FINANCIAL AND FISCAL COMMISSION

Preliminary Recommendations for 2001

A Costed Norms Approach for the Division of Revenue

CONSULTATION DOCUMENT

February 2000

FINANCIAL AND FISCAL COMMISSION

For an Equitable Sharing of National Revenue

Foreword

$\mathcal{T}$he Financial and Fiscal Commission is charged by the Constitution, the Financial and Fiscal Commission Act and the Intergovernmental Fiscal Relations Act with the responsibility to prepare recommendations on the equitable shares of national revenue to be provided to national, provincial, and local government. Any recommendations must be submitted ten months prior to the date that the national budget is placed before Parliament, and are to be provided to the national and provincial legislatures and to organised local government.

The FFC supports the need for stability in fiscal arrangements over a three-year cycle, and for that reason believes 2001/02 would be the appropriate opportunity to begin a new cycle for fiscal arrangements. To this end, the FFC has instituted a review of the provision of equitable shares from national revenue.

In order to accomplish this task, the FFC established a team working under the title "Project 2001". This team consisted of FFC Commissioners, FFC staff, contracted staff from South African non-governmental organisations, and a highly qualified set of international academics and practitioners from Australia, Canada, India, Italy, and the United States.

The Project 2001 team believes that the FFC has advanced the thinking concerning appropriate formulae for the establishment of equitable shares. The conclusions of the Project 2001 research form the substance of this Report and the focus of our consultations over the next two months.

The main thrust in this Report is the use of a costed norms analysis applied to the areas of education, welfare, and health, both to provide the formula for the division of provincial revenue and to inform the vertical division of national revenue amongst the three spheres of government. In addition, the Report sketches a framework for capital funding and describes principles for conditional grants.

Stakeholders and reviewers are requested to take the opportunity to respond to this document before 31 March 2000, in order that the FFC can take account of all views prior to finalisation. These views will be treated in the same spirit of constructive debate as that in which they are offered.

Mr. Murphy Morobe, Chairperson

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 has developed numerous proposals for appropriate fiscal arrangements.

This preliminary Report serves as the basis for a consultative process which the Commission is embarking upon with stakeholders and commentators. Through this process, the Commission hopes to subject the analysis and conclusions to thorough review. Stakeholder input will then feed into the preparation of the Commission's final recommendations and advisories for the 2001/02 and subsequent fiscal years, which will be presented to national Parliament, provincial Legislatures, and organised local government.

A new approach to the allocation of national revenues

The Financial and Fiscal Commission is advocating a new approach to the allocation of national revenues. This approach is based on national norms and standards for the provision of basic services, and has been called the "costed norms" approach.

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 social service delivery, the approach establishes a principled basis for a process to determine simultaneously the vertical and horizontal divisions of revenue, and to evaluate these against the Medium-Term Expenditure Framework (MTEF).

The main objective of the Commission's new approach is to ensure that each province has sufficient financial resources to

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.

provide basic services to all its citizens to the norms and standards that 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 social services in each province.

The Constitution provides the foundation for the approach. The Bill of Rights stipulates that certain basic 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 services.

While the approach is new, it may be viewed as an extension of previous FFC recommendations. Moreover, it 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.

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 Forum, at its January 2000 meeting, decided 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 completion of the demarcation process 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 FFC supports the evolution of a national policy-making process that alternates repeatedly between the costing of nationally determined norms and the macro priorities set by the MTEF.

The national sphere

National government has already taken a significant step in creating an appropriate macro-economic framework with the adoption of the Medium-Term Expenditure Framework. The MTEF sets the macro priorities for the country, and thus all three spheres of government, in terms of the major expenditure categories. 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. The FFC supports the evolution of a national policy-making process that alternates repeatedly between the costing of nationally determined norms and the macro 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 education, welfare, and health services. These three programme areas currently encompass 85 per cent of total provincial expenditure.[1]

The first step in the costed norms approach is to establish basic 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 services are calculated by taking account of the structure of the provincial population. This provides an objective measure of the financial resources necessary to attain the norms and standards that have been nationally mandated.

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, for it not only establishes the horizontal division of the provincial equitable shares among provinces but

The FFC 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.

[1] Department of Finance,
I_e g e   e _al Fi cal Re ie
(1999), p. B6.

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.

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;

- 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 using this approach;

- 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

The total cost of the "norm" is calculated using a series of benchmark ratios applied to the different groups within the population which each programme is expected to serve.

The FFC has been able to construct prototype formulae for each of the three social sector programmes, namely education, welfare, and health. Continuous refinements of these formulae will occur through better data and further analysis. However the FFC believes that using these prototypes 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 using a series of benchmark ratios applied to the different groups within the population which each programme is expected to serve. Population is weighted when different groups are expected to receive services at different levels, based on factors such as age and relative poverty.

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

The FFC has models by which it can calculate the effects of a variety of policy parameter changes. As mentioned earlier, an iterative process is proposed to reconcile the costs of benchmark norms and standards to the fiscal constraints arising out of the vertical division of national revenue.

On-going research and future directions

Part II of this Report contains two sections designed to highlight on-going areas of research and to promote wider consideration of other matters important in the division of revenue.

- *Ca i al G a   :* This section introduces a capital model which is being developed. It addresses the low level of capital spending in South Africa and 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.

- *Conditional grants:* Conditional grants can be particularly useful in nations where the delivery of major programmes, such as health care, education, and welfare, are decentralised. The rationale for conditional grants and international experience of them are outlined in the Report.

From this, the FFC concludes that conditional grants play an important role, but their use must not unduly detract from the responsibilities assigned to the provincial and local spheres of government.

Background to proposed 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:

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 fiscal capacity equalisation grant;
I	is an institutional grant to finance the core legislative functions;
B	is a basic grant to establish programmes and fulfil constitutional responsibilities.

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

Summary of proposed recommendations for 2001

The objective is to ensure that each province has sufficient financial resources to provide basic services to all its citizens to the norms and standards that are affordable within the national fiscal framework.

1) That the principles of the costed norms approach be adopted as the "S" grant mechanism to determine the horizontal and vertical divisions of revenue and to support the delivery of education, welfare, and health-care services by provinces. Implementation should be as early as possible, taking into account the Medium-Term Expenditure Framework cycle. *[Ref: Pa_ I, Sec_i 4]*.

2) That costed norms be implemented for education by means of the formula specified in Part I, Section 5.2 of this Report, which includes the following elements:

   • the mix of different types of learners actually enrolled in each province;

   • a normative learner-educator ratio 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;

   • the level of educator remuneration in the province; and

   • provincial support for independent schools.

3) That costed norms be implemented for welfare by means of the formula specified in Part I, Section 5.3 of this Report, which includes the following elements:

   • the number of individuals eligible for each of six separate social security programmes and the entitlement amount of each;

   • an allowance for administrative expenses;

   • phase-in parameters for social security programmes with low take-up rates, to provide for gradually increased utilisation; and

   • an explicit allocation for social welfare services that provides a higher allocation for provinces with a high proportion of poor residents.

4) That costed norms be implemented for health care by means of the formula specified in Part I, Section 5.4 of this Report, which includes the following elements:

- the number of individuals in each province falling into each of four age and gender groupings;

- the relative costs of providing primary, secondary, and other 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;

- the population density of the province relative to a norm; and

- an allowance for residual health care costs (administrative, support services, and miscellaneous).

5) That each province be allocated

- a Basic Element, which 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, and which is net of the Institutional Element; and

- an Institutional Element set equal to the basic cost of operating government institutions. *[Refe e ce: Pa I, Sec i 6]*

6) 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;

- The m grant is dropped from the formula, as it is now provided through various conditional grants financed from the national sphere. *[Refe e ce: Pa I, Sec i 6]*

7) As an interim solution in view of urgent need, that conditional grants be allocated to provinces out of the national equitable share to support the reduction or elimination of social infrastructure backlogs. *[Refe e ce: Pa II, Sec i 8]*

Part I

1. A VISION OF FISCAL ARRANGEMENTS IN SOUTH AFRICA

1.1 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. Local governments 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 *e ical fi cal i bala ce* 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.

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Thi_ i_ lie_ ha_ _i ce a e al _ e cl_ i el elia_ _ _ he e_ iable ha i g f a i al e e_ e_ deli e ba ic_ cial_ e ice_ all S_ _ h Af ica_ _ he le el_ i la_ ed b_ a i al_ a d_ a da d_. 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.

1.2 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.

The provincial equitable share component should be based on an objective measure of the costs of delivering the mandated services in each province.

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:

  o They would be *c di i al* in the sense that provinces would be free to choose the exact mix of services most preferred by their constituents, *ided he e he ba ic a d a da d e a i all f heal h, ed ca i a d elfa e*. This would encourage provincial responsibility and would not distort the incentives for provincial spending and raising of revenues.

  o The amounts provided to each province should be *able e he edi e* so that the provinces can plan their expenditures and not be subject to uncertainty or budget shocks.

  o The amounts provided should be *d i e b a f la* rather than being subject to administrative discretion, so that the process is as transparent and empirical as possible.

  o The size of the provincial equitable share should be *aff dable* given the fiscal realities facing national government.

  o Provincial equitable shares relative to the national equitable share should take account of provincial own source revenues.

  o 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 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 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.

1.3 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.

2. 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 citizens 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, the situation of 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

The equitable division of national revenue lies at the heart of the functions of the Financial and Fiscal Commission.

promote the equitable division of national revenue mitigates this characteristic of the intergovernmental fiscal system in South Africa.

2.1 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 that 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;

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(d)   the need to ensure that 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 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:

Access to basic services is a fundamental right to which everyone is entitled. Certain rights must be subject to progressive realisation, as governments must operate within available resources.

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.

2.2 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.

3. 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.

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 to facilitate the decentralisation of fiscal responsibilities in a way that leads to efficient decision-making.

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.

3.1 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 will they 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.

3.2 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.

3.3 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.

Explicit delineation of accountability relationships between the different spheres of government is critical.

3.4 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 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.

3.5 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.

3.6 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.

3.7 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.

3.8 Norms and costs as elements of grants

If norms and cost differences are to be included in the grant formula, it should be done in a way that provincial spending does not directly influence the amounts transferred.

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.

3.9 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.

Some of the general principles with respect to provincial grants also apply to local government grants.

3.10 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.

3.11 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 local governments' programme design satisfies 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 3.2 above) among municipalities, and should be transparent and predictable.

4. 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 *h i al di i i*), and the three-way aggregate division (the *e ical di i i*).

The approach that the FFC is proposing for determining these two divisions is called the *c ed a ach*. 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.

4.1 The case for a new approach

The case for a new approach arises from the requirement for provinces to deliver the 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 and welfare, and education (Sections 27(1) and 29(1), respectively);

- 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.

