in the most densely populated provinces. Therefore, the basic per capita cost of indirect services (such as clinic transport and administration) is set equal to that in the most densely populated province, with the per capita cost deviating from this one in all other provinces according to their relative population densities. The impact of economies of scale on indirect service costs may be adjusted by using a variable parameter (in this case, the exponent β). In the formula a benchmark weight of 0.2 is assigned to β . The relative cost for indirect services is then multiplied by the same weighted population as before.

The allocation to any one province for PHC services is the sum of the cost of direct services to individuals and indirect services in that province.

2.4.2.2 Factors not included in the formula

Medical Aid Coverage: In contrast to the previous FFC and Department of Finance formulae, the proposed formula does not include medical aid coverage directly. The medical aid indicator is less-than-ideal for a number of reasons:

- As stated in the Health White Paper of 1997, the Department of Health's constitutional mandate is to guarantee basic health services to the entire population of South Africa, and the equitable share must provide an amount sufficient to (progressively) meet that objective. Reducing provincial funding in direct proportion to private alternatives vitiates the goal of providing a unified system of health care.
- The separation in usage of public and private health services between those with medical aid coverage and those without is only partial. For example, substantial numbers of people without private insurance may make use of private medical services, paying out-of-pocket.¹¹ By avoiding direct weighting of the population by medical aid coverage, the formula tries to take account of cross utilisation between the public and private sectors.

¹¹ See N. Soderlund et al, "Private Health Sector Care," in *South African Health Review 1998*, Health Systems Trust, Durban. It may also be the case that many people who do enjoy medical aid coverage will still rely on public health either for very basic services or for services that are very expensive in the private sector, or where their medical aid/insurance coverage is insufficient or exhausted.

- The Department of Health is committed to increasing the efficiency and effectiveness of the revenue collection administration in public hospitals. By reallocating the equitable share for provincial public health services in favour of provinces with greater proportions of low-income people, those provinces will be encouraged to provide free care to those who are unable to contribute out of their own resources. On the other hand, those provinces with a greater proportion of patients who can afford some contribution will face a greater need to rely on efficient collections from that sector of their population.¹²

HIV/Aids: The rapid rise in the incidence of HIV/Aids raises the question of whether there should be a specific factor for the epidemic in the equitable share formula. Despite the severity of the HIV/Aids epidemic, the FFC recommends against including HIV/Aids incidence specifically in the equitable share formula. The FFC believes that public health needs and priorities change continuously as new problems are identified, for example the increase in tuberculosis. Including specific disease factors in the formula tends to lock in patterns of aid distribution, making it more difficult to respond to changing needs. Instead, the FFC suggests that the HIV/Aids epidemic be dealt with as a national and multi-sectoral priority (across the education, health and welfare functions), and not as one to be addressed separately by the various provincial departments of health.

Other specific diseases: Similarly, the temptation to create conditional grants for specific diseases should be resisted. Conditional grants tend to crowd out resources for primary care and reduce provincial flexibility in allocating health care resources, with little or no guarantee that tied funds will be more effective at combating the various diseases than block grant funds.

2.4.2.3 Policy parameters

As with the other social sector components, a number of policy and technical parameters are built into the proposed health formula. These are included to imbue the formula with flexibility. Each of these parameters can be adjusted to ensure more desirable outcomes without fundamentally altering the objective basis of the formula. The policy and technical parameters include:

- Provincial populations are weighted for age and gender profiles to accommodate different utilisation rates. These weights can be adjusted over time to better reflect ideal utilisation rates between age and gender groups.
- The poverty rate is defined in the formula as the percentage of each province's population that lives in households with an annual income below R12,000 per annum. Relative poverty is this

¹² In a description of Mexico's efforts at decentralising the health care system, Birn illustrates the problems that result if user fees are not targeted appropriately: increased reliance on user fees is both inequitable and inefficient, imposing proportionately higher costs on the poor and discouraging access to basic health services. See A. Birn, "Federalist Flirtations: The Politics and Execution of Health Services Decentralization for the Uninsured Population in Mexico, 1985-1995," *Journal of Health Policy*, Vol 20, No 1, 1996.

measure divided by the national average. The importance of poverty in the formula may be adjusted by modifying the variable parameter α (in the exponent $1 + \alpha$, where $-1 < \alpha \leq 1$ to either attenuate or augment the importance of poverty). In the formula, a benchmark value of -0.8 is assigned to α . Thus, both the poverty rate and the weight accorded to poverty may be adjusted to give greater or lesser emphasis to poorer provinces, and therefore also to the redistributive thrust of the formula.

- The importance of population density in determining provincial indirect costs for PHC is captured in the exponent β , (where $0 < \beta \leq 1$ to attenuate the importance of population density). In the formula, a benchmark value of 0.2 is assigned to β . As more precise information on the extent of economies of scale becomes available, this may be adjusted to accord greater or lesser importance to population density.
- The average per capita costs used in the formula are based on an available study of primary health care costs in South Africa. As more accurate cost indicators become available they may simply be inserted into the formula to replace the existing ones.

2.4.3 Specifying the integrated health formula and estimating costs

Recommendation 2.3

$$A_i^H = \sum_{j=1}^4 C_{ij}^P P_{ij}$$

Where:

A_i^H = The equitable share allocation for health in province i.

C_{ij}^P = The costs of providing primary health care services.

P_{ij} = The number of people in province i of patient type j (described in the four age/ gender groups above).

And:

$$C_{ij}^P = W_j (Pov_i / Pov_{nat})^{1+\alpha} C^P$$

Where:

W_j = The weights for each patient type reflecting the “normative” utilisation of basic health care associated with each patient type;

Pov_i = The poverty rate in province i;

Pov_{nat} = The national average poverty rate;

α = the policy parameter reflecting the “weight” to be given to poverty;

$C^P = C^A + C^N (D_{norm} / D_i)^\beta$ which is the per capita cost for

a national norm of primary health care services, where C^A is the average annual cost of providing a bundle of personal primary health services (in the benchmark formula we have applied $C^A = R177$), and C^N is the average annual cost of providing a set of associated services (in the benchmark formula $C^N = R 43$). D_{norm} = is a norm population density set equal to Gauteng’s population density, and D_i is the population density in province i. β is a policy parameter which allows the importance of population density in the formula to be adjusted.

2.5 Conclusions

A defining characteristic of provincial public services is that the costs of achieving norms in the service areas of education, welfare, and health differ according to the people being catered for. At the risk of over-simplification, South Africa's population can be categorised demographically and economically:

- International experience suggests that, in general, the costs of maintaining an adequate level of health care are higher for the elderly and for young children than for most working-age adults. Similarly, social security grants will almost always exclude able-bodied, working-age adults from benefits.
- Poverty leads directly to higher education, health, and welfare costs. For example, the incidence of both disease and accidents are higher among the poor, and thus higher concentrations of poor lead to higher costs of achieving a healthy population. Similarly, the costs of education are higher for learners from low-income families than from higher income families.

As there is substantial variation in the economic and demographic characteristics of South Africa's provinces, it is not surprising that the costs of meeting social sector norms and standards vary substantially across the provinces. It should be stressed that such cost differences are not a function of the efficiency or inefficiency with which provinces deliver services. Rather, cost differences reflect factors that are beyond the influence of provincial government administrators.

If grant formulae do not take account of these cost differences, then even if all provinces were able to raise their service delivery standards to the level of the most efficient province, differences in outcomes – for example, rates of infant mortality, or percentage scholars passing the matriculation exam – would still be pronounced. If these differences in outcomes are mistakenly attributed to inefficiency or waste, then the rules for determining intergovernmental transfers are likely to be primarily political, and confidence in the fairness of the system will be eroded.

In devising formulae for the social sector, the guiding principle has been to choose as cost factors only those characteristics that are beyond the influence of provincial officials. Thus the education formula is based on the number of learners enrolled in school, adjusted for cost differences based on household income and place of residence. If the education formula were based solely on enrolment, provinces would have an incentive to maximise enrolments rather than the educational attainment of learners. To provide an incentive for provinces to improve the quality of basic education, a lower weight is assigned to inappropriate age learners.

Similarly, in the health formula, poverty rates, differences in the demographic composition of the population, and population density are used as the basis for the inter-provincial allocations. A major goal of national health policy is the reduction in infant mortality. However, infant mortality is not included as a specific indicator in the formula. This is because its inclusion could create an incentive to over-report infant mortality, and could also lead to penalising provinces which are relatively successful in lowering rates of infant mortality. By including factors that correlate well with rates of infant mortality, such as poverty, the formula can achieve the objective of providing more resources to provinces with greater needs because of higher rates of infant mortality, while avoiding undesirable incentives. For the social security grant formula, measures of eligibility are used, which are based on data on age, income, and disability rates from the 1996 Census.

The magnitude of the differences in costs across provinces is difficult to determine, however, because of the complexity of public sector production functions. The interaction of publicly provided inputs (such as schools, educators, clinics, and social service workers) and private inputs (such as parental assistance with schoolwork and basic nutrition levels) makes it difficult to isolate the separate effects of cost factors such as poverty. Data requirements in this regard are substantial.

The total Rand allocations that might result from the prototype formulae therefore reflect the particular set of norms and standards and other policy parameters that the FFC has chosen as a starting point. Continued refinements of the cost estimates will be necessary, as will a sustained effort at data collection and analysis by all of the relevant government agencies in both the national and the provincial spheres.

The FFC envisions further research in the following areas:

- A key factor in the costed norms approach to the equitable share is that the standard of efficiency – that is, the minimum cost of service delivery – be widely understood and accepted. To accomplish this, statistical studies should be complemented by case studies and implementation research. Such studies can help to identify best practices in provincial allocation and delivery of social sector services.
- Research on the relationship between private and public provision of social services is needed. Patterns of demand for both public and private health services would help to make more precise the measure of need for health care. Similarly, an understanding of the role of fees in education and their effect on access to schooling is important.

- Further research in identifying the relationship between public sector inputs (such as teachers, school books, and nurses) and public sector outputs (such as reduced infant mortality and increases in matriculation pass rates) will be extremely useful in implementing the costed norms approach to the equitable share. There should be two aspects of this research. The first is a systematic examination and synthesis of relevant research and practices from other countries. The second is the collection and analysis of data that will shed more light on the costs of providing basic social sector services. Specific poverty-related differences in the costs of education and health care are assumed in the initial formulations.
- Estimation of health production functions that relate health outcomes to primary health care, controlling for factors such as poverty, would be useful. Some initial studies of this type have been performed in the education sector.
- Finally, systematic monitoring and evaluation of the results of moving to a costed norms approach is crucial.



3. COMPLETING THE PROVINCIAL EQUITABLE SHARE FORMULA

Presently the allocations for education, welfare, and health account for 77 per cent of the Department of Finance formula, and provincial expenditure on these items has averaged between 78 and 85 per cent of total expenditure over the past four years. Sections 4 and 5 of this Report laid the basis for the costed norms approach, and it is clear that if this system is implemented, social expenditure will still comprise the greater proportion of provincial expenditure.

This raises the question of what comprises the remainder of the provincial revenue pool. The current Department of Finance formula consists of four additional elements:

- a basic component (7 per cent of the total equitable share);
- an economic activity component (8 per cent);
- a backlogs component (3 per cent); and
- an institutional component (5 per cent).

In this section, the case will be made for folding the current Basic, Economic Activity, and Backlog components of the Department of Finance equitable share formula into one “Basic Element” and retaining a separate Institutional Element. The basis for distributing these two components will be presented.

3.1 The Basic Element (B)

3.1.1 Past FFC recommendations

The Basic Element has been a notional block grant for provinces to finance functions assigned to them, and may supplement other allocations and grants specifically provided for certain mandated service responsibilities. This element supports the principle of provincial fiscal autonomy in that it enables provinces to budget with this grant according to their priorities. As explained in the FFC’s Framework Document, lower-tier governments are sometimes considered better able to spend public money more efficiently than higher-tier governments because they should be more responsive to the needs and preferences of their constituents. If the individual formula elements were to be totally prescriptive as to how provinces should spend their resources, this important advantage would be lost.

The demand for public services rises as the number of people in an area increases. It is thus logical that the amount of the Basic Element should be related to the size of the population in a particular jurisdiction. The amount of financial resources available for distribution under the Basic Element was accordingly shared in proportion to weighted provincial populations, using the best demographic estimates available.

The demand for public services also varies according to the socio-economic characteristics of the recipient population. A proxy for poverty, economic development and need was required. The FFC recommended in 1996 that the number of people defined as living in rural areas be used for this purpose and that a weight of 25 per cent be attached to this factor. Other socio-economic indicators such as poverty levels (based on income measures) and the Human Development Index (HDI) were considered as alternatives to the “ruralness” factor. In the end it was felt that “ruralness” of the population would be the most appropriate and least contentious of the indicators for weighting, given the nature of the data.

In the 1996 FFC proposals, the aggregate Basic Element was a residual after the other elements (education, and health) had been determined. This was done in order to ensure that these very important services are provided for even though the total amounts available to each province were lump sum amounts that were intended to fulfil the general expenditure responsibilities of the provinces. The Basic Element amounted to about 45 per cent of the total provincial allocations. At that stage, the figure of 45 per cent included expenditure on social welfare, which was not part of the S (education and health) Element.

3.1.2 Review of the Department of Finance allocation formula

Basic component: For the 1998/99 fiscal year, the Department of Finance agreed in principle with the FFC’s notion of a B Element as part of the overall provincial allocation formula, although it weighted ruralness at 50 per cent.

For the 1999/2000 fiscal year, the rural weighting factor for this element fell away owing to the introduction of a separate backlogs component. In the final allocations, the basic share is calculated as a province’s share of the national population. The introduction of the backlogs component resulted in a fall in the share of the basic grant from 15 per cent to 9 per cent in 1999/2000 and a projected 7 per cent in 2000/01.

Table 3.A Comparison between the FFC and Department of Finance:

Relative size of formula elements in percentage shares				
Element	FFC 1996	DoF 1.5998	DoF 1999	DoF 2000
Education	40	39	40	41
Health	12	18	18	19
Welfare	0	16	17	17
Institutional	0.4	4	5	5
Ec Activity	1	8	8	8
Basic	45	15	9	7
Backlog	0	0	3	3

Sources: FFC, 1996 Recommendations
DoF, Intergovernmental Fiscal Review, 1999

Note: When the FFC’s recommendation of 45 per cent was made in 1996, welfare was not included in the S element of the formula.

Backlogs component: The backlogs component was introduced in 1999/2000 in order to address the significant capital backlogs faced by some provinces. Its distribution is calculated using three subcomponents: the health and education subcomponents are 18 and 40 per cent respectively to reflect actual provincial spending on these functions, and the third subcomponent of 42 per cent is based upon provincial shares of the rural population.

Economic Activity component: This component is a proxy for provincial contribution to national revenue in the absence of provincial taxing powers and therefore directs a proportion of nationally collected revenue back to its source. Gross geographic product (GDP) was used in 1998/99 to determine the economic activity allocation across provinces.

3.1.3 Review of provincial “other” expenditure

In assessing the importance of the basic, backlogs, and economic activity components, it is instructive to examine trends for the “other” provincial expenditure (that is, expenditure over and above education, welfare, and health).

Table 3. B Provincial Expenditure Budgets, 1999

	<i>% Shares of Programmes</i>								
	Education Health & Welfare	Institution	Public works	Housing & Local Gov.	Agricult & Land Affairs	Econ. Affairs & Environm.	Transport	Finance & Prov. Expendit.	Other
E Cape	85.20%	0.77%	3.56%	1.81%	2.47%	0.85%	1.22%	3.07%	1.04%
F State	84.94%	1.52%	0.00%	2.07%	1.64%	0.91%	7.02%	1.13%	0.77%
Gauteng	90.91%	1.13%	5.20%	0.61%	0.00%	0.00%	0.00%	0.76%	1.40%
KZN	84.56%	0.60%	1.74%	2.41%	1.80%	0.57%	3.70%	3.36%	1.25%
Mpumal.	80.11%	1.64%	9.55%	1.68%	1.90%	2.19%	0.00%	2.07%	0.86%
N Cape	80.44%	2.37%	3.20%	1.85%	2.00%	0.52%	5.79%	1.08%	2.75%
N Prov	82.02%	0.86%	5.68%	0.16%	4.53%	0.60%	1.64%	4.48%	0.04%
N West	77.78%	1.12%	7.40%	3.07%	2.46%	0.79%	4.34%	2.02%	1.03%
W Cape	88.25%	0.26%	0.00%	0.91%	0.71%	0.64%	5.11%	1.35%	2.77%

Source: FFC calculations based upon 1999 Provincial White Books.

The provincial budgets for the 1999 fiscal year illustrate the difficulties involved in making reasonable comparisons between provinces on “other” expenditures. The distinctions in functions for budgetary purposes are not the same across provinces, for example in some provinces economic affairs is a stand-alone department while in others it is combined with tourism.

What emerges from these trends is that apart from social sector spending (education, welfare, and health) and institutional expenditures, on average only 14 per cent is spent by provinces on other functions. Roughly 3 per cent of total provincial expenditure is on functions that are not common to all provinces. The rest of the formula elements cannot be easily discerned from the budgets, mainly because they are spread across different departments, or provinces do not report in a consistent manner to allow for any reasonable comparisons.

3.1.4 The case for a combined Basic Element

The current Department of Finance allocation of the Basic, Backlogs, and Economic Activity components of the equitable shares formula is as follows:

Table 3.C: Distribution of Basic, Economic Activity, and Backlogs components (Department of Finance)

	Percentage of total equitable share	Basis for distribution
Basic	7%	Percentage share of the total population
Economic	8%	Gross geographic product activity (GGP) ¹³
Backlogs	3%	Health backlog (18%), Education backlog (40%), Rural population (42%)

The Backlogs component was introduced for the 1999/2000 fiscal year. As noted in Section 5.1, there is no firm evidence that this element is effective in clearing capital backlogs, owing to pressure from non-capital spending. Furthermore, addressing capital backlog needs in education, welfare, and health is in the broader interest of all South Africans (see Section 5.2). The FFC therefore proposes that a national capital grant be made available to provinces with conditions attached that ensure these funds are dedicated to the elimination of capital backlogs (see Section 5).

The Economic Activity component is a counter-equalising element. Its allocation favours provinces with the greatest amount of economic activity and has no demonstrable relationship to the costs of providing basic services. It can be argued, however, that the demand for certain public services (for example, road maintenance) increases proportionately with income. As long as provinces do not have substantial amounts of own-source revenue, it may be appropriate to allocate provinces with higher incomes additional amounts to help finance these (income-related) public services.

The FFC recommends that the Basic, Backlogs and Economic Activity components as disaggregated by the Department of Finance be combined into one B Element, and that a new conditional grant to support clearing of capital backlogs be funded out of the national equitable share.

3.1.5 Allocating the “B” Element

If the Basic, the Economic Activity and Backlogs components (as defined by the Department of Finance) are combined into one B Element, the issue of its distribution across provinces remains. The Basic component is currently calculated on a “neutral” basis, the Backlogs component takes capital backlogs and “ruralness” into account, and the Economic Activity component is based upon GGP.

In this context, the fundamental objectives and characteristics of the Basic Element need to be emphasised:

- It should provide provinces with the resources to fulfil their constitutional mandates in addition to constitutionally mandated basic education, welfare, and health services;
- It can be deployed by each province to bolster formula-specific allocations for any function, including education, health and welfare services not defined as constitutionally mandated basic services;
- It should be of a reasonable size, to provide provinces with real budget flexibility; and
- It should be calculated in such a manner that it supports the equity thrust of the general formula, although providing sufficient room for use as a mechanism to cater for differences in GGP across provinces.

One important purpose of the Basic Element is to ensure that all provinces will have available sufficient resources to provide public services required by statute or by the Constitution but not explicitly accounted for in the S Element. Although the FFC has made no attempt to “cost out” these public services, the expenditure needs of providing these services are to some extent related to the incidence of poverty in each province. The Commission thus proposes that the B Element be allocated to provinces on the basis of population weighted by the poverty rate, where the latter is defined as the percentage of households with incomes below a predetermined level of income (R12,000 in the benchmark S Element formulas).

The inclusion of a poverty factor in the B Element is proposed for two reasons. Firstly, the weighting for ruralness proposed in 1996 was chosen owing to lack of data. As more data become available, certain parameters can be adjusted to take the new data into account. Secondly, targeting households that fall below a given level of income takes proper account of urban, as well as rural, poverty.

At the same time, there are some public services provided by provinces where the costs and needs rise as provincial income rises. To account for these needs, the FFC recommends that the poverty

weight used in the B Element of the formula be relatively small. The exact poverty weight can be adjusted over time as future research provides sufficient information on the relationship between income and the costs of delivering various public services.

3.1.6 Determining the total B Element

Because the FFC has applied the costed norms approach to the provision of constitutionally mandated “basic” social services in education, welfare and health (S Element), and there are other services beyond the basic that provinces have to provide, the Basic Element is the tool with which provinces can pursue the provision of such services depending on their circumstances.

The FFC believes that the S and B Elements should be determined within the parameters of any given MTEF. In keeping with this principle, the FFC recommends that the chosen norms and standards in the S Element (basic education, welfare, and health) be costed and accommodated within the overall equitable share allocations projected in the MTEF. Once the provisions in terms of the S Element have been made, the implications for the B Element can be examined.

Government should determine the norms and standards to be met, and through the intergovernmental institutions also determine the acceptable size of the Basic Element. As with the provision of basic social services, all mandates must be funded in accordance with the level of development of the country and the fiscal policy framework adopted by national government. It is therefore proposed that the MTEF be used as a guide in estimating what proportion of GDP should constitute a policy target for the expenditure on all the functions assigned to provinces.

With this guideline and the estimated S Element (health, education, welfare), an iterative process can be followed to adjust either of (or both) the S Element norms and/or the MTEF guidelines in order to bring the two into alignment (see a more complete discussion in Section 4.2) and ensure the ongoing integrity of the B Element. In so doing, the B Element will be determined in a manner that is consistent with the principle that both the vertical and horizontal divisions of revenue be based on clear and transparent norms that can be applied objectively. It will also be consistent with the requirements of the Constitution and national government’s fiscal policy framework.

3.2 The Institutional Element (I)

The Institutional Element is a lump sum transfer to provinces. It is used widely across the world and is usually a relatively small share of the total allocations made.¹³ The main objective of lump sum transfers is to take into account the indivisible elements in the provision of

¹³ W. Mahler, G. Brosio, and C. Donian, *Georgia: Issues in Intergovernmental Fiscal Relations* (Fiscal Affairs Department: International Monetary Fund 1999), P. 14

public goods and services, for example administrative costs and the setting up of a basic legislative infrastructure.

While the origins of the Institutional Element are peculiar to South Africa, the objectives are generally consistent with best practice. However, two issues require review, namely whether the objective that this element was designed to achieve is being met, and whether its relative size within the overall transfer package is appropriate.

3.2.1 Origins and implementation

In 1996 the FFC grappled with the budgetary peculiarities of the Northern Cape, which had an aggregate budget that was, on a basis equivalent with the Western Cape, the furthest from the equity target set in 1996. The Northern Cape budget is inherently influenced by the province's uniquely low population density, in that the Northern Cape cannot hope to capture economies of scale comparable to the other provinces. For example, the Northern Cape cannot reach average South African learner/educator ratios or hospital bed-counts per thousand of population.

In 1996, after considering these matters and consulting with the Northern Cape government, the FFC recommended that despite these peculiarities, it would be inappropriate to adjust function-based elements of the proposed formula.

The FFC concluded that the optimum solution to the "Northern Cape problem" was to set aside a Rand amount equivalent to what it would cost to finance a basic legislative and senior executive structure in the smallest provincial administration, namely the Northern Cape. In 1996 this was an amount of R32 million. The total for all nine provinces was R286 million, or about 0.4 per cent of the equitable share revenue pool. This amount was netted out from the total revenue pool before the other formula elements were run through the pool.

The Department of Finance applied the principle of a lump sum grant, equivalent to the FFC's Institutional Element, in its first intergovernmental transfer formula for provinces for the 1998/99 fiscal year. The Department's lump sum element was described as supporting additional provincial requirements, such as "building essential capacity and participating in intergovernmental forums".

Table 3.D Costs of operating a basic government

<i>Amounts R'000</i>			
Budget Items	1996/97	1999/2000	2001/02
Premier	10,433	39,065	44,256
Legislature	14,339	20,444	23,161
Public Service Commission	2,949	1,710	1,937
Agriculture	404	857	971
Economic Affairs	404	857	971
Education & Culture	404	857	971
Finance	404	857	971
Health & Welfare	404	857	971
Housing & Local Government	404	857	971
Recr'n, Sport & Youth Affairs	404	857	971
Safety & Security	404	857	971
Roads & Traffic Control	404	857	971
Works	404	857	971
Total	31,761	69,789	79,063
Proportion of provincial revenue pool	0.4%	0.6%	0.6%

Notes:

1. Director-General's remuneration included in Premier's costs.
2. The Constitution permits a maximum of 10 Members of the Executive Council (Section 132(1)). The Institutional Element is calculated on the maximum number of MEC's permitted.
3. The amount for each department is the sum of the MEC's and Heads of Department remuneration.
4. Amounts for 1999/2000 are budgeted.
5. Amounts for 2001/2002 are 1999/2000 numbers adjusted with projected budget growth over two years, namely 13 per cent.