The costed norms approach is designed to enable all provinces to achieve the nationally set standards of basic services while retaining their autonomy to design programmes.

4.2 Essence of the costed norms approach

The costed norms approach suggests the following schematic approach to determining 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 consultations 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, 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 that would be 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, welfare, and health services should be calculated for each province.** The aggregate costs of basic services will then serve as the basis for estimating the horizontal split of national revenues into provincial equitable shares.

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 will provide some impetus for the collection of more data, which will in turn improve the ability to implement the costed norms approach.

4.3 Advantages of the costed norms approach

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

- **The approach promotes efficiency.** The formula used to allocate the equitable share to provinces should encourage provincial governments to make the most efficient resource allocation choices possible. Provincial governments are constrained by their lack of revenue-raising ability. This means that national government is unable even 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 i c 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.

It is important to develop funding mechanisms that encourage provinces to recognise the true opportunity cost of reallocating resources.

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 transparency and objectivity of cost-based formulae engenders system-wide confidence in the fairness of provincial allocations.

- **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. Because a costed norms approach is based on specific public output standards (for example, a specified pass rate on matriculation exams), it is 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, 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 fiscal discipline.** 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 the health sector, 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]

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.

4.4 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. Because of the difficulty of measuring outputs and the limited availability of data, however, costs for health and education are estimated through the use of input standards.

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

- 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 *be ch a k* 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 be ef e   e ha al e a i e a i al be ch a k be de ig ed, hich   ld   ide i f   hich a i al g e e c ld ch e. A l e a i e   ld be ch e   l eflec diffe e j dg e ab   ible   a d a da d , b al   ield diffe e   i cial ha e i he e ical di i i . Offe i g a e f al e a i e eali a i   a e a d lic a a e e facili a e he elec i f a i al a d a da d ha ca be acc   da ed i hi he fi cal f a e   k. Tha i , i ake e lici he ade- ff be ee he le el f a i al   a d a da d a d he fi cal i i ie f g e e .

This procedure has some additional advantages:

- By using only benchmark norms in the first stage, 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 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 principles of the costed norms approach be adopted as the mechanism to determine the horizontal and vertical divisions of revenue and to support the delivery of education, welfare, and health-care services by provinces. Implementation should be as early as possible, taking into account the Medium-Term Expenditure Framework cycle.

5. THE COSTED NORMS APPROACH AS APPLIED TO THE SOCIAL SECTOR

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

5.1 General principles

In this section, we wish to define the special characteristics of basic service 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.

In order to overcome the absence of comprehensive norms and standards regimes in the three key social sectors, the formulae proposed here have been constructed with a significant degree of flexibility. The allocation that each formula will deliver may be varied by adjusting a series of policy/technical parameters.

This Report will only show a single total allocation for each of the three social sector components. This "benchmark" allocation reflects the use, in the formulae, of policy/technical parameters that are consistent with the FFC's judgement of what is a reasonable starting point. The particular parameters can be adjusted to produce equitable share allocations that more closely reflect the preferences of national and provincial governments.

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 question is, how much does it cost each province to achieve basic levels of educational attainment, social welfare, and health care?

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.

The key idea in calculating costs of delivering a 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.

Comparisons are hard to make with actual expenditure data. 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.

Input standards are not to be used as standards in the allocation of the equitable share as a series of public sector 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 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 student 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.

5.2 The education grant

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 students with a high-quality basic education. The definition of *ba ic* education must be determined by national government. National government must agree on a national standard (or standards) of student performance as measured by student test scores, grade completion, or other criteria.

5.2.1 Socio-economic cost factors

Obviously, the number of students to be educated by a province is the first and most important determinant of that province's education costs. Any given student population, however, can differ in its demographic or socio-economic composition. Such differences give rise to differences in average needs, which, in turn give rise to significant differences in the cost of education. These demographic factors are well outside the ability of any province to influence in the short and medium term. In other words, the composition of a province's student population must be examined in order to reflect the costs that province inevitably incurs in meeting minimum standards established by national government. Such demographic factors include:

- *The ＿i f ecial ch l lea e* (as opposed to ordinary learners) in the student population. There is substantial evidence that the cost per learner of special schools for disabled students is much higher than the per-learner cost of ordinary schools. It is important to treat special school learners differently from ordinary school learners for two reasons. First, there are their unique characteristics referred to implicitly in the Employment of Educators Act of 1998 pertaining to the post-provisioning for this group of learners. Second, although the cost of educating special learners is not insignificant, their actual numbers as a percentage of the total learner population is very small, except in Gauteng, Western Cape and KwaZulu-Natal. Most provinces thus have very little room to influence this input factor.

- *The age ＿ c＿ e f＿he il la i* (primary versus secondary school age). Provinces clearly cannot influence this factor. However, the question of whether costs are higher in primary or secondary schools is controversial.

Children from poor families require more resources to achieve comparable educational outcomes.

- *The prevalence of poverty* amongst families and communities from which the province's pupil population is drawn. A number of studies in South Africa and in other countries suggest that, all other things being equal, children from poor families require the expenditure of more resources, compared to their economically advantaged peers, to achieve educational outcomes mandated by the nationally determined norms.

- *Rural-urban residence:* The evidence indicates that pupils residing in a rural area also require the expenditure of more resources, compared to urban children, to achieve comparable, or at least minimum mandated educational outcomes.[3] While the factor of rural residence may be less strongly related to cost than is poverty, poor rural children are the most expensive to educate, followed by poor urban children, followed by the non-poor rural, followed in turn by the non-poor urban.

5.2.2 Other factors

Some other factors need to be considered. These include:

- *The over-enrollment factor.* 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 students at each grade level are an inappropriate age for that grade. These data indicate two separate problems:

  o 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

  o 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.

  This factor is, at least in part, controllable by provinces, which may set eligibility standards for admission, and which are viewed as taking responsibility for the quality of

[3] This is particularly true in rural South Africa, where learners have to travel long distances to school and where the conditions of schools are far below standard both in terms of physical and social infrastructure.

education, and therefore for learners' outcomes. No indication exists of a systematic difference in the relative costs of educating learners of appropriate and inappropriate age, once account has been taken of family income and urban/rural status.

- *Lea e -ed ca a i*. The smaller the number of pupils per teacher (and hence the lower this ratio), the greater costs will be, other things being equal. It should be noted that this ratio need not be the same as average classroom size, as some teachers are assigned to a school to assist in specialised ways with children from many classrooms.

- *A e age le el f ed ca e e a i :* Because teachers' remuneration structure is centrally bargained and nationally determined, no difference in remuneration scales exists between provinces. However, as more qualified and experienced teachers are paid more highly everywhere, the average level of teacher remuneration in a province is a proxy for the level of qualifications and experience of the teachers hired there. While this variable is fixed during any one year, provinces can set hiring policies with a view to changing qualifications and experience of the teachers in the medium term.

- *I de e de ch l :* A small portion of provincial education expenditures is devoted to subsidies to independent schools. Because the number of learners enrolled in such schools varies widely between the provinces, there could be distributional implications in the way that this is reflected in the norm. This cost can be directly determined by provincial policy.

- *O he C :* The education budget of each province also includes expenditures for administration, teacher training, technical college and independent school education, as well as non-personnel expenditures such as books, teaching material, electricity, heating fuel, and custodial services for school buildings. There is considerable variation in the share of total education spending that the different provinces devote to administration and to non-personnel expenditures. For example, recent data from the Department of Finance's Intergovernmental Fiscal Review for the financial year 1999/2000 indicate that the share of total current education expenditures on administration range from 1.7 per cent of total spending in Gauteng to 8.7 per cent in the Northern Province. The share of the budget spent on textbooks ranges from 0.7 per cent in the Northern Cape to 2.0 per cent in the Free State.

There is considerable variation in the share of total education spending that the different provinces devote to administration and to non-personnel expenditures.

5.2.3 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.
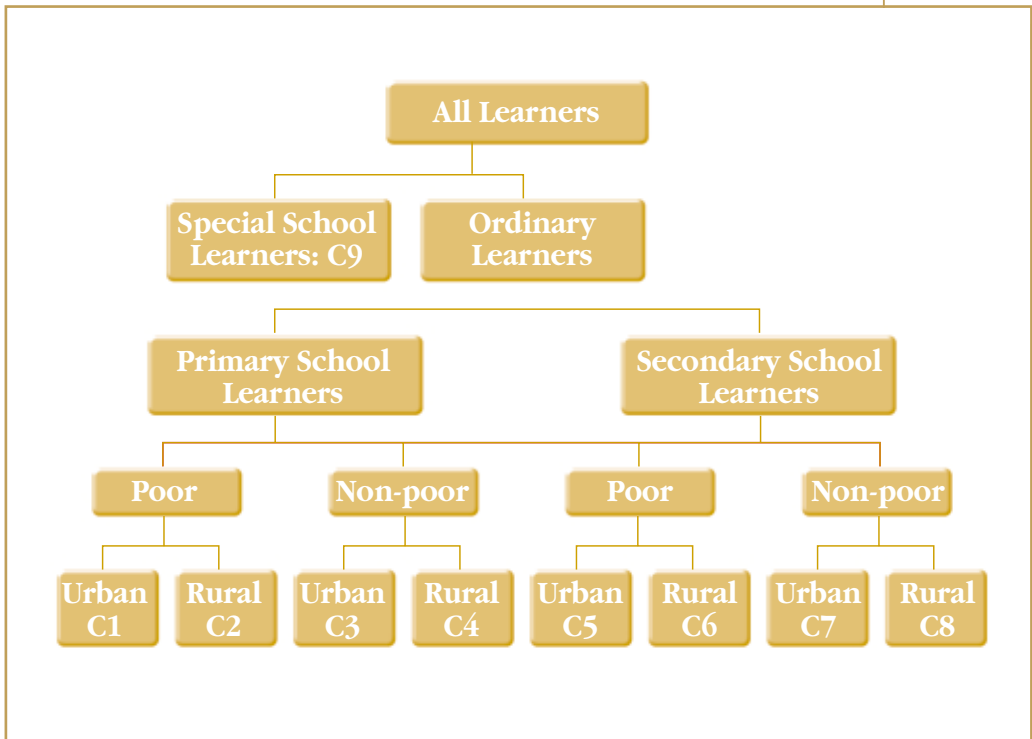
In some provinces a substantial proportion of learners are either under the age of 7 or over the age of 18. This "over-enrolment" has had the effect of reducing the resources available to educate school-age (7-18) learners. To provide provinces with an incentive to reduce the number of learners who are 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.

5.2.4 The FFC proposal for the education component

In light of all the above factors, the FFC recommends a formula to reflect a costed norm based on a realistic simulation of the real-world differences in the cost of educating learners in the various provinces. This same formula also includes several policy parameters designed to allow national government to reflect its own policy priorities within a principled framework. To do this, it can adjust the formula to a) recognise certain costs only in part, or b) offer incentives for spending deemed consistent with national policy.

The education formula includes policy parameters designed to allow national government to reflect its policy priorities within a principled framework.

5.2.4.1 Numbers and composition of learners to be educated

First, the data on the composition of each province's student population is disaggregated into nine groups, each representing a combination of the demographic or socio-economic factors, outlined in Section 5.2.1, which determine or predict costs. The distribution of Learner Groups 1 through 9 in the population of each province is thus the first determinant of cost differences in educating the students of that province, as per the diagram below.

```
                        ┌──────────────┐
                        │ All Learners │
                        └──────┬───────┘
              ┌────────────────┴────────────────┐
    ┌──────────────────┐              ┌──────────────────┐
    │  Special School   │             │     Ordinary     │
    │  Learners: C9     │             │     Learners     │
    └──────────────────┘              └────────┬─────────┘
              ┌────────────────────────────────┴────────────────────┐
    ┌──────────────────┐                          ┌──────────────────┐
    │  Primary School   │                         │ Secondary School  │
    │     Learners      │                         │     Learners      │
    └─────────┬────────┘                          └─────────┬────────┘
        ┌─────┴─────┐                                  ┌─────┴─────┐
   ┌────────┐  ┌──────────┐                      ┌────────┐  ┌──────────┐
   │  Poor  │  │ Non-poor │                      │  Poor  │  │ Non-poor │
   └───┬────┘  └────┬─────┘                      └───┬────┘  └────┬─────┘
    ┌──┴──┐      ┌──┴──┐                          ┌──┴──┐      ┌──┴──┐
 ┌─────┐┌─────┐┌─────┐┌─────┐              ┌─────┐┌─────┐┌─────┐┌─────┐
 │Urban││Rural││Urban││Rural│              │Urban││Rural││Urban││Rural│
 │ C1  ││ C2  ││ C3  ││ C4  │              │ C5  ││ C6  ││ C7  ││ C8  │
 └─────┘└─────┘└─────┘└─────┘              └─────┘└─────┘└─────┘└─────┘
```

This means that a province with a higher proportion of C1, C2, C5, and C6 learners, for example, will have a higher costed norm per pupil than would a province with a lower proportion of such learners.

> To illustrate, the cost of education in province i (C_i) can be written as:
>
> $$C_i = \sum_{j=1}^{9} C_{ij} L_{ij}$$
>
> 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.

Taking account of the "inappropriate-age learner" phenomenon (described in Section 5.2.2 above) could have a significant effect on the number of pupils to be educated, as considerable

variation exists between the provinces in the prevalence of this class of learners.

The data in Table 5.A indicate that in the 1997/98 academic year, nearly 27 per cent of primary school and 44 per cent of secondary school enrolment consisted of inappropriately aged learners. Some concern has been expressed that the

Table 5.A Ordinary School Enrolment and "Inappropriate Age" Enrolment, 1997/98						
	Ordinary Primary School			Ordinary Secondary School		
	Total	Inappropriate Age		Total	Inappropriate Age	
Province	Enrolment	Number	Percent	Enrolment	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 learner-educator ratios are not meant to be prescriptive, but are proxies for the relative amount of resources that need to be expended to provide basic education to various types of learners.

presence of inappropriate-age learners in schools serves to divert scarce resources from the education of the rest of the students. In any event, national government may decide to use the treatment of inappropriate-age learners in the costed norm formula as a policy parameter. By weighting this group (by a factor ranging from 0 to 1), they can be removed from the number of pupils counted in the costs a province faces, partially removed, or left in the count.

It is now possible to extend the illustration of the allocation of the education portion of the equitable share. If A_i^E is defined as the illustrative equitable share allocation for education to province i, the formula can be written as:

$$A_i^E = \sum_{j=1}^{9} C_{ij} \left(L_{ij}^A + \alpha L_{ij}^{IN} \right)$$

where:

C_{ij} is defined by the previous equation,

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

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

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

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5.2.4.2 Numbers and qualifications of educators required

It was pointed out that the evidence suggests that the cost of providing a basic education to poor, rural learners is greater than the cost of educating poor, urban learners, and these costs are both higher than the costs of educating learners whose families are not poor.

To provide a proxy for the relative costs per learner for each learner group, a *native* or *benchmark* learner-educator ratio (L/E) is assigned to each group. These ratios provide a mechanism to convert the relative costs of educating different learner groups into concrete estimates of the costs of providing basic education. The following values have been chosen as normative learner-educator ratios:

	Primary School	Secondary School	Special School
Poor rural	25	25	10
Poor urban	27	27	10
Non-poor rural	33	33	10
Non-poor urban	35	35	10

It is important to emphasise that these learner-educator ratios are not meant to be prescriptive. They are to be interpreted as proxies for the relative amount of resources that need to be expended to provide basic education to various types of learners. While in some provinces, and in some 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 and other school supplies might contribute most to learners' academic performance. It is also important to note that these *benchmark* learner-educator ratios imply class sizes that are generally smaller than are found currently in most South African schools.

It should also be stressed that the relative learner-educator ratios between the various categories of learners are only initial choices, and may be revised as additional information becomes available on the impact of poverty, ruralness, and school level on the costs of education. For example, the ratios for primary and secondary school have been set the same for now, because the data on the relative costs in South Africa are ambiguous. The distinction is retained in the formula to accommodate new data as they become available.

The cost per learner for each of the nine provincial groups of learners can be divided into two parts: the remuneration of educators and the expenditures on supplies, and school administration. In most provinces, about 90 per cent of education spending goes to pay educators. Clearly the most important element in determining the cost per learner is the

About 90 per cent of education spending goes to pay educators. Thus the most important element in determining the cost per learner is the number and quality of educators needed.

number and the quality of educators needed to ensure that the learners in each learner group receive a basic (or adequate) education.

As noted above, in South Africa, significant differences between provinces' actual average remuneration per educator arise, due to regional variation in the mix of qualifications of the educators hired. In the current year, provinces cannot instantly change the mix of teachers they have already hired. Within a year or two, however, provincial hiring policy can begin having an impact on remuneration costs.

Assuming that higher teacher qualifications are legitimate and valuable inputs to the learning process, it would be wise to recognise them explicitly in the costed norm. Not doing so might create an incentive for provinces to lower (or to avoid raising) average qualifications over time through their hiring policies. Two conflicting imperatives must be balanced here: the requirement to avoid giving provinces a direct policy lever with which to increase their own grant levels, versus the need to avoid creating a perverse incentive to lower teacher qualifications.

It is a matter for national policy whether to recognise in the norm any differences from the national average in the average qualification of the teachers hired.

Given the numbers of learners in each learner group and the proposed normative learner-educator ratios, a norm can be set for the number of teachers required in a province. Next, given remuneration per educator, the costed norm for the teacher-costs per learner faced by each province can be determined, simply by multiplying the number of teachers by the province's adjusted average remuneration, divided by the number of learners.

Without, for the moment, factoring in any of the costs associated with the administration of schools, the purchase of supplies, and other costs not associated with educators, **we now assign a new value to C_{ij}:**

$$C_{ij} = R_{ij}/(L/E)_j$$

where:

C_{ij} = the average cost of educating a learner in group j in province i.

R_{ij} = remuneration per educator: a weighted average blending the national average remuneration per educator for learner group j, with the average remuneration for group j in province i. For benchmark purposes, 100% of the national average and 0% of province i's are used. Note also that the same average is used for the eight groups of ordinary learners, but a different one is used for special-school learners.

$(L/E)_j$ = the normative learner-educator ratio for learner group j.

5.2.4.3 Policy Issues

A number of policy issues must be considered. To reduce its expenditure on grants, national government may choose to recognise certain types of cost only in part or not at all. Further, where national government bases norms on cost factors that provinces can directly affect or influence, it must determine what, if any, incentive effect it wishes the grant to have. Policy issues include:

- *The relative learner-educator ratios* for various types and levels of students. The relative learner-educator ratios for the various groups are technical parameters to be set nationally, in line with improvements in the data available. It should be repeated, however, that these are not prescriptive norms: the grants resulting from this formula could be used equally to boost teacher qualifications, to improve the curriculum, or for other improvements besides smaller class size.

- *The over-age learner factor*. If there is a concern that spending on learners of inappropriate age is of lower priority than spending on others, the government may exercise a policy option to exclude the under- and over-age learners fully or partially from the number of students recognised in the costed norm formula. While current government policy is to discourage inappropriate-age learners, the FFC takes no position on the advisability of incorporating disincentives for their enrolment, in the context of constitutional guarantees of education for every person.

- *Average level of educator remuneration*: It is a matter for national policy whether to recognise in the norm any differences from the national average in the average qualification of the teachers hired. Various incentive effects concerning provincial hiring policies could be introduced by adjusting this factor.

- *Private schools*: A small portion (0.7 per cent) of provincial education expenditure is devoted to subsidies for independent schools. Because the number of learners in independent schools varies widely across the provinces, the proposed allocation formula includes an amount for each province equal to its independent school learners during the 1997/98 academic year multiplied by a parameter, β, which represents the absolute per-learner level of spending the government wants to subsidise.

- *Other Costs*: The proposed formula will allocate to each province two additional proportions, p^{Ad} and p^{SS}, which will gross up each province's total allocation for the

remuneration of educators, to reflect administrative and non-personnel spending, respectively, to the degree that national government chooses to recognise them as necessary for a basic education.

5.2.5 Specifying the integrated education formula and estimating costs

Based on these additions, the equitable share allocation formula presented above can be augmented to account for costs associated with administration, supplies, and non-educator services; and with independent schools.

Recommendation 2

The formula for the education component:

$$A_i^E = \sum_{j=1}^{9} C_{ij} (L_{ij}^A + \alpha L_{ij}^{IN}) * (1 + P^{Ad} + P^{SS}) + \beta L_i^{IND}$$

where:

A_i^E = the total equitable share allocation for education to province i,

C_{ij} = the average cost of educating a learner in learner group j in province i, defined as:

$$C_{ij} = R_{ij} / (L/E)_j \quad \text{where:}$$

R_{ij} = remuneration per educator. Different averages are used for ordinary and special schools.

$(L/E)_j$ = the normative learner-educator ratio for learner group j.

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

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

L_{ij}^{IN} = the number of inappropriate-age learners in learner group j in province i.

P^{Ad} = policy parameter for administrative expenditures as a proportion of educator remuneration expenditures,

P^{SS} = policy parameter for spending on books and supplies as a proportion of educator remuneration expenditures,

β = policy parameter reflecting the absolute amount of spending per independent learner the national government wishes to recognise, and

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

It is important to emphasise that the policy parameters in the formula should not be interpreted as the FFC's recommended or preferred one. They are merely a starting point from which to compare formulae that include alternative parameter values. A reminder is also in order that provinces would not be expected to allocate their spending in proportion to the components of the costed norms formula: rather the costed norm, which is the result of the formula, is to be a global and unconditional amount, provided nationally mandated minimum norms and standards are met.