Source: FFC calculations based on *Provincial White Book*

At the same time, the Department of Finance increased the size of the Institutional Element both absolutely and as a proportion of provincial grants, to about R351 million in 1998/99 (4 per cent of the provincial revenue pool). The residual amount for distribution amongst the provinces via the other elements of the formula is thus lower than it was under the proposed FFC regime.

For the 1999/2000 fiscal year, the Department of Finance retained the Institutional Element but adjusted the weight in the overall formula from 4 to 5 per cent. The draft proposals from the Department of Finance for the 2000/01 fiscal year maintain the 1999/2000 position for the Institutional Element.

3.2.2 Recommendations for the I Element

The FFC recommends that once the total allocation to provinces is decided (see discussion on the vertical division in Section 4), the Institutional Element should be “top-sliced” from the provincial allocation. Each province would be allocated an amount of R79 million for the Institutional Element. The amount is determined by calculating the 1999/2000 budgeted expenditure for the Northern Cape for the same set of functions as defined in the FFC’s 1996 recommendations, and adjusted for a full ten departments.

As before, the objective of the I Element is to provide each province with a standard set of resources to fund a basic governmental structure. Each province may set up its governmental structure as it sees fit. The above method of determining the Institutional Element amount is not in any way a recommendation for actual provincial arrangements.

The equivalent amount that would be allocated to the Institutional Element via the Department of Finance formula for 2001/02 would be about R5 billion in aggregate and R556 million per province. This is seven times more than what is suggested by the FFC approach. A consequence of having a larger institutional element is that the aggregate revenue pool is reduced by a higher amount and thus the redistributive nature of other elements is undermined.

3.3 The tax capacity equalisation grant (T)

The T-grant is a concept used to refer to a class of grants intended to equalise provinces’ revenue-raising ability from their own tax sources. Due in part to the small proportion of provincial own revenue this part of the formula is not developed. The FFC recommends that until the issues around provincial own revenue sources are resolved, this element of the equitable shares formula should be set at zero.

3.4 The spillover grant (m)

The m grant, or spillover grant, refers to a class of grants intended to provide compensation to provinces for delivering services that fulfil a national function or that spread benefits across provincial borders. An example is an academic hospital, which may train medical staff destined for several provinces. This type of grant is now funded conditionally out of the national equitable share, and is therefore not included in the recommended formula for the provincial equitable share.

3.5 The phasing in of the equitable share

Stability and predictability are important criteria for any system of intergovernmental fiscal transfers. It is important that provinces are

aware of their share of national revenue in advance of its actual transfer to ensure that they can plan effectively. Therefore a phase-in period is advisable for any allocations that differ significantly from what has gone before.

The portion of the equitable share where the most significant changes are being proposed is the costed norms allocation. Other parts of the equitable share formula may offset or increase the impact of the changes implied by the implementation of the costed norms approach. Any phase-in mechanism should thus be applied to the entire equitable share allocation.

The FFC recommends that changes in provincial equitable share allocations be phased in over a period of several years. The phase-in process for the equitable share should be guided by international experience, which suggests that for provinces that will experience a reduction in revenue as a result of new formulae, this decrease should not amount to more than 3-4 per cent per annum in real terms. Conversely, where provinces will be receiving additional funding, this should be restricted to 5-6 per cent annual increases. This phase-in decreases the chances that provincial governments will suffer dislocation due to grant increases, and will be able to use any increases in equitable share allocations as efficiently as possible.

3.6 The total provincial equitable share

The FFC recommends that the total provincial equitable share should consist of the grants for basic education, welfare, and health (the S Element), plus the Basic Element and the Institutional Element. The Transfer grant (T) is set at zero. The entire amount is adjusted by a Phase-in factor (P), to promote stability.

$$\mathbf{PES = E + W + H + B + I + T}$$

where	PES	=	Provincial Equitable Share
	E	=	Education
	W	=	Welfare
	H	=	Health care
	B	=	Combined Basic
	I	=	Institutional
	T	=	Transfer

For purposes of exposition, because they are all calculated using the costed norms approach, E + W + H can be grouped together as the S (social services) Element.

B is net of the amount of the Institutional Element.

T is currently set at zero for all grant simulations. M grants are now dropped from the formula for the reasons stated above.

The provincial equitable share (PES), provincial own-source revenue, and conditional grants for capital and other factors complete the provincial revenue picture.

Notes:

- 1 The percentage share of each of these FFC equitable share “S” components is dependent upon the establishment or review of national norms and standards.
- 2 The Institutional Element is derived from the cost of operating basic government institutions, and is deducted from the gross Basic Element as an absolute amount.
- 3 The Basic Element is determined by policy-makers after the implications of the benchmark norms for education, welfare, and health have been costed, and is net of the Institutional Element.
- 4 The FFC recommends that conditional grants from the national equitable share be used to address capital backlogs.

Recommendation 3

That each province be allocated:

- a Basic (B) Element, which will include the provision of all services not defined as constitutionally mandated basic services and any other functions negotiated by the three spheres of government. The B Element is determined in a manner that is consistent with the principle that both the vertical and horizontal divisions of revenue be based on clear and transparent norms where possible, and it is net of the Institutional Element; and
- an Institutional Element set equal to the minimum cost of operating government institutions.

Recommendation 4

That the remaining grants in the 1996 provincial equitable share formula be treated as follows:

- The T grant continues to be treated as part of the formula, but remains at zero as in current practice; and
- The m grant is dropped from the formula, as it may now be provided through the B Element or through various conditional grants financed from the national sphere.



4. THE VERTICAL DIVISION

4.1 Rationale for applying a costed norms approach

The Constitution requires that the FFC make annual recommendations with respect to the equitable division of national revenue amongst the three spheres of government (also known as the “vertical division”). In Sections 4 and 5 of this Report, it was shown how the costed norms approach could be applied to the horizontal division of the provincial equitable share. This section will demonstrate how the application of the costed norms approach may assist government in its decisions with respect to the vertical division.

Governance is about making choices, and in budgeting, the choices are made with respect to revenue, expenditure allocations, and debt. In addition to setting the macro-economic and fiscal agenda, government’s budget allocations determine, in large part, the pattern and level of government services that will be delivered.

The Presidential Review Commission outlined the importance of the decision-making process on the vertical division:

Ministers’ involvement in the decision-making about revenue allocation is most pronounced with regard to the vertical split of revenues, where political judgement must play an important role. Once the vertical split has been determined, the provincial share is divided horizontally by means of a detailed formula. However, any weaknesses in the vertical split are also reflected in the horizontal split.¹⁴

The FFC believes that the use of the costed norms approach will help to inform the political decisions on the vertical division, for the approach can indicate the pattern and level of public programming which could be provided when services are delivered in an efficient and effective manner.

Furthermore, the costed norms approach can provide a means of reconciling the decisions on the vertical division with the decisions on planning and budgeting made individually and collectively by the three spheres of government. For example, if the responsibility for primary health care is shared by provincial and local governments, the costed norms approach can determine the overall amount needed and then the specific amounts to be allocated to those two spheres based on the primary health care services they provide. Indeed, it is precisely this ability to harmonise the decision on the vertical division with the budgetary and planning processes of government that provides the principal rationale for the application of this approach.

¹⁴ Presidential Review Commission, *Budgeting and Financial Management* (1998), Annexure 6, p. 44.

4.2 Establishing the vertical division through an iterative approach

The key to informed decision-making on the vertical division is suitable information. Starting with benchmark budgets (established through the costed norms approach when possible) given the fiscal framework, the political decision on the vertical division involves an examination of the trade-offs made in budgetary decisions and their effects on the service norms which result from the decision.

A range of options with respect to changes in the benchmarks for each sphere should be examined. Then, through an iterative process, different combinations of changes to the benchmark budgets can be made to bring the aggregated revenue provided to the three spheres in line with the fiscal framework as specified in the Medium-Term Expenditure Framework (MTEF). The effects of trade-offs will be transparent in those areas in which a costed norms approach has been used, and this will provide valuable support to the political process, even if the costed norms approach were not universally applied across the entire spectrum of government programmes.

Information concerning the effects of different decisions on norms and standards would assist in the decisions on the vertical division and/or on changing the fiscal framework through altering the levels of taxation or borrowing.

By establishing the transparent link between the decisions on the fiscal framework, the vertical division, budgets, and the costed norms, progress toward realisation of higher levels of basic rights can be charted. This is a fundamental benefit of the proposed approach, and has the added benefit of promoting accountability for decisions taken. It is not expected that the norms and standards describing basic services will change significantly in the short- or medium-term. Nor should it be expected that all basic needs will be fulfilled as soon as they are identified.

In the longer term, it is expected that norms and standards for government services can be raised beyond basic levels. The framework requires, when new norms and standards are adopted by government, that they be incorporated into benchmark formulae, whether or not it is expected that they will be met immediately. It is important that governments clarify the goals they have set for themselves, and that they monitor their progress toward those goals. Rather than speaking vaguely about unfunded mandates, the debate could then turn productively to a discussion of the progress being made, the specific amounts necessary to achieve the norms and standards adopted by governments, and the factors within the fiscal framework which may constrain progress.



National government has already taken a significant step in creating an appropriate macro-economic framework with the adoption of the MTEF, which sets the macro priorities for the country, and thus for all three spheres of government, in terms of the major expenditure categories. In a sense, this can be likened to the formation of “macro expenditure norms” for all spheres of government over a given period. The macro allocation of resources to the main expenditure categories (such as education, health, and defence) is a logical component of a rational and norms-based system of intergovernmental fiscal relations. It is also of integral importance to an iterative approach to the fiscal decision-making process.

4.3 The application of the costed norms approach to the local, provincial, and national spheres

4.3.1 The local government sphere

The FFC presented its initial thinking on local government finance in 1997 in its document, *Local Government in a System of Intergovernmental Fiscal Relations in South Africa*. The document presented a theoretical framework for intergovernmental fiscal allocations and suggested guidelines for intergovernmental transfers and the vertical division.

Government subsequently embarked on a similar process and eventually implemented a different transfer regime for local government. Until then, most of the transfers to local government for recurrent purposes were channelled through provinces. Some were paid on an agency basis, covering the cost of services rendered by municipalities on behalf of provinces. Other transfers had a gap-filling function and were allocated mostly on the basis of *ad hoc*, unpredictable and/or negotiable criteria.

The Department of Constitutional Development also developed a system of capital grants known as the Consolidated Municipal Infrastructure Programme (CMIP), which combines the infrastructure grants previously made available by other line departments. The transfers are available to a municipality upon application to the relevant provincial authorities. The local government sphere is thus characterised by a variety of grants, and there is a need for them to be shaped into a coherent system.

Currently, significant problems obtain with respect to the application of the existing “equitable share” system to local government. These have been the subject of much discussion at meetings such as the Budget Forum, which comprises representatives of the South African Local Government Association and members of the Budget Council (National Minister of Finance and Provincial Finance MECs).

Municipalities may be in a position to raise over 90 per cent of their expenditure requirements. Little is known about the magnitude of either the expenditure requirements or the revenue-raising capacity of local government. However, given the historical context forming the backdrop to the evolution of the municipal system, intra-municipal disparities are so vast that a unique approach will have to be developed.

The Commission is cognisant of recent deliberations on these issues at the Budget Forum. Consequently, while developing a work programme to search for answers to these vexing questions, the FFC has decided against a unilateral approach. The FFC has noted the decision taken at the January 2000 meeting of the Budget Forum that no major changes to the current equitable share dispensation should be entertained for the 2000/01 financial year. Furthermore, the Commission takes note of the Budget Forum decision for a major review of the entire grant system for purposes of the 2001/02 allocations.

In that respect, the Commission concurs with the Department of Finance's view that at this point in time, given the unresolved state of the demarcation process and the forthcoming municipal elections, it would be prudent not to propose major changes to the local government financing regime, at least for the next financial year. The FFC will wait for further guidance from the Department of Finance, Department of Provincial and Local Government, and South African Local Government Association, which are the lead institutions regarding any matters affecting local government.

In the long term, it may be possible to apply costed norms or similar approaches when considering the horizontal and vertical divisions for the local government sphere. It should be noted, however, that the design of a formula for the horizontal allocation of the equitable share to local governments will need to take account of the fact that own-source revenue is much more important to the local sphere than to the provincial sphere.

4.3.2 The provincial government sphere

In Section 5 of this Report, a prototype formula was developed for the calculation of costed norms with respect to constitutionally mandated basic levels of service in the areas of education, health, and welfare. This exercise provides an initial starting point (or benchmark) to inform the government of the cost of a particular set of norms and standards for provincial government programmes. The realisation of these norms and standards is dependent on the provision of the fiscal resources identified in the costed norms approach. In the political decision on the vertical division of national revenue, the establishment of norms for these basic services and/or the realisation of these norms must be placed against the requirements for resources of national and local government programmes.