In order to provide an initial benchmark estimate of the allocation generated by the formula, the following assumptions have been used in the formula:

- As noted above, primary and secondary grades are for the present assigned the same normative learner-educator ratios. The formula, however, retains the flexibility to weight them differently should South African data become available which justifies this.

- The national average educator-remuneration rate has been used in the cost calculations. Because remuneration scales are nationally set, this approach is accurate and simple, and provides a quantity which provinces cannot influence. These rates are currently R93,000 for primary and secondary educators and R96,000 for special school educators.

- Individuals are considered poor if they live in households with annual incomes below R12,000 per annum. (This level was suggested in the absence of an agreed standard. If agreement develops later around another standard, it should be used instead).

- *I a   ia e-age lea   e* are assigned a weight of 0.75. This implies that the actual enrolment of 10 inappropriate-age learners will count as 7.5 learners for the purpose of the equitable share allocation formula.

- *P i a e ch   l :* The parameter used for average private school cost was national average public expenditure on independent schools per learner.

- *O be C   :* The proportions P^{Ad} and P^{SS} by which the costs based on normative remuneration per educator are grossed up are 0.076 for administration and related services and 0.053 per cent for ordinary and special school non-personnel current expenditures, respectively. Based on Department of Education data for the 1997/98 financial year, these numbers are derived by dividing the total spending on each spending category (administration, for example) by total expenditures on remuneration of educators in ordinary primary schools, ordinary secondary schools and special schools.

Based on the above assumptions, the most recent available enrolment numbers for the 1997 school year, and educator remuneration data from September 1999, the costed norm for providing basic education to South Africa's children in all nine provinces is R39.3 billion. This is R5.7 billion above the R33.6 billion allocated in terms of the current equitable share formula. It is essential to emphasise that national policy-makers are free to adjust these benchmark norms.

Conclusion

The proposed formula presented above does not constitute a radical departure from the original FFC recommendations. The difference is that in the original FFC 1996 recommendations, learners were treated basically the same irrespective of whether they were primary, secondary or special education learners. The result was an equal *e ca i a* funding for all school-age learners. The 1996 recommendations did not explicitly take into consideration the socio-economic characteristics of learners and their impact on educational outcomes and differences in resource needs. The FFC 1996 recommendations utilised school-age population instead of enrolment numbers in order to enable provinces to deal with problems of lack of access in the past. However the best way to encourage provinces to increase enrolment is to tie funding to enrolment numbers and at the same time guard against any attempts to misrepresent such numbers. The latter is well addressed in the national norms and standards for funding schools via the requirement that schools collect the necessary data. Legally, any school official that misrepresents enrolment figures is engaging in fraud and should be held responsible.

The current proposals therefore constitute an improvement rather than a radical departure in the allocation of the equitable share for education.

5.3 The welfare grant

Welfare spending in South Africa finances social security (direct grants to needy individuals) and a number of social welfare services aimed at both poverty alleviation and social development. About 61 per cent of the total funding for social security is used for old age and veterans' pensions, 12 per cent for children from poor families, and 27 per cent for grants to individuals with physical or mental disabilities. In 1998/99, R18.6 billion was budgeted for welfare, with 90 per cent of this amount used to finance social security grants and administration. The remaining 10 per cent of welfare spending finances a wide range of social services dealing with problems such as child abuse, substance abuse, and social and family problems.

Under the current fiscal arrangements, nearly all welfare spending is included in the provincial equitable share. National government, however, 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.

After a brief discussion of the formula currently being used to allocate nationally raised revenues to provinces for the financing of welfare, the FFC's proposal for a costed norms formula for welfare is described.

5.3.1 The current allocation

The total size of the social sector equitable share component is determined according to its previous relative size in provincial budgets. Accordingly, social welfare has been allocated 17 per cent of the total equitable share for the 1999/2000 financial year. This amount is divided amongst the provinces using a formula that accounts for both demographic and income differences. The table below lists the four data elements in the welfare formula and the weights assigned to each:

Children, age 6 or less	7.50 %
Elderly, females > 59, males > 64	48.75 %
Disability	18.75 %
Poverty, bottom 40% of income distribution	25.00 %

Although the costs of welfare are clearly related to demographic and income differences across provinces, the current formula combines these elements in a manner that is not directly related to eligibility or the costs of social security and social welfare services. For example, the use of population in the welfare

It is not appropriate to use the number of actual recipients of social security grants as a basis for allocating social security funding, as this would provide a disincentive for provinces to purge the rolls of "ghosts".

[4] The actual receipt of disability grants is unrelated to the distribution of population and poverty among the provinces. In the Northern Cape, 4.5 per cent of the population are recipients of disability grants, while in Gauteng, Mpumalanga, and the Northern Province, 1 per cent or less than 1 per cent of the population receive disability grants.

[5] Regulations regarding grants and financial awards to welfare organisations, Government Gazette No 18771, 31 March 1998.

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.[4]

5.3.2 FFC proposal for the welfare component

The issues involved in implementing a costed norms approach for the allocation of the equitable share for welfare differ somewhat from those involved in the allocation of funds for health and education. This is because a large portion of the welfare budget is allocated directly to individuals in the form of cash payments to those deemed eligible. For the portion of social security funding that is comprised of cash transfers to individuals, the costed norms approach requires that one multiply the number of eligible individuals by the government-determined grant per person. To implement this approach, it is necessary to develop a reasonably accurate count of the number of individuals who are eligible for each grant.

It is important to emphasise that it is not appropriate to use the number of actual recipients of social security grants as a basis for allocating social security funding. As provincial governments administer social security grants, the use of beneficiary data in the allocation formulae would provide a disincentive for provinces to purge the rolls of ineligible individuals or "ghosts".

Instead, 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,[5] 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 then 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. To the extent, however, that existing variations reflect historical variation 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 a uniform percentage is applied for administration, provinces that spend relatively more on administration, as opposed to benefits, will also see a decline in their relative share of aid.

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 the average grant amount. *(It should be noted that a deliberate decision was made to exclude the biggest grant of the social security grants, namely Grant-in-Aid, because of the complexities associated with the costing of this grant).* 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 welfare under the costed norms approach should encourage provinces to search for the most equitable ways of limiting 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 SOCPEN[6] 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.

The FFC does suggest that old age and veterans' pensions be assigned to national government (see box, overleaf). The welfare formula presented here, however, is designed on the premise that pensions will remain a provincial government responsibility.

5.3.2.1 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 R520 per month. 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. According to these calculations, the average old age pension to which individuals are entitled is R354, however the SOCPEN management reports indicated that the average old age pension actually paid in August 1999 was equal to R516.

Thus, almost every individual who receives an old age pension is receiving the maximum R520, despite the intended reduction in actual grant awards implied by the clawback effect of the means test. The FFC 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 census-based and SOCPEN numbers.

According to FFC calculations, nearly 90 per cent of individuals who are eligible for old age pensions currently receive them. As most provincial welfare departments are actively working to add eligible persons to their pension rolls, it is assumed that pensions are fully phased in, that is, the β for old age pensions is given a value of 1.

5.3.2.2 War veteran pensions

South Africa's pension system for war veterans who were combatants between 1915 and 1945 is slowly being phased out. According to SOCPEN management reports, only about 8,400 veterans 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.

Nearly 90 per cent of individuals who are eligible for old age pensions currently receive them.

Location of old age and veteran pensions

The FFC proposes that old age and veterans' pensions be budgeted for and administered by national government. These pensions provide an income transfer to impoverished individuals and constitute a "social safety net" that in many cases serves to prevent severe hardship and in some cases starvation.

In most countries with well-developed social safety nets, social security for the elderly is a national function. This reflects the society-wide nature of the decision about how much to transfer from the working generation to the retired generation, as it is a decision about how to share economic growth (or decline).

In South Africa, old-age assistance can play an important role in nation-building by helping to link all citizens in a common economic endeavour. Access to these transfers should not be a function of the particular economic circumstances of individual provinces. Ideally, all elderly should have the same degree of access to assistance if they qualify on income grounds. Equity of access is likely to be improved if fiscal and administrative responsibility is located at the national level. In the years between national censuses, estimates at the national level of the number and income level of eligible persons are likely to be more accurate than estimates at the provincial level, because data on inter-provincial migration is difficult to obtain.

A further argument for moving old age and veteran pensions to the national level is that this will reduce the extent to which provinces allow cash entitlements to crowd out non-cash services. It seems likely that social services could better compete with the rest of the provincial welfare budget if these pensions were a national function.

Social welfare services and other grants

The equity in access argument might also be applied to the other welfare grants as an argument for moving their location to the national level. In the case of grants for foster care, child support and social services, however, there are specific characteristics of provinces and local areas that are relevant in determining access to welfare grants. Trade-offs and adjustments in the bundle of services are best made provincially, taking into account differences in population and administrative capacity.

Disability is an intermediate case, and arguments can be made both for "nationalising" disability and allowing it to remain at the provincial level. In the interests of building provincial fiscal and managerial capability, responsibility for disability grants should, at least for the present, remain with provinces.

The FFC cannot identify any major administrative hurdles to transferring the administration of old age and veteran pensions to national government. The function shift would have an impact on the vertical division of national revenue, which is explored in further FFC research documents.

5.3.2.3 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 R520 per month. For 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. Because eligibility for disability grants requires that disabilities be severe enough to prevent individuals from supporting themselves, individuals whose disabilities were either "unspecified" or "not

specified" are excluded. The final count of the disabled appears to be comparable with international and developing country trends.

The latest data from the Department of Welfare indicate that about 640,000 individuals currently receive disability grants. This figure is only 56 per cent of the FFC estimate of the total number of persons eligible for disability grants. Using information from the 1996 census on the distribution of income by disability status, the average disability grant should equal R427 given current policy. Parallel to the situation found for old age pensions, the SOCPEN data indicate that the actual average disability grant amount is R516. In the proposed equitable share allocation formula, the cost of disability grants is calculated as the average of the census-based number for that province and the SOCPEN number. In order to reflect the fact that eligibility for disability benefits exceeds the actual number of disability benefit recipients, the phase-in parameter for disability grants (the β) is set equal to 0.65 in our formula.

5.3.2.4 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, however, only 144,000 children are currently receiving the grant. This very low (3.6 per cent) "take-up" rate probably reflects the fact that this is a new grant programme and it is not well known or understood by potential recipients. It would also not be surprising, given the competing demands that are made on their resources, if provincial welfare departments are less than aggressive in signing up new grant recipients. Nevertheless, the national Department of Welfare has made clear its goal of dramatically increasing the number of families receiving child support grants over the next several years.

In calculating the full cost of the child support grant for each province, the number of eligible children (using Census data) is multiplied by R100. In order to account for the anticipated growth in this programme, in the formula simulation, the phase-in parameter is given a value of 0.10.

5.3.2.5 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 a quarter 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 0.30.

5.3.2.6 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 nationally are eligible for this grant. Of this number, only about four per cent are currently receiving the care dependency 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 0.05.

5.3.2.7 Social welfare services

Slightly less than 10 per cent of welfare spending goes to social welfare services, as opposed to cash entitlements. This portion of the welfare budget is used to fund a wide range of activities, including social work services (also referred to as personal social services), community services and facilities, community development programmes and the provision of protective services for people with special needs provided through the judicial system. Many of these services are contracted out to not-for-profit providers, rather than being provided by government itself.

The difficulty in defining and costing a package of social development services should not be allowed to let this portion of the welfare budget wither relative to cash assistance.

Implementation of a costed norms approach for the non-social security portion of welfare spending is especially difficult. The complexity and diversity of the range of social welfare services makes it difficult, if not impossible, to define a manageable and measurable set of output measures that could serve as the foundation for a cost-based formula to allocate grants for social welfare services. The inputs used in the "production" of social welfare services are also very diverse: in some cases social workers are involved, in others, specialised medical or other professional treatment is involved.

The difficulty in defining and costing a package of social development services should not, however, be allowed to let this portion of the welfare budget wither relative to cash assistance.

The Department of Welfare has frequently stated that its target spending on social welfare services is 20 per cent of the total welfare budget (national and provincial). Although the reason for this target is unclear, it does not seem to be the result of a careful costing out of "basic" social welfare and social assistance services. As a point of departure, and until enough data and knowledge are available to carry out a costing exercise, the FFC assumes that the costs of basic social welfare services do in fact equal 20 per cent of the total welfare budget.

This assumption implies that the total costed norm for social welfare services equals 25 per cent of total social security costs (that is, 25 per cent of 80 per cent of the total welfare budget, which generates a 20 per cent share of the total budget). Until an estimate of the costs of providing basic social welfare services can be developed, government will need either to accept 20 per cent of the welfare budget as a costed norm for social welfare services, or choose an alternative percentage.

As a basis for distributing the total amount of money allocated to social welfare services among the nine provinces, the FFC draws upon a considerable body of international research that finds that a wide range of social problems, including drug and alcohol addiction, child and spouse abuse, and many forms of mental illness, are highly correlated with the incidence of poverty. In the proposed formula, funds for social welfare services are allocated on a *per capita* basis, where the poor are given a heavier weight than the non-poor.

Thus, provinces with above-average poverty rates will receive larger than average *per capita* allocations. Specifically, all non-poor individuals are given a weight of one and all poor persons a weight of two. Each province receives an allocation equal to

its share of the total weighted population. In the FFC's formula, individuals are considered to be poor if their household income is less than R12,000 per annum.

5.3.3 Specifying the integrated welfare formula and estimating costs

Recommendation 3

The Formula for the welfare component

$$A_i^W = \sum_j^6 \beta_j E_i^j G_i^j (1 + P^{Adm}) + SW_i$$

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,
P^{Adm}	=	the proportion of total Social Security allocations to be added for administrative expenses,

$$SW_i = \gamma \sum_i^9 \left[\sum_j^6 \beta_j E_i^j G_i^j (1 + P_{Adm}) \right] P_i^{SW}$$

SW_i	=	the allocation to province i for social welfare services,
γ	=	a policy variable to reflect the total allocation for social welfare services as a percentage of the total Social Security allocation, and
P_i^{SW}	=	the weighted population of province i, with poor individuals given a weight of two and non-poor individuals a weight of one.

Based on the most recent available data and on the parameter values specified in the discussion of the formula, the proposed welfare formula would allocate a total of R21.3 billion to the nine provinces in the 1999/2000 financial year. This amount is R7 billion more than the current equitable share allocation for welfare. This total could be increased or decreased as a result of parameters set by national policy-makers.

5.4 The health care grant

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. Where appropriate data are lacking, for example on the definition and cost of secondary health services, the formula relies on improvised methods to complete the proposed total equitable share allocation. These improvisations will require revision as better data and policy parameters are developed.

5.4.1 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.

5.4.2 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 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 proposed formula provides for levels of service (primary and secondary), rather than for particular institutions (district or provincial hospitals).

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 (PHC), 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).[7] 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 *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, provided by community-based rehabilitation nurses to people with disabilities; as well as the support services that accompany the delivery of the PHC package, such as management and administration). Updated to 1999, the two figures read R136 and R33 respectively.

The *per capita* cost indicators that result from the CHP study and that are used in the proposed formula must be treated with caution. The indicators are taken from selected "case-study" clinics and community health centres and are based on a number of assumptions (for example, utilisation rates) that may no longer be appropriate. However, they are currently the only cost indicators for PHC services that are available.

The proposed formula is intended to cost and provide for *levels of service* (primary and secondary), *as they happen for particular institutions* (District or Provincial Hospitals). It is acknowledged that there may be a broad coincidence between levels of service and institutions. However, to imply that an allocation for PHC services, based on costs determined at clinics or community health centres, could stand as equivalent to the District Health budget would be incorrect. District Health Services include, but are not limited to, PHC service provision. For this reason, the proposed formula inflates the normative ratio of primary to secondary care in provinces by 10 per cent to adjust for this underestimation.

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 should be given to the design of protocols and measures by which equitable share portions for PHC could be diverted to municipalities.

[7] L. Rispel *et al* (1996), *Costing Needs 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.

5.4.2.1 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.[8]

In summary:

Group 1: Weighting = 1.0

- Males 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 closely correlated with economic well-being. Poverty correlates strongly with several factors posing health risks, including 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. 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 0.5 is assigned to α.

To obtain the cost-based grant amount for services to individuals, the weighted population totals are multiplied by an estimated per capita cost of personal primary care services.

[8] 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 Re   ce All ca i   F   la i S   f E i i P i a Heal h Ca e* (Centre for Health Policy, 1997).

Assessments of the demand for health care in South Africa are complicated by the existence of a definite sector (generally employed and wealthier people) that enjoys private medical aid coverage.[9] 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.

To obtain the cost-based grant amount for services to individuals (that is, the services or treatments provided directly to a patient), the provincial weighted population totals are multiplied by an estimated *per capita* cost of personal primary care services, in this case, R136. 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 densest provinces. Therefore, the basic *per capita* cost of indirect services (such as clinic transport and administration) is set equal to that in the densest 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 services to individuals and indirect services in that province.

In terms of the formula, two further allocations are made to complete the equitable share for health:

- An allocation for secondary health care is made against the base set by the allocation for PHC services. The allocation for secondary care is calculated as the national average ratio (in terms of the 1999/2000 budget amounts) for provincial hospital services to district health services and the ratio in a particular province. The national average ratio is increased by 10 per cent to reflect undercounting (relative to the

An allocation for secondary health care is made against the base set by the allocation for primary health care services.

[9] 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.

District Health Services programme) that will have crept in when using the service level allocation, PHC. In order to permit all provinces to be phased towards the national average ratio over a number of years, the national average ratio is weighted at 0.2 and the provincial ratio at 0.8. Changes in these weights will facilitate the gradual move towards the national average.

This method to determine the allocation for secondary health care is proposed as a temporary expedient. As secondary services are defined and costed by the Department of Health, so a variant of the formula for PHC services (with suitable population weightings) may be brought into use. The equitable share allocation in terms of the future costed formula will then provide resources exclusively on the basis of service levels and will avoid the complexities associated with trying to reconcile allocations for service levels with existing budget programme descriptions.

- Second, a "residual" allocation is attached to the end of the formula. This is designed to reflect the costs under the "administration", "health sciences" and "auxiliary" or "support" services budget programme descriptions.[10] In the formula a benchmark cost of R60 *e ca i a* is used for these services. This figure is an average taken from the 1999/2000 budgets of four selected provinces. The figure should be adjusted to bring it into line with any future national norms in this regard.

5.4.2.2 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 the national health system to provide a unified system of health provision.

- 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

[10] These services would include management and support services; nurse and ambulance training; some clinic services such as orthotic, prosthetic and forensic services; and non-clinical services such as research, laundry, catering, and transport.

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-sector utilisation.

- 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 segment of their population.[12]

HIV: The rapid rise in the incidence of HIV raises the question of whether there should be a specific factor for HIV in the equitable share formula. Despite the severity of the HIV epidemic, the FFC recommends against including HIV incidence specifically in the equitable share formula. Inclusion of specific diseases could create an incentive for provinces to try to influence the formula by over-reporting those diseases. Moreover, needs and priorities may change 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.

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.

5.4.2.3 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 considerable 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:

Conditional grants tend to crowd out resources for primary care and reduce provincial flexibility in allocating health care resources.

[11] See N. Soderlund *et al*, "Private Health Sector Care", *in South Africa 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.

[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 proportionally 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.

- The population weights in age and gender to accommodate greater utilisation. Weightings for utilisation would conceivably vary for the level of service that the formula should provide (for example, older people might make greater use of expensive hospital services, while women of child-bearing age would have greater need of PHC services).

- 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 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 0.5 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.

- 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 *e ca i a* costs used in the formula are based on the best 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.

- The formula assumes that the *e ca i a* "residual" costs are identical in all provinces. More analysis is required to determine whether a single residual cost indicator is appropriate, and if so, what value it should be given. Alternatively, an indicator that varies by province (and which is based on measurable provincial requirements in this regard) might be contemplated.

- The weights attached to the ratio of secondary to primary health services may be adjusted over time to ensure phasing to a national standard ratio where such a national standard is desirable.

5.4.3 Specifying the integrated health formula and estimating costs

Recommendation 4

The formula for the health-care component

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

where:

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

$C_{ij} = C_{ij}^P + C_{ij}^S + C_{ij}^O$ = The costs of providing primary health care C^P, secondary health care C^S, and other health care-related services C^O to individuals of patient type j in province i,

P_{ij} = The number of people in province i of patient type j (described in the 4 age/gender groups above).

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

where:

W_j = 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 = A policy parameter reflecting the "weight" to be given to poverty,

$C^P = R136 + C^N (D_{norm} / D_i)^\beta$ = The per capita costs for a national norm of primary health care services, where (on the basis of an existing study), R136 is the average annual cost of providing a bundle of personal primary health services, and C^N is the average annual cost of providing a set of associated services. D_{norm} is a norm population density set equal to Gauteng's population density, and D_i is population density in province i.