4.3.3 The national government sphere

There are important areas in which national government is the agent of delivery, such as protection services (defence and internal security), economic services, and foreign affairs. Other functions are shared responsibilities in which provincial or local governments are or may be the primary delivery agents, such as with education, health, and infrastructure. This is presented schematically below.

The national equitable share must reflect both exclusive and concurrent functions. With respect to nationally delivered programmes, it would be possible to construct benchmark norms for some but not all expenditure programmes. In other countries, this is sometimes calculated as a percentage of GDP or other such benchmarking. More often, the norms are explicitly or implicitly defined within the national planning and budgeting process.

Reference has already been made to the MTEF. It is envisaged that an iterative process will alternate between the costing of nationally determined norms and the macro-priorities set by the MTEF; in this way, these norms and standards should be brought into alignment with the MTEF. For example, should the costing of the national norms for education exceed in aggregate the national resources available for education (in terms of the MTEF), national government will then have to decide whether to adjust the norms set for education, or to change the MTEF priorities. It may also decide to introduce, or adjust, a “progressive realisation” factor into the formulae.

Coherence should therefore develop in the whole process, for it will ultimately be national government that will determine - in the context of a co-operative government system - both the norms and standards for the various functions and the national macro-priorities (MTEF “norms”).

For programmes in which national government shares responsibility, there is a choice between providing resources either through 1) the equitable share; 2) conditional grants; or 3) the assignment of revenue bases to the subnational governments delivering the services.

4.4 A basic formula for the equitable division of national revenue to the national, provincial and local government spheres

National revenue must be allocated on an equitable basis amongst the three spheres of government in accordance with the Constitution. The decision on the vertical division must reflect the trade-offs made in support of each of the three spheres and of particular programme mandates given to each sphere. The vertical division may be represented by the following formula:

$$\mathbf{N = NES + PES + LES}$$

Where:

- N** equals the nationally collected revenue to be shared equitably,
- NES** is the national equitable share,
- PES** is the provincial equitable share, and
- LES** is the local equitable share.

However, several refinements to this basic equation should be made because it does not capture all the dimensions of revenue sharing in South Africa. For example, national revenue may or may not be inclusive of the total revenue collected by national government. The Department of Finance has “top-sliced” public debt servicing costs from total national revenue, that is, debt is subtracted before equitable shares are determined. Policy reserves and contingency reserves have also been introduced into the top-slice in recent budgets. Some, including the FFC in past reports, have presented debt servicing as part of the national equitable share. It is probably best, for purposes of transparency, to indicate it as a separate item. On the other hand, the policy and contingency reserves are clearly under the control of the national government and will be included for now in the national equitable share.

With the refinement on debt servicing, the FFC’s basic equation will appear as follows:

$$\mathbf{TN - D = N = NES + PES + LES}$$

Where:

- TN** is the total nationally collected revenue, and
- D** equals the public debt servicing cost.

4.5 The economic and fiscal framework

The economic and fiscal framework provides both the capacity for achieving government goals and the constraint on what may be financed. The left hand side of the equation presented above represents this observation. The government, led by the Department of Finance, must make judgement calls based on its evaluation of both



current and long-term growth and prosperity for the nation. In making these choices, it has a number of tools at its disposal.

The most important fiscal tool is the choice of the level and incidence of taxation on individuals and businesses. This determines the resources that the public sector will have, as compared to the amount that will be left in the hands of the private sector. The income or wealth of the nation generated by the economy cannot be assumed to be a fixed quantum. Of course, the incidence of taxation will affect the choices of individuals and businesses to spend or invest in South Africa.

This must be balanced against the effects of spending and investment of the public sector (for example on education, health, and infrastructure) enabled through taxation. There exists a symbiotic relationship between fiscal policy choices and the health and growth of the economy. A healthy economy provides the resources to provide basic services, while the social cohesiveness and physical well-being of the people creates the conditions for stronger economic growth.

In South Africa, taxation decisions lie primarily in the hands of national government. Provincial governments currently have no significant tax powers. Local governments only partially rely on taxes with the rest of their revenue coming from user charges.

The second major decision in establishing the fiscal framework is the level of borrowing and debt. The use of borrowing can be viewed positively both as promoting the realisation of goals and providing an investment in human or physical resources through supplementing available revenue. It can also be seen as coming at the cost of long-term drag on the ability of the government to meet needs, for a portion of the budget will ultimately have to be devoted to servicing the public debt. It also has short- and long-term consequences for economic growth, with borrowing usually stimulating the economy in the short-term but resulting in a burden in the longer term.

Returning to the basic formula for the vertical division of national revenue, the TN representing total national revenue includes current debt financing, while the N representing national revenue to be shared equitably excludes public debt servicing costs. Thus net new borrowing is included within the equitable share calculations, while net debt retirement would reduce the amount available within the equitable share calculation. This implies the sharing of the benefits and costs of national borrowing amongst the three spheres. The other alternative is dealing with all the effects of borrowing in the national equitable share.

4.6 Further refinements on the model for the vertical division of national revenue

4.6.1 Use of conditional grants

Conditional grants are provided by national government to provinces and municipalities in order to achieve specific objectives. The Constitution states that conditional grants must be provided from the national equitable share. The division of revenue must recognise, within the national equitable share, the role to be played by conditional grants. The FFC in this Report advocates the use of conditional grants for the capital element, especially as it pertains to backlogs.

The use of conditional grants also plays a part in the calculation of the provincial or local government equitable share. Conditional grants provide another source of funding programmes to meet the norms and standards related to provincial needs. Thus they might decrease the requirement for the provincial or local government equitable shares. However, the FFC believes that the use of conditional grants should be limited and should promote the intentions of the Constitution with respect to decentralisation and the principles of good governance applicable to subnational governments.

Accountability for conditional grants is shared between national government and the government receiving the grant. Conditional grants remain part of the national equitable share for which the national government must be accountable. At the same time, the provincial or local government must be responsible for all the revenue it receives, including the conditional grants.

4.6.2 Broadening the provincial tax base

The Constitution envisages the potential for provinces to raise substantially more revenue than they do at the present time. With legislative approval, provincial surtaxes on personal income and fuel tax raised at the national level are possible, as are a variety of other levies. As with the provision of conditional grants, the broadening of the provincial tax base could be reflected in a reduction in the provincial equitable share.

However, the increase in the provincial revenue base would provide some important signals with respect to the appropriate division of national revenue. If subnational governments were prepared to raise taxes to maintain or improve norms and standards, the national government might recognise this political willingness to raise taxes in the manner and degree to which it adjusted the vertical division. Of course, national government would retain responsibility for national economic and fiscal policy.

4.6.3 Changing resource requirements

Any financing system must recognise that resource requirements and cost functions will change over time with changing circumstances and greater efficiencies. These may alter the parameters used in the calculations for the costed norms approach.

4.6.4 Contingency reserves

National government has adopted the practice of establishing substantial contingency and policy reserves within the fiscal framework. This practice creates a complication with respect to the calculation of equitable shares.

The integrity of the process of establishing equitable shares requires that they be based on a realistic fiscal framework. Therefore, it should be based on the best estimate of national revenue, rather than a figure which has been reduced by a “contingency” factor. The Constitution does not envisage a “top slice” approach to the provision of reserves, nor does the FFC support this approach. Therefore, if prudent fiscal management requires such reserves, means must be found within the financial framework to properly reflect them.

If the fiscal framework is not artificially reduced, there are two alternatives available. The first is to incorporate the amounts into the national equitable share. If the amounts should prove not to be available, for example due to changing economic circumstances, the accountability of the national government for expenditures would only relate to the sums which actually were available. The responsibility for explaining the shortfalls or surpluses with respect to revenue would lie with national government, which has the overall responsibility for economic management.

The placement of the policy reserve within the national equitable share also makes particular sense if the uses of the reserve remain as they have been in recent years. Essentially, these reserves have been used to meet national needs or have been provided to subnational governments in the form of conditional grants. As noted earlier, conditional grants must be provided from the national equitable share.

The other option for establishing contingency funds would be to incorporate them more broadly within the formula for establishing equitable shares. This could involve the assignment of part of the contingency fund to each sphere, with the rider that these funds would not be forthcoming in full should national revenues decrease, and not at all if national revenue dropped by the amount of the contingency fund.

4.6.5 Conclusion

The framework for establishing the vertical division, based on a costed norms approach, requires a substantial amount of good quality information. It also requires that all government programmes be amenable to being subjected to the approach. However, it is not possible in the foreseeable future to apply the costed norms approach to all government expenditure programmes due to the nature of some of these, for example national security or public safety. It therefore has to be noted that the costed norms approach does not directly address the vertical division of revenue, although it does provide invaluable information towards the determination of this division.

The costed norms approach, if accurately aligned to the national fiscal framework, provides useful information to policy makers on the resource needs of certain norms and standards that they set. In the form in which it has been applied by the FFC, the approach has the added advantage in that it has flexible built-in parameters that can be adjusted through intergovernmental negotiations to achieve nationally accepted objectives. The goal is to relate financing to acceptable outcomes in terms of the provision of constitutionally mandated basic services to the nation. The information required ideally includes:

- clarity with respect to the norms and standards;
- the establishment of accurate relationships between norms and standards for outputs and resource requirements and their costs; and
- reliable, disaggregated demographic information.

It is clear that not all the information is or will be available in the short term. For example, local government is in a period of substantial re-structuring, and therefore it is currently not possible accurately to measure the gap between own-source revenue and resource requirements arising from the local government mandate. Even with respect to provincial responsibilities, norms and standards are not sufficiently clear, costs of inputs are not always available, and demographic data are subject to some interpretation and change.

The FFC believes that data deficiencies do not invalidate the costed norms approach, but rather support the case for moving more quickly toward obtaining better information for planning, budgeting and accountability. Simply put, there is a need to know better where the country has been and where it is now, so as to chart the way forward and monitor progress.

By starting now with the acceptance of basing decisions for the equitable share allocation for the provision of constitutionally mandated basic services in education, health and welfare on the

concept of a costed norms approach, the impetus will be created to further develop the data requirements needed for this or any other viable system of financial administration and accountability. Where shortcomings and inaccuracies are identified, there will be a movement to redress these shortcomings and improve the system. The formula will inevitably develop to become more reflective of policy and programme realities, but only if a start is made on actually implementing the system.

5. THE CAPITAL ELEMENT

This section introduces some aspects of a capital grant scheme for provinces to fund on-going capital needs and capital backlogs. Such a grant scheme would allow provinces to raise public infrastructure to a standard that facilitates the efficient provision of public services.

5.1 Introduction

During the public hearings on the Intergovernmental Fiscal Review in Parliament in October 1999, concern was expressed by both Parliamentarians and economists alike that the on-going rate of capital spending by provinces is insufficient to address capital backlogs and on-going demands for capital. There has been an overall decline in the funding of capital expenditure from 5.3 per cent of provincial budgets in 1996/97 to 4.2 per cent in 1998/99.¹⁵

The low level of capital spending by provinces is largely due to limited access to capital markets, very small or non-existent own revenues, and pressure from recurrent spending. In addition, South Africa's provinces have inherited widely different levels of public capital for the provision of services such as health, education, welfare, and general infrastructure. These capital backlogs are much larger than those found in mature decentralised economies and arise for well-known historical reasons.

The Department of Finance has tried to rectify this situation by identifying a notional "backlogs" component of 3 per cent within the provincial equitable share. There is no clear evidence that backlogs are being cleared with this component owing to pressure from non-capital spending. Unless a change in the level and direction of spending toward clearing the backlogs occurs, there is a need to review the options for re-structuring this component of the grants programme.

The long-term solution is to reform the fiscal framework to allow provinces to access capital markets and increase their own revenues. These reforms would allow provincial governments to make decisions independently and competitively, setting their own tax rates and facing the full political costs of their spending decisions.

In the absence of such reforms, a capital grant from national government is the major remaining option for addressing the capital problems of the provinces. The grant scheme discussed in this section focuses on public infrastructure within the functional areas assigned to provinces, namely social public infrastructure used in the provision of health and education services (such as hospital and school buildings) and economic public infrastructure (such as provincial roads).

¹⁵ Department of Finance, *Intergovernmental Fiscal Review* (1999). It should be noted that a substantial proportion of the funding for capital projects in health is funded by national capital grants, such as the Hospital Reconstruction and Rehabilitation Grant.

The aim of a capital grant should be to supplement provinces' capital spending to allow their stocks of public capital to achieve a desired level over a period of time. The selection of the desired level of public capital is in itself a major issue, as is the choice of the rate of convergence to this desired level and the transition path to be taken by each province.

In achieving its aims, a grant scheme must take account of provinces' inherited capital backlogs and any deficiencies in their on-going capital expenditures if it is to ensure convergence to the desired outcome at some point in the future. The scheme must also take account of two essential features of capital that distinguish it from recurrent expenditures, namely 1) it is durable and provides a flow of services over a long period of time; and 2) capital of an older vintage may not be as productive as newer capital. In other words, the grant scheme must take account of the inter-temporal nature of capital.