β = a policy parameter which allows the importance of population density in the formula to be adjusted.

$$C_{ij}^S = R_i C_{ij}^P$$

where:

R_i is the weighted average of the ratio of the cost of secondary to primary health care services in province i and the inflated national average ratio, with a weight of 0.8 assigned to the provincial averages and a weight of 0.2 to the national average.

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

where:

C^O = The national average "residual" health care costs (covering administrative services, health care support services, and miscellaneous services) and is set equal to R60.

In the formulae presented in this section, the total cost of the "norm" level of service in each social sector was obtained by first estimating the cost of the basic service, and then adding the cost of administrative support services and supplies.

Based on the above assumptions, the cost of providing basic primary and secondary health care to South Africa's nine provinces is R16.8 billion. This is R1.7 billion above the R15.1 billion allocated in terms of the current equitable share formula. It bears repeating that the total cost of the norms will ultimately depend on national decisions on policy parameters in the context of the Medium-Term Expenditure Framework.

5.5 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 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

Cost differences are not a function of the efficiency or inefficiency with which provinces deliver services, but reflect factors that are beyond the influence of provincial administrators.

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.

In the formulae presented in this chapter, the total cost of the "norm" level of service in each social sector was obtained by first estimating the cost of the basic service – ordinary and special education, primary health care services, or welfare grants. To this was then added the cost of administrative support services and supplies. To provide an incentive for the efficient provision of services, the equitable share allocation to each province was increased by the national average shares of administrative and support costs. For example, in the education formula, total education costs in each province were estimated by using the national average ratio of spending on books and supplies to total spending on the remuneration of educators.

The education, welfare, and health formulae, using the most recent available data along with the FFC's "benchmark" policy and technical parameters, yield a total social sector equitable share allocation for fiscal year 1999/2000 of R78 billion. This

amount is R15 billion more than the current social sector equitable share allocation for the same year.

The total Rand allocations implied by the prototype formulae 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 acceptance of 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 matric 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 and secondary care health, 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.

6. COMPLETING THE PROVINCIAL FORMULAE FOR THE EQUITABLE SHARE

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% of the total equitable share);

- an economic activity component (8%);

- a backlogs component (3%); and

- an institutional component (5%).

In this section, the case will be made for folding the basic, economic activity, and backlog components into one "Basic Element" and retaining a separate Institutional Element. The basis for distributing these two components will be presented.

6.1 The Basic Element (B)

6.1.1 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 service responsibilities. The Basic Element supports the principle of provincial fiscal autonomy in that it enables provinces to budget with this grant as they see fit. 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

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 service responsibilities.

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, welfare, and health) had been determined. 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) grant.

6.1.2 Department of Finance formulae

Basic component: For the 1998/99 fiscal year, the Department of Finance agreed in principle with the FFC's notion of a basic component as part of the overall provincial allocation formula. However, there were considerable differences in the implementation of the Basic Element. The Department of Finance weighted rural people at twice the level that the FFC recommended, namely 50 per cent. Furthermore, the Department of Finance weighted the Basic Element at 15 per cent, while in the FFC formula it made up about 45 per cent of the total amount allocated to provinces, partly because it included the welfare function.

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 6.A Comparison between the FFC and Department of Finance:

Relative size of formula elements in percentage shares

Element	FFC 1996	DoF 1998	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 serves as a proxy for provincial contribution to national tax revenue and directs a proportion of nationally collected revenue back to its source. Gross geographic product (GGP) was used in 1998/99 to estimate the distribution of economic activity across provinces.

Minus the social and institutional expenditures, only 14 per cent on average is spent by provinces on other functions.

6.1.3 Review of provincial "other" expenditure

In assessing the importance of the Basic, Backlogs, and Economic Activity elements, it is instructive to examine trends for "other" provincial expenditure (that is, expenditure in addition to education, welfare, and health).

Table 6.B Provincial Expenditure Budgets, 1999

	Educ, Health & Welfare	Institl	Public works	Housing + Local Gov.	Agricult + Land Affairs	Econ Aff. +Envirn	Transport	Finance + Prov Ex	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

Percentage Shares of Programmes

Source: FFC calculations based upon 1999 Provincial White Books.

The Basic, Backlogs, and Economic Activity elements should be combined into one "B" grant, and a new conditional grant to support clearing of capital backlogs should be funded out of the national equitable share.

The provincial budgets for the 1999 fiscal year illustrate the difficulties involved in making reasonable comparisons between provinces on 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 minus the social (education, welfare, and health) and the institutional expenditures, only 14 per cent on average 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.

6.1.4 The case for a combined Basic Element

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

Table 6.C: Distribution of Basic, Economic Activity, and Backlogs Components

	Percentage of total equitable share	Basis for distribution
Basic	7%	Percentage share of the total population
Economic activity	8%	Gross geographic product (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 8.1, 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 8.2). 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 8).

The Economic Activity component is a counter-equalising element, with no demonstrable relationship to the cost of basic services. There is no principled rationale for retaining this component.

The FFC recommends that the Basic, Backlogs, and Economic Activity elements be combined into one "B" grant, and that a new conditional grant to support clearing of capital backlogs be funded out of the national equitable share.

6.1.5 Distributing the basic allocation

If the Economic Activity and Backlogs components are combined with the Basic Element, the issue of its distribution across provinces remains. The Basic Element is currently calculated on a "neutral" basis, the Backlogs element takes capital backlogs and "ruralness" into account, and the Economic Activity component is based upon GGP.

[13] In some years, distribution of employee remuneration has been used as a proxy for distribution of 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 deliver on their constitutional mandates apart from education, welfare, and health;

- It can be deployed by each province to bolster formula-specific allocations for any function;

- 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 redistributive thrust of the general formula.

Given that one purpose of the Basic Element is to be redistributive, the FFC proposes the application of the measure used in the costed norms approach for education, welfare and health, namely the percentage of households falling below a predetermined income level (R12,000 in the benchmark formula).

This measure is proposed for two reasons. Firstly, the weighting for ruralness proposed in 1996 was chosen owing to lack of data. As more data becomes 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.

6.1.6 Determining the total Basic Element

The FFC recommends that the chosen norms and standards in the "S" grant (education, welfare, and health) be costed and that the implications for the Basic Element then be examined. If the norms chosen in the "S" grant result in a significant increase in the absolute amount allocated to provinces, it becomes the role of policy-makers to adjust norms and standards in a manner that leaves a sufficient amount to achieve the objectives outlined in Section 6.1.5 above.

Such an adjustment of norms and standards would be consistent with the objective of progressive realisation of quality services within existing budget constraints. Because government determines the norms and standards to be met, it should also determine through the intergovernmental institutions what the acceptable size of the Basic Element should be.

However, as with the provision of basic services, these 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 an objective for the expenditure on the other functions assigned to provinces.

With this MTEF Basic Element guideline and the estimated "S" grant (health, education, welfare), an iterative process can be followed to adjust either of (or both) the "S" grant norms and/or the MTEF guidelines in order to bring the two in alignment (see a more complete discussion in Section 7.2). In so doing, the Basic 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.

6.2   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.[14] The main objective of lump sum transfers is to take into account the indivisible elements in the provision of 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.

6.2.1 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.

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

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".

Once the total allocation to provinces is decided, the Institutional Element should be "top-sliced" from the provincial allocation.

Table 6.D Costs of operating a basic government.

Budget Items	Amounts R'000		
	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 Books*

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.

6.2.2 Financial and Fiscal Commission proposals/recommendations for 2001/2002

The FFC recommends that once the total allocation to provinces is decided (see discussion on the vertical division in Section 7), 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 this component 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.

6.3 The fiscal 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 portion of provincial revenue made up of own-source revenue, this grant was not

The objective of the institutional component is to provide each province with a standard set of resources to fund a basic governmental structure.

developed or implemented, and is not recommended by the FFC for 2001/02. It is included in the formula conceptually only, at a level of R0.

6.4 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.

6.5 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.

6.6 The total provincial equitable share

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

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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) grant.

B is net of the amount of the Institutional grant.

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.

SUMMARY of FORMULA COMPONENTS

Sphere	Dept. of Finance (2000)		FFC Proposals for 2001	
Provincial	Education	40%	Education	(1)
	Social Welfare	17%	Social Welfare	
	Health Care	18%	Health Care	
	Institutional	5%	Institutional	(2)
	Economic Activity	8%	} Basic Share	(3)
	Basic Share	9%		
	Backlogs	3%		
National			Conditional Capital Grant	(4)

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 component is derived from the cost of operating basic government institutions, and is deducted from the gross Basic component as an absolute amount.

3   The Basic component 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 component.

4   The FFC recommends that conditional grants from the national equitable share be used to address capital backlogs.

Recommendation 5

That each province be allocated:

- *a Basic Element, which is determined in a manner that is consistent with the principle that both the vertical and horizontal division of revenue be based on clear and transparent norms, and which is net of the Institutional Element; and*

- *an Institutional Element set equal to the basic cost of operating government institutions.*

Recommendation 6

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;*

- *The m grant is dropped from the formula, as it is now provided through various conditional grants financed from the national sphere.*

7. THE COSTED NORMS APPROACH IN THE CONTEXT OF THE VERTICAL DIVISION

7.1 Rationale for the 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.*[15]

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 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

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.

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

with the budgetary and planning processes of governments which provides the principal rationale for the adoption of this approach.

7.2 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) and 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. 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 should the costed norms approach not be universally applicable 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

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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 Medium-Term Expenditure Framework (MTEF). The MTEF 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. 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.

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

7.3.1 The local 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 on 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

Given the evolution of the municipal system, intra-municipal disparities are so vast that a unique approach will have to be developed.

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 are theoretically in a position to raise over 90 per cent of their expenditure requirements. 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 SALGA, 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. However, it should be noted that own-source revenue is much more important to the local sphere than to the provincial sphere.

7.3.2 The provincial sphere

In Section 5 of this Report, a prototype formula was developed for the calculation of costed norms with respect to a basic level of services 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.

7.3.3 The national 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.

	Defence	Foreign Affairs	Education	Health	Water Affairs
National					
Provincial					
Local					

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 many services. 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.

Mention has already been made of 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 the MTEF should be brought into alignment. 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

It is envisaged that the iterative process will alternate between the costing of nationally determined norms and the macro priorities set by the Medium-Term Expenditure Framework.

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) national grants; or 3) the assignment of revenue bases to the subnational governments delivering the services. In Section 9, the FFC presents some principles on the use of national conditional grants.

7.4 A basic formula for the equitable division of national revenue to the national, provincial and local 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:

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 as 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:

TN - D = N = NES + PES + LES

Where:

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

7.5   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. This is represented by the left side of the equation presented above. 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 which 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 for 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 because provincial tax bases are very limited and local government revenue relies only partly on taxation, with the remainder of its revenue coming from user fees.

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

In the formula for the vertical division, net new borrowing is included within the equitable share calculations. This has the effect of sharing the benefits and costs of national borrowing amongst the three spheres.

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 has the effect of sharing 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.

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

7.6.1 Use of conditional grants

Conditional grants are provided by national government to provinces and local governments 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 the 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

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.

same time, the provincial or local government must be responsible for all the revenue it receives, including the conditional grants. For a thorough discussion of the issues surrounding conditional grants, refer to Section 9.

7.6.2 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.

7.6.3 Changing resource requirements

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

7.6.4 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.

The placement of the policy reserve within the national equitable share makes particular sense if the uses of the reserve remain as they have been in recent years.

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 due, for example, 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.

7.6.5 Role of monitoring to ensure accurate calculation of need

The framework for establishing the vertical division, based on a costed norms approach, requires a substantial amount of information of good quality. The goal is to relate financing to acceptable outcomes in terms of the provision of 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, the FFC does not have information with respect to the norms and standards relating to national responsibilities. 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

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.

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 acceptance of the concept of basing decisions on the costed norms approach, the impetus will have been 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.

Part 2

8.   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.

8.1   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.[16]

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

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.

[16] 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.

infrastructure used in the provision of health and education services (such as hospital and school buildings) and economic public infrastructure (such as provincial roads).

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 argued below that 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.

8.2 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.

Social infrastructure is the foundation for the provision of services such as health and education.

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.[17] 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 8.3.1 below). 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

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.

[17] Development Bank of Southern Africa, *Infrastructure: A Foundation for Development*, Development Report 1998.

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.

8.3   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.

### 8.3.1 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 8.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.[18] Since this province is relatively poor, the actual capital stock is depicted as being below the standard.

Fig. 8.A: Actual capital stock relative to the standard
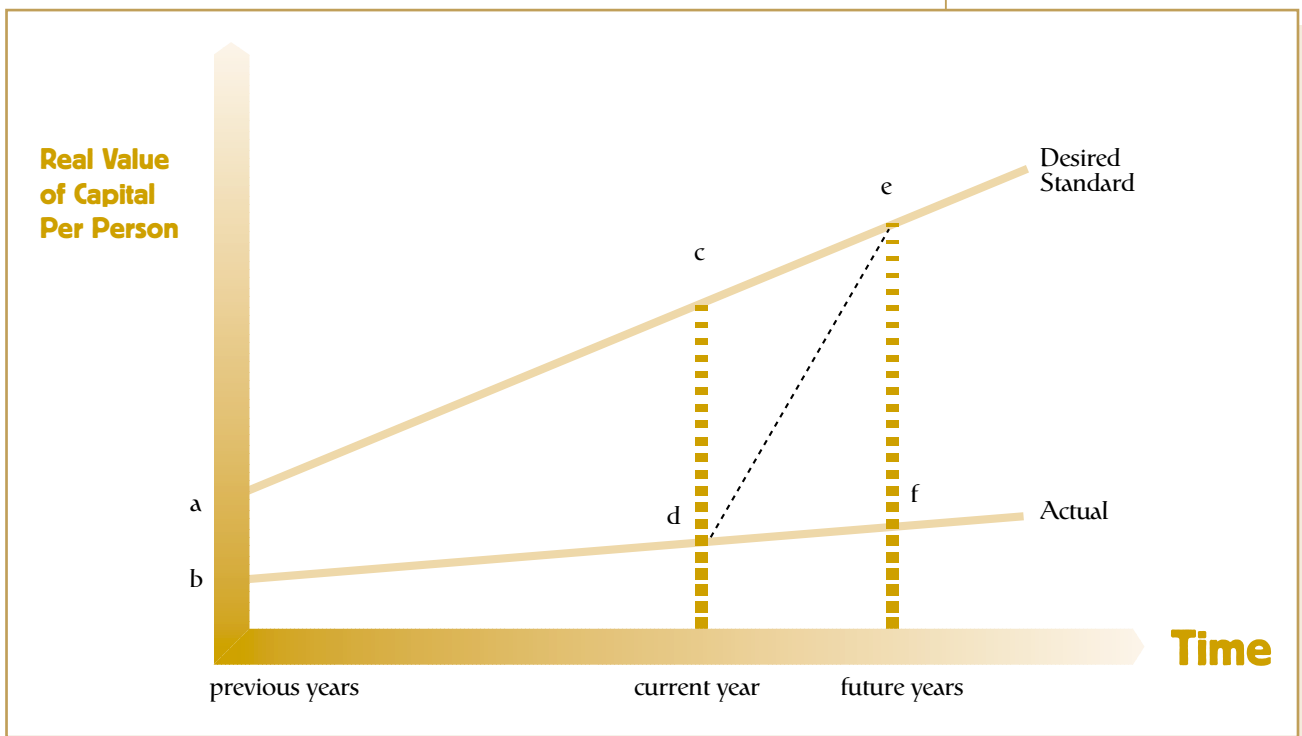
- In a previous year, the province has a capital backlog, defined as the difference between the standard and actual capital stock at a point in time, and equal to the distance *ab* in the diagram.

- 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*.

[18] 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 that same period.

- 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.

8.3.2 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.

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.

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.

8.3.3 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

The choice of starting and end points for the scheme are policy choices, as is the transition path.

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.

8.4   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.

8.4.1 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.

8.4.2 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.

8.4.3 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

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.

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.

8.4.4 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.

8.4.5 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.

To implement the scheme requires that norms and standards be established for the provision of capital for each province and service over time.

8.4.6 Conditionality

The capital grant should be conditional, that is, it should only to 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.

8.4.7 Monitoring

A further issue is whether provinces should be monitored to ensure that capital grant funds are spent on capital and, perhaps more important, 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.

8.5 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 other words, the fact that 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.

The FFC requests input on these questions during the consultation period on this Report. 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

Co-operation with other government bodies to collect information on absolute backlogs is necessary.

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 a dire 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 7

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

9. CONDITIONAL GRANTS

Conditional grants from national to subnational governments are used in virtually every country in the world where there is more than one level of government. They are especially relevant in nations where the delivery of major public services such as education and health has been decentralised to provincial or local governments. The grants can also be used to provide support and encouragement for more narrowly defined projects, such as infrastructure or administration, in order to achieve more effective decentralised decision-making.

9.1 Types of conditional grants

Conditional grants can come in many forms and have various sorts of conditions associated with them. The scope of conditional grants varies along a spectrum. At one extreme, they may be *specific* grants for fairly narrow and well-defined purposes such as a road or hospital. At the other end of the spectrum, they may be block grants used to support a broad area of expenditure, such as education or health.

The nature of the conditions can vary. For specific grants, the conditions can be correspondingly specific. For block grants, the conditions are typically much more general, and they may stipulate general criteria that broad spending programmes must satisfy. These can include the scope or comprehensiveness of services provided in health care, the levels of schooling to be made available to target populations in education, and so on. The criteria could be very broad indeed, covering such principles as non-discrimination, availability to residents of other jurisdictions, or fairness somehow defined, leaving considerable discretion to the provinces and municipalities to choose the design and level of services offered.

Conditional grants may be *matching* or *non-matching*. That is, the amount of the grant may or may not be tied by formula to spending by the recipient government. If matching, they may be subject to a maximum and are thus *closed-ended*, or they may be *open-ended*. Grants that are matching influence not only the programme design, but also the amount of expenditures devoted to the programme.

Finally, conditions may be imposed by the sphere of government allocating the funds, or the two spheres of government may negotiate them. In either case, an important feature of conditional grants is the method used to enforce the conditions. With specific grants, enforcement will typically not be an issue: the grant will only be paid if the recipient government undertakes the specific spending.

For block grants, enforcement is more difficult because the conditions are typically rather vague and subject to interpretation. The following methods of enforcement are possible:

- National government may enforce the conditions by penalising the subnational government whose programmes do not meet them.

- There may be some dispute settlement mechanism, possibly the courts, which might be used for adjudication.

- National government may be empowered to impose mandates on the subnational government, essentially insisting through the force of law that the recipient government enact certain measures.

- National government may simply rely on moral suasion or public opinion to induce the subnational spheres to abide by the conditions.

9.2   The rationale for conditional grants

The extent to which conditional grants are used and their design depend very much on the constitutional, institutional and fiscal circumstances of the nation concerned. In the most general sense, the purpose of conditional grants is to influence the fiscal decisions of the subnational government, presumably with the express intent of achieving some objective of national government, including objectives that are stipulated by the Constitution.

9.2.1 Spillovers

The traditional argument for conditional grants, especially matching ones, is that the spending programmes of one jurisdiction provide benefits to residents of other jurisdictions. Examples might include transportation facilities that are used by households and firms of neighbouring municipalities, education or training provided to households who subsequently change provinces, or pollution control measures that reduce cross-border pollution. In these circumstances, there is no mechanism for registering the benefits accruing to non-residents, and conditional grants are meant to substitute for this. Though this argument is fairly non-controversial, it is unlikely to account for the bulk of inter-governmental transfers in practice.

9.2.2 Efficiency in the national common market

A related argument is that conditional grants can help to achieve efficiency in the internal common market, that is, in the free and undistorted movement of labour, capital, goods and services across borders, especially provincial ones. Provinces may design their programmes in ways that distort these cross-border movements, either intentionally or unintentionally. For example, mobility rights may not be guaranteed in provincial programmes, educational and training qualifications may differ from one province to another, or provinces may engage in beggar-thy-neighbour policies to attract economic activity at the expense of other provinces. Conditional grants might aim to ensure that general principles of non-discrimination, equal access and mobility rights are guaranteed, or more generally they may attempt to harmonise the design of programmes that have implications for inter-provincial exchange.

9.2.3 National standards of equity

More important, and perhaps more controversial, is the use of conditional grants to achieve objectives of equity or fairness. Many of the expenditure responsibilities decentralised to provinces and municipalities are policy instruments for the pursuit of redistributive objectives. Examples include the main categories of education and health services, which together address goals of equality of opportunity, income distribution and social insurance. While there are good reasons on efficiency grounds for decentralising their provision to the provinces and municipalities, national government nonetheless maintains an interest in how these programmes are designed.

The use of conditional block grants is one effective way for national government to discharge its responsibility for national equity objectives while preserving the advantages of decentralised service provision. In the provincial sphere, the existence of significant vertical fiscal imbalances facilitates the use of conditions for this purpose. Of necessity, conditions attached to block grants for the purposes of furthering national equity objectives will be fairly general.

The effectiveness of conditions attached to grants that are used to finance health and education services will depend on the proportion of spending that is financed by grants. The more financially self-sufficient the provinces or municipalities are, the more difficult it might be to assure compliance with general conditions. This is an issue in some federations such as Canada, but not in South Africa's provinces, which are heavily reliant on national grants.

The use of conditional block grants is one effective way for national government to discharge its responsibility for national equity objectives while preserving the advantages of decentralised service provision.