The aim is therefore to develop a scheme that meets such requirements and can be implemented in South Africa using existing data and information. It is possible to construct such a scheme with the aid of an appropriate computer-based model that could be used to allocate a pool of capital grant funds on an annual basis to the more needy provinces.

5.2 Rationale for capital grants

In South Africa, the provision of public services and the stock of public capital are well below standard in many provinces. Though this is true in many transitional economies in Africa and other parts of the world, in South Africa it is due partly to past policies that have created large capital backlogs in some provinces.

The low level of investment in public infrastructure needs to be addressed for a number of compelling reasons. First, the spatial distortions created by apartheid have resulted in a legacy of inequity in terms of capital backlogs and social and economic circumstances. The expansion and upgrading of infrastructure and services is necessary to address these imbalances and meet the developmental needs of areas prejudiced by previous policies.

Second, social public infrastructure is the foundation for the provision of services such as health and education. Directly, social infrastructure supports the production of trade, and indirectly it streamlines activities and outcomes such as education, health and safety. The indirect benefit of improved primary health care, for example, is improved productivity, which in turn leads to higher real incomes. These benefits accrue both in the areas where infrastructure is being improved and in the more economically advanced areas.

The lack of resources for capital expenditure means that the poor quality of social services will remain a reality for most South Africans.

For example, there was an estimated backlog of 57,499 classrooms in 1996 and it was reported that less than half of existing schools had a power supply.¹⁶ National government may wish to set minimum standards in the education sector (such as a learner-educator ratio); however provinces may not be able to implement these national standards if there are insufficient classrooms.

The efficient output of a particular service is thus defined as the level of output that meets nationally determined minimum standards. The amount of capital needed to produce the efficient level of public service output is defined as the efficient capital stock for that service in the province being considered. From now on this is called the *standard* capital stock since it will serve as a benchmark against which each province's actual stock of public capital is compared.

A capital grant scheme has to address three significant issues. First, how should the standard level of public service output and capital be determined in practice for each province? Second, should the grant be given as one amount, with provinces being allowed discretion over how they spend the funds on capital versus recurrent inputs such as labour, or should the grant be conditional and/or matching? Third, if there is to be a capital grant to the provinces, how should the scheme take account of the special nature of capital, and in particular, its declining durability as it gets older?

These are important matters. The first could be addressed by taking an average of what all provinces spend and adopting this as the national standard or by using international benchmarks (see discussion in Section 5.3.1). With regard to the second issue, the assumption is made that there is to be a separate capital grant to the provinces, with a recurrent grant being provided separately. However, both capital and recurrent grants are derived from the underlying need to allow provinces to undertake efficient service provision. Therefore, if there is to be a separate capital grant to provinces, the grant must be linked to any other grant provided for recurrent inputs.

In relation to the third issue, it should be noted that capital is fundamentally different from recurrent inputs because the flow of services from an amount spent on public capital occurs over many years, not just the year that the expenditure is incurred. Moreover, the flow of services declines over time as the quality of the capital deteriorates with age. This means that any capital grant scheme that is designed to raise the level of public infrastructure in a province must take account of the inter-temporal nature of capital, or its durability. It is this aspect of capital that makes it much more difficult to deal with than grants for recurrent inputs.

¹⁶ Development Bank of Southern Africa, *Infrastructure: A Foundation for Development*, Development Report 1998.

5.3 Developing a capital grant scheme

From the discussion above, it is clear that any capital grant scheme for the provinces must be one that allows provinces to provide the standard level of service and at the same time takes account of the special features of capital. The FFC suggests a scheme could be considered to achieve these aims, the main features of which are outlined below.

5.3.1 Standard versus actual levels of capital

The first step in developing the scheme is to show how standards for provincial capital might be set and compare these standards with actual levels of capital infrastructure in each province. In principle, the standard capital stock for a particular service in any province is the amount of capital needed to produce an efficient level of public service that also takes account of inter-provincial spillovers and meets nationally agreed minimum equity standards. Past policies in South Africa mean that the actual output of public services such as education, welfare, and health has been below what one might reasonably set as a standard in many provinces.

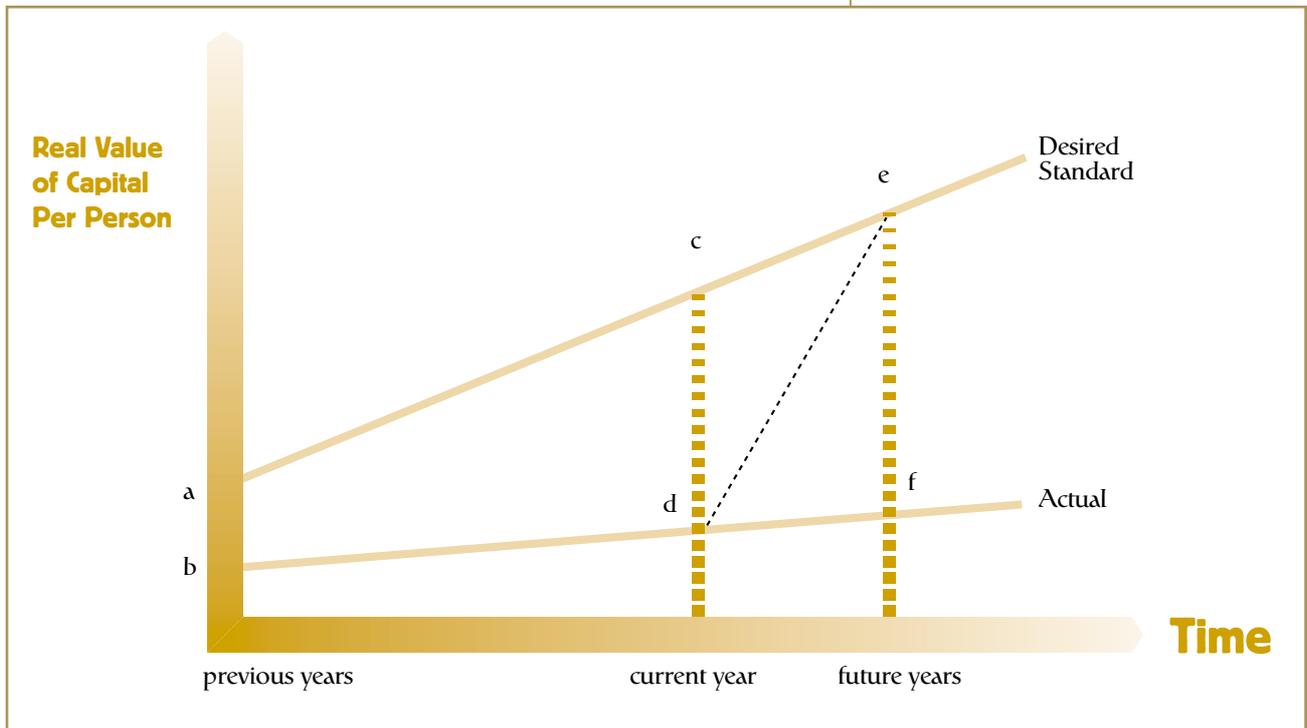
In practice, it is very difficult to derive accurate measures for standards of infrastructure. One possible proxy might be the amount of capital used by the average of all South African provinces for the production of a particular service. Under this approach, the standard health capital stock would be the actual amount of capital used to produce health services averaged across all provinces. Some provinces would then fall below and others above this standard. One difficulty with this approach is that the overall amount of capital is insufficient at present – possibly in all provinces – and the desired standard produced by such a method would therefore be too low.

Another alternative is to establish international benchmarks for capital stock in the functional areas that are assigned to South African provinces (for example, health and roads). This would ensure that the desired standard reflects the level of capital spending needed to achieve an efficient level of public service outputs.

Figure 5.A presents a model for discussion. The actual per person capital stock of a representative poor province (for a particular service) is plotted against the standard capital stock for that service in that province. Note that the example presented is one in which the standard capital stock per person is growing over time.¹⁷ Since this province is relatively poor, the actual capital stock is depicted as being below the standard.

¹⁷ It seems reasonable to suppose that the standard increases over time, though this will only occur if net capital expenditure in each time period (or the rate at which new capital is accumulated) exceeds depreciation of previously installed capital during the same period.

Fig. 5.A: Actual capital stock relative to the standard



- In a previous year, the province has a capital backlog, defined as the difference between the standard and actual capital stock at a point in time, and equal to the distance ab in the diagram.
- By the current year, this has grown to equal the distance cd . The reason for the growth is the assumption that the rate of net capital spending is insufficient to reduce the backlog that existed in the previous year.
- Because of continued low levels of net capital spending, by a given future year, the capital backlog has increased further to equal the distance ef .
- Provinces that lie above the standard (that is, they have more than the nationally determined standard for the service in question) will have a capital surplus or negative backlog.

The key policy question is how to raise the level of net capital spending by the poor province so that its actual capital stock for the service in question equals the standard at some year in the future. In the short- to medium-term, the main possibility lies with a national government grant scheme. Such a scheme could provide provinces with additional resources between now and the end of the chosen period to enable them to transform their capital stocks from the actual starting point toward the desired standard.

The particular route taken is the “transition path”. The linear transition *de* is one such path that sees the backlog filled in equal increments over time. There actually exist an infinite number of paths. For example, it is possible to imagine a path that fills a large portion of the backlog in the early years and less in later years, with full convergence by the chosen future year. Alternatively, the transition path might be one in which little is given to the province in the early years and more in later years.

What follows is a discussion of how these ideas can be used to estimate the “capital needs” of a province for a particular service. A description is then presented of how capital needs can be used to construct a grant scheme that achieves convergence between actual and standard capital stocks at some point in the future.

5.3.2 Capital needs

The first step in estimating capital needs is to derive a formula which defines the standard capital stock for a particular province and a particular service in some future year using the norms (standards) approach. The second step is to suppose that there is some additional annual flow of net capital expenditures for the service and province in question between the current and future year. These expenditures can be incorporated into the formula that defines the province’s actual capital stock for the service in a chosen future year.

It is then possible to define the key part of the scheme, namely the level of supplementary net capital expenditures required by a province to allow its actual capital stock for the service in question to converge to the standard by the future year. This extra expenditure is the total capital need of the province for that service.

If the standard is estimated as the average of all provinces’ actual capital stocks for a particular service, then some provinces will be assessed as having above-average capital needs and others will have below-average needs. Note that if international benchmarks are used, it is possible that all provinces might fall below the standard. Should a province be assessed with no capital need relative to the standard chosen, it could be given a zero need when estimating the grant model. This means that the positive capital needs of the poorer provinces would be funded from the central grant pool. It should be noted that the grant pool is collected from nationally raised revenues, including revenues disproportionately collected from richer provinces. Hence, the grant scheme would induce implicit redistribution between provinces and could therefore be thought of as a capital equalisation model.

5.3.3 Calculating the grant

Having calculated the total backlog, the capital grant for each province and service in the first year of operation will be estimated as follows:

1. The total capital need estimate will be used to calculate a province's capital need for each service in the first year of the scheme.
2. The capital need for the province as a whole in the chosen year will be estimated by summing its needs across all services.
3. The needs of all provinces are then added to create an aggregate capital need for South Africa, and provinces with below-standard capital needs (if applicable) are rated at zero.
4. Information from Step 3 is used to estimate the capital grant to each province from the grant pool made available by national government. This is accomplished by expressing the total need for each province as a ratio of the aggregate capital need for South Africa. The resulting ratio is called a capital need relativity. The relativity is then multiplied by the grant pool to allocate a percentage share of the pool to the province in question.
5. The service needs calculated in Step 1 are used to determine how the grant to each province should be allocated among services within that province.

Estimation of the grant for subsequent years proceeds in a similar fashion. However, because of the inter-temporal nature of capital, the grant estimated for these years must take account of actual progress in relation to the originally defined transition path. This in turn implies that account must be taken of capital constructed by grant funds in the earlier years of the scheme, as well as capital yet to be funded by future grants.

The size of the capital grant pool is determined by national fiscal constraints. Though the scheme treats this pool as exogenously determined, it is in practice a national government policy instrument and is dependent on macro economic and other variables. Since the capital need relativities sum to one, the methodology ensures that the pool is always fully exhausted regardless of its size and how it is determined.

Thus, the total allocation to the provinces for capital purposes is determined by national fiscal policy, while the allocation between provinces is determined on the basis of relative need. If the size of the pool available for distribution decreases or increases, so too does the total amount allocated to each province according to the distribution of needs.

5.4 Implementation issues

The discussion above has outlined some salient features of a capital grant scheme for the provinces. A number of issues related to the practical implementation of the scheme are now discussed, including the choice of transition path, input data requirements, the need for computer-based grant simulations, and the issue of whether the capital grant should come from the provinces' equitable share or from a national government allocation. A detailed technical discussion of some of these implementation issues is to be found in research papers which informed this Report.

5.4.1 Choice of the transition path

The choice of starting and end points for the scheme are policy choices, as is the transition path. The shape of the transition path does not affect the final result of the scheme, but it does influence how the result is achieved. What is needed to accomplish a transition is to define a sequence of needs for each service in each province and make yearly grants equal to these needs. The path can be altered at any step in the operation of the scheme. If it is not possible to follow the originally defined path due to a lack of funds part-way through the scheme, the sequence of remaining needs to be filled could be recalculated. This would mean that the path still aims to accomplish the goal by the chosen future year and the scheme would ensure steeper transition.

The choice of the original transition path for each service and province, and any subsequent adjustments to it, thus define the operation of the grant scheme, the rate of the transition, and the relative progress among the provinces.

There are a number of possible factors that influence the choice of the transition path. The first is the desired speed of the transition in terms of approaching efficiency for each service in each province. Most likely, the poorer and less efficient services and provinces will be given priority and their initial transition trajectories will be made steeper. This priority list may be altered as the process develops by transforming transition paths, since the provinces with low initial demands would have higher future needs to complete the transition in a reasonable time frame.

The second important consideration is the country's current and future economic and political circumstances. If there are any changes expected to take place during the desired transition period, the transition paths can be strategically designed to accommodate such changes. For this reason, the pool of funds available and the transition path for each province would have to be linked to macroeconomic forecasts for the South African economy.

5.4.2 Input requirements

Implementation of the scheme would require substantial data input and other information. The required input variables are:

- The desired time period in which convergence is to be completed. This is a policy decision and depends on the resources which government is prepared to commit to the capital grant scheme.
- An estimate of the capital depreciation rate.
- The pool of funds available in each period. This is also determined by macro-economic variables.
- The standard and actual levels of capital stock at the commencement of operation of the scheme for each province and service. This is needed in order to estimate the backlogs at the start of the scheme.
- The standard and actual levels of net capital expenditures for each service and province over the chosen period of time, which could be extrapolated from current trends.
- An initial transition path for each service and province (the sequence of needs). This is a mathematical expression that shows how the capital stock for each service in each province will be transformed to the standard. It is possible to undertake simulations that made different assumptions about this path, and it would be instructive to see how the grant estimates change as one makes different assumptions about the transition path.

In summary, further work is required to construct all the input data required by the model.

5.4.3 Computer simulations

Once the data and the estimates for the set of the required variables are assembled, the scheme can be implemented by designing a computer software programme. The main output would be the estimated capital grants for each year. The programme could also be designed to create the plot of the original and actual transition paths for each service and province.

Apart from facilitating the implementation of the scheme, there are numerous advantages to developing the simulation model:

- The software would provide a powerful tool for further investigation and improvement of the scheme. For example, it could be used to analyse the dependence of the length of the transition period on the shapes of the initial transition paths, or the stream of the available funds.

- The simulation model would allow policy-makers to adjust the transition paths for different services and provinces as the scheme progresses, which would ensure a faster and more even transition process. Comprehensive graphical exposition of the output could also be provided.
- If at some stage in the future provinces were given access to own revenues and capital markets for borrowing, this would give them greater capacity to fund their own capital needs. Accordingly, there may be a need to undertake revisions to the transition path in the future to allow for a phasing out of the scheme in response to such reforms.
- If national government decides to reduce or expand the pool of capital funds for provincial infrastructure, it would be possible to show how this change in funding would translate into an increase or decrease in the time it would take for provincial infrastructure to converge to the standards that have been set.
- Developing the simulation model would make it possible to draw out the implications of the capital grant scheme for the vertical allocation of resources to provinces. For the first time, policy-makers would have an estimate of what capital needs are in provinces and would be able to compare this with what is actually made available.

5.4.4 The pool of capital funds

It was noted that the implementation of the scheme requires that a pool of capital grant funds be created. The capital need relativities are then applied to this pool to determine the allocation of grant funds to each province. However, there is an issue of whether the pool is part of the provinces' equitable share or whether it should be funded from a separate national allocation.

An argument in favour of providing a separate allocation from national government resources is that addressing capital backlog needs in education, health and welfare is in the broader interest of all South Africans. As noted in Section 8.2, social infrastructure supports the production of trade and indirectly streamlines outcomes such as education and safety. The FFC therefore proposes that a national capital grant be made available to provinces with conditions attached that ensure the funds are dedicated to the elimination of capital backlogs.

5.4.5 Norms and standards for capital

It should be re-emphasised that to implement the scheme requires that norms and standards be established for the provision of capital for each province and service over time. In this regard, decisions need to be made on:

- Whether standards will be the same or differ across provinces for the same service.
- How these standards are to be constructed. For example, should one construct output standards for education, health and welfare and then construct standards for capital which are based on these output standards?
- Who should be responsible for a) setting national standards for the provision of capital, and b) monitoring progress towards meeting those standards? In Australia, the Commonwealth Grants Commission devotes considerable resources to estimating national standards for use in its equalisation model.

5.4.6 Conditionality

The capital grant should be conditional, that is, it should only be used by provinces to provide infrastructure. The FFC would argue against matching grants at this stage because provinces lack the tax resources to match a national capital grant and have limited access to capital markets. However, if reforms proceed in the longer term, this could be considered, especially if it is possible for provinces to use capital grants to leverage contributions towards capital from the private sector.

5.4.7 Monitoring

A further issue is whether provinces should be monitored to ensure that capital grant funds are spent on capital and, perhaps more importantly, that provinces do not reduce their own capital spending in response to receiving conditional capital grants. This monitoring might be provided by the Auditor-General. Requiring the grant to be matched is one way around the latter problem, but as was noted this may not be an option in the short term.

5.5 Future research directions and conclusion

A capital grant model has been outlined that could be considered for South Africa to address on-going capital needs and capital backlogs. The model has important features, most notably its ability to take account of the inter-temporal nature of capital arising from its durability and depreciation.

However, the model is not yet operational. To complete it, further conceptual work is required to determine how the model could:

- be adapted to reflect the requirement to maintain, upgrade, and update existing public capital in the national interest;
- be adapted to reflect disparities within provinces. In South Africa, there are many historically poor communities with serious capital backlogs located within provinces with above-average capital stock;
- be integrated with recurrent expenditure on social services.

If these questions can be resolved, then further work would need to be conducted to collect all the necessary input data. Most provinces do not have asset registers, and any asset registers that do exist are of questionable accuracy. This poses a significant challenge in collecting input data, and co-operation with other government bodies seeking to collect this information is necessary. Once this task is complete, the model could be constructed within an appropriate computer programme.

Research also needs to be carried out on current capital expenditure trends in provinces, with a view to clarifying the relationship between capital expenditure which may be covered by the equitable share and other grants. It should also be noted that some of the current capital expenditure in provinces is being funded by conditional grants, especially in the health sector. It is crucial that the links between recurrent and capital expenditure be developed and explicitly stated.

This additional work is future research that the FFC must undertake if it is to move forward with the process of developing a consistent and conceptually sound approach to the matter of capital backlogs and on-going capital needs of the provinces. This research agenda might proceed in four stages:

- Construct all input data (particularly estimations of capital backlogs in the health, education and welfare sectors);
- Construct the capital model within an appropriate computer software package;
- Establish benchmark parameter and policy settings for the model (for example the size of the grant pool, the transition path, and the time over which transition to the standard is to occur); and
- Undertake simulations with the model to produce various grant scenarios.

This section has discussed a scheme for the funding of social infrastructure. Given the low level of expenditure on social infrastructure, the FFC believes that there is an urgent need for a

capital grant scheme in South Africa. As the scheme outlined above is not yet ready for implementation, the FFC recommends that a conditional grant from the national equitable share be provided to provinces as an interim measure to address the pressing issue of capital backlogs.

If national government wished to make funds immediately available for a conditional capital grant, the grant could be distributed using the relative indices of need for health and education developed by the FFC in the research papers which informed this Report. These indices are similar to those developed by the Department of Finance, but also differ in some respects. The education index is based upon classroom backlogs, the physical condition of school buildings and the availability of connectivity infrastructure (for example, electricity and sewerage). The health index is based upon the physical condition of health facilities and the relative need for additional health facilities in order to bring each province to the norm of 3 beds per 1,000 people. The use of these indices should only be considered as an interim measure while the required work on building the full capital grant model proceeds.

Recommendation 5

That as an interim solution and in view of urgent need, conditional grants be allocated to provinces out of the national equitable share to support the reduction or elimination of social infrastructure backlogs.

Part 2

PRINCIPLES FOR INTERGOVERNMENTAL FISCAL RELATIONS

6. A VISION OF FISCAL ARRANGEMENTS IN SOUTH AFRICA

6.1 Introduction

The Republic of South Africa is now embarking on a new phase of its transformation to a fully democratic and dynamic nation, one which has at its core the principles of equity, justice, and a better life for all.

The structures of national and provincial governments in South Africa are less than five years old. The Constitution was adopted only in 1996. Local government is still in the process of being restructured. There is still much to be done to achieve core goals, while continuing appropriate fiscal policies to allow the economy to grow and provide the foundation for prosperity.

A central priority of government in South Africa is to provide basic services to all within the constraint of available resources. This objective is set out in the Constitution's Bill of Rights and is a fundamental responsibility of government. Rights to which all citizens are entitled are in areas such as housing, health, social security, and education. Responsibilities in respect of these rights are shared amongst governments, with each sphere of government charged with fulfilling its assigned functions.

Under the Constitution, national government has over-riding responsibility for the management of the country's affairs and shares responsibility with the provinces for the provision of basic social services. National government may mandate appropriate essential or minimum levels and standards of services. Provinces are responsible for delivering most of the range of social services, which fall in the areas of education, welfare, and health. Municipalities carry responsibility for provision of local infrastructure and basic services such as sanitation and water reticulation.

The objective of South Africa's intergovernmental fiscal arrangements is to ensure that these multi-sphere responsibilities are carried out in the spirit of co-operation, fairness, and efficiency. In the end, it is the welfare of individual citizens, wherever they reside, that should be the ultimate objective guiding the decisions around fiscal arrangements.

Designing a system of fiscal arrangements to accomplish this objective is made even more challenging by the large *vertical fiscal imbalance* in the South African fiscal system. Whereas the expenditure responsibilities of the provincial sphere are extensive, its revenue-raising abilities are minimal. Although a long-term strategy should be to increase the revenue-raising capacity of the provinces, this is not likely to occur in the short term.

This implies that provinces are almost exclusively reliant on the equitable sharing of national revenue to deliver basic social services to all South Africans to the levels stipulated by national norms and standards. This is a challenging task indeed: the need for social service improvements is great, and the current service levels and capacity to deliver effective services varies considerably across and within provinces.

The situation is quite different for the local government sphere, which generates most of its own revenue through property rates and user charges. While this revenue may well be insufficient for providing basic services to all, local governments' relative self-sufficiency is in marked contrast to the provinces' dependence on the central fiscus.

This is not to imply that equitable shares play no role in the local government sphere, nor that principles governing provincial relations are different from those applying to municipalities. Indeed, the FFC advocates consistency in its approach to provincial and local issues, as in its support for a formula-based approach for the equitable shares. The difference is in the magnitude of the role that equitable shares play for the provinces. With over 90 per cent of provincial revenue coming from the equitable shares, the manner in which these shares are calculated assumes great significance for the equitable provision of services.

Consequently, this Report focuses primarily upon the proposals relating to the provincial equitable share. Another reason for this focus is that the local government sphere remains in a state of flux. Until the new boundaries and structures of municipalities are in place, the development of detailed proposals for intergovernmental transfers for capital and recurrent expenditure are premature.

6.2 The ideal features of a national-provincial revenue sharing system

An ideal system of intergovernmental fiscal arrangements should achieve continuous improvement in the level of basic services across the nation as resources permit. It must finance services in an equitable manner among provinces. At the same time, the system must allow provinces to develop the capacity to assume full responsibility for providing basic social services in their own jurisdictions.

The long-term vision of the multi-sphere government system in South Africa is one where national government, in consultation and co-operation with provinces, sets standards for basic public services. Ideally, these standards should be transparent and should be provided for in national legislation. Provinces have the responsibility to design and deliver programmes within their jurisdictions that satisfy these national standards, utilising the resources available to them.