Conditional grants may be important for developing the capacity of provinces and municipalities to provide public services.

9.2.4 Infrastructure

Conditional grants might have a particular role to play in financing infrastructure projects. These projects tend to be once-off expenditures rather than recurring ones. Moreover, they involve the creation of assets of ongoing use. Provinces and municipalities might have difficulties financing them if they have limited access to capital markets, which is especially the case with provinces . These grants might be very important for building up the capacity to provide future services of national importance (schools and hospitals), or for providing assets that build up the economic capacity of a jurisdiction so that it will be less dependent on future grants (for example, roads, communications facilities, and utilities).

9.2.5 Building administrative capacity

Related to the infrastructure argument, conditional grants may be important for developing the capacity of provinces and municipalities to provide public services. The delivery of an acceptable level of public services requires both physical and human assets. The latter includes both the acquisition of particular skills as well as the development of management and administrative expertise. Some of this comes with training, and some simply with experience. In either case, extraordinary once-off expenditures will be needed to develop the decision-making capacity of subnational governments. Once these backlogs of human and physical capital are made up, the capacity of provinces and municipalities to deliver important public services will be put on a sustainable footing.

9.2.6 Strategic arguments

Yet another related argument for conditional grants is that they are necessary to counter what is sometimes called the *bailout problem* or the *soft budget constraint problem*. If subnational governments recognise that their funding is determined partly by the extent to which their services satisfy the needs of their residents for important public services, they may take actions that exacerbate those needs and result in the granting government increasing its allocation. This exploitation by the recipient government might include overspending, spending in inefficient and unaccountable ways, or directing too much spending on items of that are not in the national interest.

Part of the purpose of the costed norms approach is to remove those adverse incentives. Nonetheless, the system may be less than perfect. Even if the correct amount of equalisation grants is given to provinces and municipalities, they may simply not use them to provide services that meet the nationally mandated

standards. In these circumstances, national government might have to attach conditions to them, despite the disadvantages of doing so.

These reasons for conditional grants are distinct from, but related to, those for equalisation grants. Unconditional grants serve important national equity and efficiency objectives. They are necessary for ensuring that acceptable standards of public services can be provided at comparable tax rates to citizens no matter where they reside. Assuming that an effective system of equalising grants is in place, making them effective may involve attaching conditions to them. That may not be permissible in South Africa, where equitable shares are meant to be unconditional.

9.3 Difficulties with conditional grants

Conditional grants have some potential drawbacks. Since their intent is to influence the fiscal behaviour of the recipients, they necessarily detract from one of the objectives of decentralisation, which is to make all spheres of government responsible for their own decisions. If it were possible to set out the conditions such that they clearly reflected national objectives and no more, this interference with local or regional autonomy would be justified.

But matters are not so clear-cut. On the one hand, it is practically impossible to define general conditions to reflect national objectives in a way that is clear and unambiguous. This means that some discretion is necessary to determine the extent to which recipient governments are abiding by the conditions. Even if national government is fully benevolent, it will not be possible in practice to apply general conditions that entirely avoid interference with what may be legitimate provincial or municipal goals. In the end, a compromise must be reached between the benefits of decentralisation as achieved through provincial and local autonomy and the necessity to ensure that the exercise of this autonomy does not abrogate national objectives. The need to strike an appropriate balance is at the heart of multi-sphere government systems.

On the other hand, national governments may not be so benevolent as to resist taking the opportunity to use conditional grants to exert undue influence over the priorities of provincial and local governments. This temptation to be intrusive suggests that nations should err on the side of caution and not impose conditions on general block grants unless it is absolutely necessary to achieve national objectives.

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Should the imposition of conditions become necessary, their enforcement is not trivial. Penalising provinces and municipalities whose programmes do not satisfy national norms and standards could be counter-productive. Such sanctions might make it even more difficult for the recipient governments to succeed, with the result that those most in need of services end up suffering.

Thus, the decision to impose conditions that are enforced by financial penalties is a difficult one. One would hope that moral suasion would go a long way to ensure compliance, especially if the conditions themselves reflect national objectives that are based on consensus. If the grants are well-designed and in accordance with constitutional principles, there should be little need to enforce them.

9.4   Implications for South Africa

Provinces in South Africa rely heavily on national grants. They are also responsible for delivering the most important public services - education, welfare, and health services. The Constitution spells out the goals that these programmes are expected to satisfy, and makes the provinces and national government jointly responsible for satisfying them. The challenges in terms of meeting these goals vary widely across provinces: both the levels of services and the capacity and experience in delivering them differ. It is natural to ask whether the use of conditional grants would facilitate the process of ensuring that all provinces deliver a minimally acceptable level of key services, while recognising that a period of transition is inevitable.

In the case of block grants to finance basic health, education and welfare services, the argument for conditions is least strong. The main financing for these services comes from the equitable shares, which can be designed to take provincial needs and costs into account. There is already constitutional provision for national government to mandate standards that provincial programmes should satisfy. Incorporating further conditions would likely be counter-productive and against the spirit of the Constitution.

The case for conditional grants is likely to be much stronger for more specific objectives. In the medium term, there is a need to build up public infrastructure to an acceptable level and thereafter to maintain it as required. The use of conditional grants for these purposes is not controversial. Conditional grants might also be useful as a means of assisting in the development of the capacity of the provinces and municipalities to deliver

If conditional grants are used, their use should be limited and the process by which they are determined should be open to public scrutiny.

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services. This may involve extraordinary expenditures on training or technological equipment. It may also be possible to identify specific areas of deficiency within the areas of education or health and in other areas of provincial or local responsibility that could use once-off funding.

There will always be a temptation to use conditional grants excessively: evidence from multi-level governments around the world bears this out. Conditional grants inevitably involve the use of discretion by national government. This tends to interfere with provincial and local autonomy, imposes uncertainty on the subnational governments, and makes them accountable for their expenditures to national government rather than to their own electorates. Thus, it is important that if conditional grants are used, their use be limited and the process by which they are determined be open to public scrutiny.

LIST OF ABBREVIATIONS

1.	**CHP**	Centre for Health Policy
2.	**CMIP**	Consolidated Municipal Infrastructure Programme
3.	**DoE**	Department of Education
4.	**DoF**	Department of Finance
5.	**DoH**	Department of Health
6.	**DoW**	Department of Welfare
7.	**FFC**	Financial and Fiscal Commission
8.	**IGF**	Intergovernmental Forum
9.	**MinMec**	Regular meeting of National Minister and Provincial members of Executive Councils from the same sector (for example, Health or Welfare)
10.	**OECD**	Organisation of Economic Co-operation and Development
11.	**PHC**	Primary Health Care
12.	**PRC**	Presidential Review Commission
13.	**RDP**	Reconstruction and Development Programme
14.	**RED**	Regional Electricity Distributors
15.	**RSC**	Regional Services Council
16.	**SOCPEN**	Social Pensions Management Information System

GLOSSARY

Accounting costs	Current or capital expenditures incurred in the delivery of services. Contrast with *social costs*.
Basic services	Minimum services (aid or assistance) such as education, health care, welfare services, housing, and clean water.
Budget Council	A consultative body consisting of the national Minister of Finance and the nine provincial MEC's for Finance.
Budget Forum	A consultative body consisting of members of the Budget Council and representatives of organised local government.
Capital expenditure	Spending on new or existing durable goods, with a normal life span of more than one year, to be used for (socially) productive purposes.
Capital grant	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.
Conditional grants	Allocations of money from one sphere of government to another, conditional on certain services being delivered or in compliance with specified requirements.
Contingency reserve	Portion of total national revenue set aside to accommodate unforeseen expenditure which could not be quantified when planning the budget expenditures.
Costed norms approach	A formula-based method for calculating the financial resources necessary for the provision of basic social service levels, given nationally mandated norms and standards.
Division of revenue	The allocation of funds vertically between the three spheres of government, or horizontally amongst provinces or local governments, as required by the Constitution.
Economies of scale	A technological situation in which per-unit costs of producing a good or service are less, the more is produced.
Equity	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).
Equitable shares	The fair allocation of revenue to the national, provincial and local spheres of government as required by the Constitution.

Fiscal dependency	The extent to which one sphere of government relies on another for revenue sources to fulfil its functions.
Fiscal equity	The ability of various governments in the same sphere to provide comparable levels of services to their citizens, with similar levels of taxation.
Formula grants	Revenue transfer from one sphere of government to another, according to a mathematical formula.
Horizontal division	The division of revenue sources amongst provinces or amongst municipalities.
Indirect services	In the health care field, services in support of direct services to individuals. Examples include administration and clinic transport.
Intergovernmental Forum	A body consisting of all national Ministers and provincial Premiers, with the President and Deputy President *ex officio*.
Iterative process	A part of the procedure for dividing national revenue suggested in this Report, in which policy-makers alternate repeatedly between adjusting the costed norms scenario, and adjusting the macro-priorities set by the Medium-term Expenditure Framework (MTEF), until a solution is found that brings the norms and the MTEF into alignment with each other.
Means-tested	A property of some government programmes in which eligibility or the amount of benefits is determined by the income of each potential recipient.
Medium-term expenditure framework (MTEF)	The three-year spending plans of national and provincial governments published at the time of the budget.
National revenue	State income from taxes, levies and other charges.
Opportunity cost	The potential social or economic benefits foregone by choosing one policy or investment option over another.
Public sector	State-owned or controlled institutions, including national, provincial and local government; statutory governmental institutions; social security funds; and state enterprises.
Primary health care services	Basic health services that have been defined and prioritised as the most important health services to be delivered by provinces.
Ring fencing	The imposition of conditions on grants, either explicitly or by incentive, that ensures that these grants are allocated to the earmarked purpose.

Secondary health care services	Includes general and specialised health services that are not included in the primary health care description, but would not include highly specialised services.
Social costs	The impact of the non-delivery of public services on society. These costs are difficult to quantify.
Social security	Non-contributory financial assistance or direct grants to the poor who qualify for such assistance.
Social sector	In this Report, constitutes education, health care, and welfare.
Special schools	Schools that cater for special learners that are physically or mentally disabled.
Tax base	The aggregate value of income, sales, transactions, or property on which particular taxes are levied.
Tax incentives	Specific provisions in the tax code that provide favourable tax treatment to individuals and businesses to encourage specific behaviour or activities, for example provisions to encourage retirement savings.
Tax incidence	The final distribution of the burden of tax.
Top-slicing	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.
Unfunded mandates	The allocation of service responsibilities by one sphere to another without a commensurate allocation of financial resources to fund those responsibilities.
Vertical division	The division of revenue between the three spheres of government.
Vertical fiscal imbalance	A situation in which the expenditure responsibilities of the spheres of government are significantly out of proportion with the spheres' respective revenue-raising capacities.