This long-term vision suggests certain principles that a grant system should satisfy:

- To the extent that the Constitution provides that national revenue be divided equitably between national, provincial, and local governments, these should ideally be sufficient to allow provinces to provide the mandated national basic levels of education, welfare, and health services. In addition, conditional grants may be used to direct national resources to achieve particular objectives that national government may identify from time to time, such as infrastructure and the development of institutional capacity.
- The provincial equitable share component should be based on an objective measure of the costs of delivering the mandated services in each province; this is the essence of the costed norms approach. Objective criteria would be translated into a transfer formula. The amount transferred to each province would be based on an assessment of the amount of money that would be required for the province to deliver a standard level of services in an efficient way. The transfer amount would reflect the demographic, geographic and other features of the province that affect the costs of delivering the services. The grants would have the following characteristics:
 - They would be *unconditional* in the sense that provinces would be free to choose the exact mix of services most preferred by their constituents, *provided they met the basic norms and standards set nationally for health, education and welfare*. This would encourage provincial responsibility and would not distort the incentives for provincial spending and raising of revenues.
 - The amounts provided to each province should be *stable over the medium term* so that the provinces can plan their expenditures and not be subject to uncertainty or budget shocks.
 - The amounts provided should be *driven by a formula* rather than being subject to administrative discretion, so that the process is as transparent and empirical as possible.
 - The size of the provincial equitable share should be *affordable* given the fiscal realities facing national government.
 - Provincial equitable shares relative to the national equitable share should take account of provincial own source revenues.

- Where it is deemed desirable for national government to support specific elements of basic services (such as teaching hospitals and infrastructure) through conditional grants, the division of equitable shares should reflect this.
- The use of the equitable shares is subject to important constraints and expectations. Provinces and municipalities must provide basic services according to the nationally agreed mandates, and must be held accountable to the subnational legislatures and to the public in the relevant jurisdiction.

6.3 Longer-term issues

The achievement of the objectives envisaged for South Africa's multi-sphere government is an evolutionary process. In the long run, there are many issues that should be recognised and addressed:

- The level (norms and standards) of services provided by national, provincial and local governments will evolve as the economy develops and generates the resources to meet social pressures.
- In balancing the need to provide basic services against current fiscal realities, the long-run payoff of investment in services, such as education and health, is that it creates the conditions for stronger economic growth and generates a healthier fiscal environment.
- The equitable shares must continually be balanced against the requirement to maintain viable national economic and fiscal policies in the face of great demand for services.
- As the ability of the provinces to raise their own revenues is enhanced, they should become more responsible and accountable to their electorates.
- Local government restructuring should better equalise and extend benefits to areas which have been under-serviced.
- The relationships among the three spheres of government – national, provincial and local – will evolve in the future, compelled by the need to nurture co-operative intergovernmental relations for establishing norms and standards for basic services. The Budget Council and the Budget Forum are important institutions which are already provided for in legislation, and the Intergovernmental Forum (IGF) also plays a role. The FFC believes that these institutions must play a vital role in balancing the priorities of the three spheres of government in South Africa.

While the challenges appear daunting, the progress already made in this nation's short history in building a democratic and fair society inspires hope and confidence that the vision of the Constitution and the commitment to a better life for all will be realised.

7. PRINCIPLES GOVERNING INTERGOVERNMENTAL FISCAL RELATIONS

The proposals set forward in this Report are founded on a set of principles for fiscal arrangements. These principles reflect the provisions and spirit of the Constitution and generally accepted practices of intergovernmental fiscal arrangements.

Provinces in South Africa are much more dependent on the sharing of national revenue than subnational governments in other decentralised countries. While provinces have a constitutionally guaranteed “equitable share” of national revenue, less than 5 per cent of their revenue may be described as strictly “own-source” revenue. This compares with 70 per cent or more for states or provinces in countries such as Brazil, Canada, Germany, and the United States.

This provincial “fiscal dependency” creates a requirement both for the establishment of principles to guide the sharing of revenue between spheres of government and a mechanism to ensure that they are given appropriate consideration. The work of the Financial and Fiscal Commission becomes much more important than would be the case in a situation in which the provinces were clearly capable of raising the revenue necessary to carry out the responsibilities assigned to them.

With respect to local government, the current situation stands in sharp contrast to that of provinces. Over 90 per cent of local government revenue is own-source revenue. However, this statistic is misleading for three reasons. First, over one-half of local government revenue is received in the form of user fees, paid by residents for electricity, water, sanitation and other services. The service responsibilities which do not yield income may be substantially more dependent on transfer revenue.

Secondly, it is generally recognised that the local government sphere still provides many important services only to a minority of the population. As municipalities increasingly fulfil responsibilities to all South Africans, under-funding from own-source revenue and the reliance on the equitable share of national revenue may increase. Thirdly, there is considerable difference between municipalities. While some have an adequate tax base, there are many others that have insufficient tax bases to yield required revenues.

The reliance of the provincial sphere on national revenue suggests a significant “vertical fiscal imbalance”. However, the fact that the Constitution explicitly provides mechanisms to promote the equitable division of national revenue mitigates this characteristic of the intergovernmental fiscal system in South Africa.

7.1 Constitutional principles

The Constitution provides for the establishment of an independent and impartial Financial and Fiscal Commission in order to ensure that all spheres of government have equitable access to nationally collected revenue. Thus there is a heavy onus on the FFC to respect the constitutional status of each sphere and to ensure that the letter and spirit of the constitutional principles guide its recommendations. The FFC is expected to use its independence and impartiality to prepare recommendations based on a transparent relationship between principles, stated objectives, examination of facts, and analytical development. All recommendations in this Report are made taking full account of the provisions of the Constitution.

The equitable division of national revenue lies at the heart of the functions of the Financial and Fiscal Commission. Chapter 13 of the Constitution presents the financial framework for the Republic. Section 214 reads as follows:

214 (1) An Act of Parliament must provide for -

- (a) The equitable division of revenue raised nationally among the national, provincial and local spheres of government;*
- (b) The determination of each province's equitable share of the provincial share of the revenue; and*
- (c) Any other allocations to provinces, local government or municipalities from the national government's share of that revenue, and any conditions on which those allocations may be made.*

(2) The Act referred to in subsection (1) may be enacted only after the provincial governments, organised local government and the Financial and Fiscal Commission have been consulted, and any recommendations of the Commission have been considered, and must take into account -

- (a) the national interest;*
- (b) any provision that must be made in respect of the national debt and other national obligations;*
- (c) the needs and interests of the national government determined by objective criteria;*
- (d) the need to ensure that the provinces and municipalities are able to provide basic services and perform the functions allocated to them;*
- (e) the fiscal capacity and efficiency of the provinces and the municipalities;*

- (f) *developmental and other needs of provinces, local government and municipalities;*
- (g) *economic disparities within and among the provinces;*
- (h) *obligations of the provinces and municipalities in terms of national legislation;*
- (i) *the desirability of stable and predictable allocations of revenue shares; and*
- (j) *the need for flexibility in responding to emergencies or other temporary needs, and other factors based on similar objective criteria.*

The Constitution does not speak directly to the issue of equity amongst subnational governments, though it requires equity for individuals in terms of rights and entitlements to basic services. With respect to the three spheres of government, the constitutional provisions relate to the provision of “equitable shares”. Section 227 of the Constitution reads as follows:

227 (1) Local government and each province -

- (a) *is entitled to an equitable share of revenue raised nationally to enable it to provide basic services and perform the functions allocated to it; and*
- (b) *may receive other allocations from national government revenue, either conditionally or unconditionally.*

(2) Additional revenue raised by provinces or municipalities may not be deducted from their share of revenue raised nationally, or from other allocations made to them out of national government revenue.

From the foregoing, it is apparent that the Constitution approaches the requirement for equity in a particular manner and requires the mechanism of “equitable shares” to play a particularly important role in financing the equity that is to be achieved through provincial and municipal programmes.

The FFC draws the following conclusions from its examination of the constitutional provisions with respect to equity and equitable shares:

With respect to equity -

- **Access to basic services is a fundamental right to which everyone is entitled.** Basic services include access to adequate housing and health care services, sufficient food and water, social security, and basic and further education, as elaborated in the Bill of Rights (Chapter 2) of the Constitution.

- **Every child has additional rights to services**, as elaborated in Section 28 of Chapter 2.
- **Certain rights must be subject to progressive realisation**, as governments must operate within available resources.

With respect to equitable shares -

Equitable shares, at a minimum, include an entitlement to enable the provision of basic services by provinces and local governments. Equitable shares are provided out of national revenue. This suggests that equitable shares must be adequate and distributed appropriately so as to ensure that all citizens have access to those basic services for which provinces and municipalities are responsible, subject to the constraint of available resources.

The Constitution envisages other allocations to subnational governments which may be made from national revenue. Such allocations may provide for services or functions which are in addition to the provision of basic services, and may be conditional or unconditional. However, the provincial equitable share must be provided unconditionally. Therefore, if conditions are attached to any allocation, that allocation must be made from the national equitable share.

Conditional grants from the national equitable share should support specific national government objectives. However, the national government should not re-classify part of the provincial equitable share as a conditional grant, and in so doing remove appropriate decision-making authority and responsibility of provinces. The allocation of delivery responsibilities for major social programmes to the provinces should be accompanied by significant latitude for decision-making, otherwise decentralisation would be meaningless.

It is envisaged that provinces raise the revenues required to carry out their responsibilities. Provisions with respect to provincial and municipal taxation and to subnational government borrowing are found in Sections 228, 229 and 230 of the Constitution. There appear to be no hindrances to national government developing an equalisation programme for such taxes raised.

7.2 Scope for intergovernmental fiscal relations

In summary, there is substantial scope for intergovernmental fiscal arrangements to contain a number of different elements, including the following:

- Equitable shares of national revenue to meet basic services;
- Equitable shares directed toward the provision of other than basic services;

- Other unconditional allocations out of the national share to subnational governments;
- Conditional allocations out of the national share to subnational governments;
- Unequalised revenue raised by provincial and/or municipal governments under arrangements provided for in national legislation; and
- Revenue or other equalisation programmes from the national equitable share.

The FFC has a responsibility to provide recommendations with respect to all intergovernmental fiscal arrangements, not only those with respect to equitable shares. It should be noted that the equitable shares do not necessarily have to be provided on an equal basis, and that the provision of equitable shares is not the only intergovernmental fiscal mechanism available to address the issue of equity.

The FFC recommendations, with respect to the intergovernmental fiscal arrangements for 2001/02 and subsequent fiscal years, therefore consider the appropriate division of national revenue into equitable shares. This division must take full account of the role that other intergovernmental fiscal instruments, such as conditional grants or revenue equalisation, are expected to play in the provision of services throughout the Republic.

8. BEST PRACTICES FOR INTERGOVERNMENTAL FISCAL RELATIONS APPLICABLE TO SOUTH AFRICA

Though the Constitution sets out the broad requirements that fiscal arrangements must satisfy, there is still considerable leeway to choose the precise features of the system.

Moreover, South Africa has the essential prerequisites for launching a fiscal system of its choice, namely:

- a set of responsible national, provincial and local governments;
- far-sighted constitutional provisions that explicitly set out norms of individual equity and the obligation of the state to achieve them;
- the existence of an institution like the Financial and Fiscal Commission that can advise, from an arms-length perspective, on long-run structural matters without the constraints of day-to-day policy and budgetary concerns; and
- perhaps most importantly, a real sense of national purpose.

Sound fiscal arrangements must rest on sound principles, so it is important to set out the principles clearly. The growing literature on fiscal transfers amongst tiers or spheres of government gives some attention to these principles. There exists also considerable experience with the management of multi-level government relations in decentralised systems around the world. What follows are some observations about the lessons that have been learned that are of particular relevance to South Africa.

It is an essential feature of all multi-level government systems, federal and otherwise, that tensions exist and compromises must be made. These involve the resolution of the balance between truly decentralised provincial responsibility for fiscal decisions on the one hand, and the achievement of national equity and efficiency objectives on the other. Although decentralising basic public service provision to provincial or local levels of government can enhance efficiency, these basic public services are at the same time among the most important policy instruments for achieving national equity goals. These goals, explicitly stated or not, include the aim that citizens ought to have equal access to educational opportunities, health care and socio-economic security regardless of where they reside.

It is the role of the grant structure, and national-provincial fiscal arrangements more generally, to facilitate the decentralisation of fiscal responsibilities in a way that leads to efficient and responsible provincial decision-making, while at the same time respecting national goals and objectives.

Nations resolve these tensions in very different ways, some more successfully than others. The experience of other decentralised states, especially the more established ones, highlights a number of general features that characterise successful multi-sphere systems and set them apart from less successful ones. By success is meant that the decentralisation of public service provision achieves two objectives. First, it gives provincial governments responsible legislative authority to meet their own constituents' particular needs effectively. Second, it ensures that citizens are provided with comparable access to basic social services regardless of their province of residence. What follows is a summary of some of the characteristics of best practices in nations with multiple levels of government.

8.1 Fiscal autonomy of provincial governments

In the South African case, the notion of autonomy cannot be applied in absolute terms, as the Constitution defines South Africa as “one sovereign, democratic state”. However, efficient and politically accountable provision of public services by provincial governments is facilitated if provinces are allowed to exercise their responsibilities within the limits provided in the Constitution. Provinces should be better informed about the detailed needs of their residents and be best placed to micro-manage their own programmes. Moreover, the greater the responsibility they are given for legislating and implementing their own programmes, the more accountable they will be to their citizens through the political process. It might be tempting to argue that the capacity for responsible decision-making at the provincial level simply does not exist. This argument has the unfortunate consequence of perpetuating that lack of capacity rather than allowing the capacity to develop through experience.

8.2 Sharing resources for fiscal equity

Almost all decentralised states have some mechanism for the fair sharing of resources among provinces and/or municipalities. Sharing entails affording subnational governments sufficient resources, such that each can provide comparable levels of public services using similar revenue-raising effort. This is what is referred to as fiscal equity. It is an explicit objective of the Australian federal system, and is built into the Canadian constitution as a requirement of the equalisation system. The case for fiscal equity is ultimately based on the notion of horizontal equity – the idea that all persons should be treated comparably by the public sector regardless of their province of residence. It reflects the common rights of citizenship that all citizens should enjoy.

8.3 Formula-driven rather than discretionary grants

Grant systems whose amounts are determined by a well-specified formula have a number of advantages over those that are determined on a year-by-year discretionary basis by national government. Formula-driven grants are more transparent, reliable and predictable, and are less subject to short-term fiscal constraints and day-to-day political considerations. This aspect of grants cannot be over-emphasised, especially in decentralised systems where provincial governments have relatively limited revenue-raising power, such as South Africa. Formula-driven grants can be designed to be in place for intervals of several years. They can also be designed so that risks of unexpected changes in revenue are borne by national government, which may be especially important where provincial governments have little revenue-raising ability, and where they cannot use debt as a method of insuring themselves against revenue fluctuations.

8.4 Transparent processes for setting grants

The process by which grant formulae and amounts are determined should be transparent and undertaken from a longer-term perspective. Nevertheless, isolating national-provincial transfers from the budget process entirely is not feasible since money must be appropriated by the national legislature. Some countries, such as Australia and India, have found arms-length bodies to be extremely helpful as a means of ensuring that longer-run considerations are taken into account in designing grants. These bodies have also proven to be effective structures for consulting with provinces.

8.5 Unconditionality of major grants

Major grants, especially those that play an equalising role, tend to be largely unconditional and non-matching. This ensures that the provinces are able to exercise the utmost discretion. Of course, there may be some requirement to ensure that when provinces use these grants to deliver important social programmes, they adhere to national norms and standards. As stressed above, achieving that objective is one of the most difficult problems in systems similar to South Africa. National government and the provinces bear joint responsibility for ensuring that public services in areas like education, welfare, and health satisfy national equity criteria.

8.6 Provincial accountability

Political accountability is important for ensuring that public services are delivered in efficient ways and that they meet the needs of citizens. Therefore, explicit and unambiguous delineation of accountability relationships between the different spheres of government is critical. Nurturing responsible provincial decision-making may involve some transition, but it will pay dividends in the long run.

8.7 Avoidance of bailouts

Formula-driven, unconditional grants have one further benefit, which arises from the fact that provinces bear responsibility for the consequences of their expenditure. The grants help to avoid the potentially serious problem faced by many federations with large vertical fiscal imbalances – the problem of bailouts of irresponsible (or over-zealous) provincial governments. This is the so-called “soft budget constraint problem”. The very possibility of bailouts of other levels of government serves to encourage irresponsible decision-making.

8.8 Norms and costs as elements of grants

National-provincial grants which are intended to equalise the ability to provide comparable levels of public services are inherently difficult to design. There are two elements which can facilitate this design. One is a component that compensates for differences in the ability of provinces to raise their own revenues. This is relatively straightforward to implement, and equalisation systems in established federations tend to do so (for example, Canada and Australia). However, with the limited revenue-raising capability of provinces in South Africa, this component is not central to the discussion at present.

The other component involves differences in the resources required to achieve comparable service levels. These differences arise due to variations in demography and geography among provinces. Historical inequality in levels of development, including critical capital backlogs, is another major determinant of provincial disparities. These are typically much more difficult to measure and very few countries attempt to do so in a detailed way. An exception is Australia, where the equalisation system incorporates needs in a sophisticated way to determine the horizontal allocation of grants among states.

There is widespread agreement that, in principle, differences in fiscal requirements ought to be included in equalisation grants. This is especially true in systems where provinces have little revenue-raising capacity of their own. Any attempts to incorporate such costs into equalisation formulas would contribute to the fiscal equity and efficiency of the multi-government system.

If norms and cost differences are to be included in the grant formula, it is important that it be done in such a way that provincial spending does not directly influence the amounts transferred. Otherwise, provinces will distort their spending priorities in order to influence the amount of grants they are to receive. Grants could be designed so that norms are able to reflect the objective features of the province that affect the amount of money needed to provide standard levels of public services.

In the South African context, the problem is made more challenging by the requirement that the norms and costs of providing basic services inform not only the horizontal division of funds across provinces, but also the vertical division of equitable shares. Although it is the prerogative of national government to determine the vertical division of national revenues, it must nonetheless be done in a way that satisfies the requirements set out in the Constitution. These involve ensuring that the provinces can provide basic services up to the national norms and standards.

8.9 Macro-economic management

National government is ultimately responsible for macro-economic management and hence the implementation of fiscal and monetary policies that will facilitate its employment, price stability and growth objectives. There are various dimensions to this. On the one hand, effective monetary management requires overseeing both the money supply and the level of public debt. The former is not an issue since it is the clear responsibility of national government. However the public debt includes not only national public debt but also any debt issued by the other spheres of government.

More generally, the idea that the three classic government functions – allocation, distribution and stabilisation – can be neatly assigned to any one of the levels of government has been discredited. In particular, virtually everything governments do has redistribution intent. The issue is how the actions of the national, provincial, and local spheres of government can be co-ordinated to achieve national redistributive objectives. The same applies to the allocation and stabilisation functions.

8.10 Provincial revenue raising

The case for decentralising expenditure functions is much stronger than for decentralising taxation functions. Nonetheless, the advantages of provincial levels of government having reasonable revenue-raising responsibilities are compelling. This need not imply a separate taxing authority. Provincial governments can have taxing responsibility without disrupting a harmonised national tax system by simply “piggy-backing” onto the national system at their own chosen rates. The ability to raise their own revenues offers provincial governments a valuable degree of freedom that allows them to implement programmes of their own choice and size. This is an important aspect of provincial autonomy.

8.11 Local government financing issues

Multi-level government systems can have significant functions decentralised to the local government level. Many of the above principles also apply to local government financing, for example the

importance of decentralising local decisions and fostering independence of local decision-making, the need for oversight to ensure that municipalities' programme designs satisfy national norms, and the relevance of equity and efficiency considerations in the design of grants.

One additional consideration arises in the local government context, and that concerns the relationship of local governments to national and provincial ones. In most countries, the relationship among governments is strictly hierarchical. National governments deal with the provinces, while provinces alone deal with their municipalities. The situation in South Africa is more complex, where there are three spheres of government which are required under the Constitution to govern co-operatively. Nevertheless, the local government sphere operates within the policy and funding parameters set primarily by national government.

Regardless of institutional relationships among the three spheres of government, it is clear that some of the general principles outlined above with respect to grants to the provinces also apply to local government grants. That is, these grants should be designed to achieve fiscal equity (as defined in Section 8.2) among municipalities, and should be transparent and predictable.

GLOSSARY

<i>Accounting costs</i>	Current or capital expenditures incurred in the delivery of services. Contrast with social costs.
<i>Backlogs Component</i>	The component of the Department of Finance provincial equitable share formula allocated for infrastructure backlogs.
<i>Basic services</i>	The national minimum standards of service in education, welfare, and health care as defined in the Constitution, legislation, or past practice.
<i>Basic Education Component (E)</i>	Ordinary primary, secondary and special school education, including independent schools.
<i>Basic Element (B)</i>	The element of the provincial equitable share formula designed to fund services other than the constitutionally mandated basic services.
<i>Basic Health Care Component (H)</i>	Primary health care services (PHC).
<i>Budget Council</i>	The consultative body consisting of the national Minister of Finance and the nine provincial MEC's for Finance.
<i>Budget Forum</i>	The consultative body consisting of members of the Budget Council and representatives of organised local government.
<i>Capital expenditure</i>	Spending on new or existing durable goods, with a normal life span of more than one year, to be used for (socially) productive purposes.
<i>Capital grant</i>	A grant made for the purpose of paying for the acquisition or construction of new or existing durable goods with a normal life span of more than one year. May include grants for the construction of roads, hospitals, a stadium, irrigation works, and schools.
<i>Conditional grants</i>	Allocations of money from one sphere of government to another, conditional on certain services being delivered or in compliance with specified requirements.
<i>Contingency reserve</i>	Portion of total national revenue set aside to accommodate unforeseen expenditure which could not be quantified when planning the budget expenditures.
<i>Costed norms approach</i>	A formula-based method for calculating the financial resources necessary for the provision of basic social service levels, given nationally mandated norms and standards.
<i>Division of revenue</i>	The allocation of funds vertically between the three spheres of government, or horizontally amongst provinces or municipalities,

	as required by the Constitution.
<i>Economic Activity Component</i>	The component of the Department of Finance equitable share formula that provides for differences in province's economic activity.
<i>Economies of scale</i>	A technological situation in which per-unit costs of producing a good or service fall as more is produced.
<i>Equity</i>	The application of principles of justice to the recognition of rights or the division of resources: 1. among individuals, or among governments in the same sphere (horizontal equity); 2. between classes of people or different government spheres (vertical equity).
<i>Equitable shares</i>	The allocation of revenue to the national, provincial and local spheres of government in a manner that advances equity, as required by the Constitution.
<i>Fiscal dependency</i>	The extent to which one sphere of government relies on another for revenue sources to fulfil its functions.
<i>Fiscal equity</i>	The ability of various governments in the same sphere to provide comparable levels of services to their citizens, with similar levels of taxation.
<i>Formula grants</i>	Revenue transfers from one sphere of government to another, according to a mathematical formula.
<i>Horizontal division</i>	The division of revenue sources amongst provinces or amongst municipalities.
<i>Indirect services</i>	In the health care field, services in support of direct services to individuals. Examples include administration and clinic transport.
<i>Institutional Element</i>	The element of the equitable share that is designed to fund the operation of provincial government institutions.
<i>Intergovernmental Forum</i>	The body consisting of all national Ministers and provincial Premiers, with the President and Deputy President <i>ex officio</i> .
<i>Iterative process</i>	A part of the procedure for dividing national revenue suggested in this report, in which policy makers alternate repeatedly between adjusting a costed norms scenario and adjusting macro-priorities set by the Medium-Term Expenditure Framework (MTEF), until a solution is found that brings norms into alignment with the MTEF.
<i>Means-tested</i>	A property of some government programmes in which eligibility or the amount of benefits is determined by the income of each potential recipient.
<i>MTEF</i>	The three-year spending plans of national and provincial governments published at the time of the budget.

<i>National revenue</i>	State income from taxes, levies and other charges.
<i>Opportunity cost</i>	The potential social or economic benefits foregone by choosing one policy or investment option over another.
<i>Primary health care</i>	Defined as basic health services.
<i>Ring fencing</i>	The imposition of conditions on grants, either explicitly or by incentive, that ensures that these grants are allocated to the earmarked purpose.
<i>Social costs</i>	The impact of the non-delivery of public services on society. These costs are difficult to quantify.
<i>Social security</i>	Non-contributory financial assistance or direct grants to the poor who qualify for such assistance as prescribed by legislation.
<i>Social Sector (S)</i>	In this Report, constitutes constitutionally mandated basic services in education, health care, and welfare.
<i>Special schools</i>	Schools that cater for learners with special learning needs, for example, physically or mentally disadvantaged learners.
<i>Tax base</i>	The aggregate value of income, sales, transactions, or property on which particular taxes are levied.
<i>Tax incentives</i>	Specific provisions in the tax code that provide favorable tax treatment to individuals and businesses to encourage specific behaviour or activities, for example provisions to encourage retirement savings.
<i>Tax incidence</i>	The final distribution of the burden of tax.
<i>Top-slicing</i>	A practice of national or other governments, by which, prior to allocating revenue, an amount is set aside for special purposes. Examples include national debt repayment and a contingency reserve for national disasters.
<i>Unfunded mandates</i>	The allocation of service responsibilities by one sphere to another without a commensurate allocation of financial resources to fund those responsibilities.
<i>Vertical division</i>	The division of revenue between the three spheres of government.
<i>Vertical fiscal imbalance</i>	A situation in which the expenditure responsibilities of the spheres of government are significantly out of proportion with the spheres' respective revenue-raising capacities.

Notes

