

Chapter 4

THE SOUTH AFRICAN LITERATURE ON SCHOOL FINANCE EQUITY

4.1 Introduction

This chapter addresses the specific question of the application of equity and the achievement of equal education in the context of public schooling. Up to the mid 1990s much of the South African literature on school finance equity focused on policy review, small-scale empirical analysis or aggregated analysis. In a more limited way, economists used large data sets to consider human capital approaches and economic growth. Since the late 1990s there has been an increasing interest from social scientists – economists and social policy analysts alike – to assess how the post-apartheid government's commitment to equitable resource allocation in education has progressed.

In the discussion below, two aspects of the literature are considered. Brief comment is made on the broader literature on education finance, and then to the literature that deals more specifically with equity and education financing in schools.

4.2 School Finance and Equity – The Broader Literature

In the South African context the operationalisation of equity has been through resource redistribution based on financing formulas and compensatory

mechanisms. Commentators have attempted to quantify inequity and progress towards equity. Much of the earlier work focuses on rates-of-return studies and racially differentiated spending inequalities (Malherbe, 1977; Moll, 1991).⁹ The availability of data in the post-apartheid period, the strengthening and improvement of data collection and the establishment of education management information systems at provincial and national level created the opportunity for much better data analysis and research – particularly in the late 1990s (Crouch, 2005; Patel, 2006).

In South Africa, research and policy analysis has paid much attention to monitoring the progress of the state in meeting its commitments to education resourcing and improving education outcomes. Van der Berg (2002), Crouch (2005), Bhorat (2004) and Case and Deaton (1999) have noted in various research studies that South Africa's long-term project of sustaining economic growth and prosperity was inimical to the country's racial policies prior to 1994. They also suggest that the key challenges to development in South Africa are structural inequalities, financial inefficiencies and declining outputs in schooling. They focus on various factors, including input variables which can contribute to the achievement of equity and an equal education.¹⁰

As noted in Chapter 3, the overarching aim of policy and legislation has been to effect redress and equity in education through redistribution of resources at school level. How has this occurred and what has been its impact? In the late 1990s and early 2000s, a small but significant body of empirical work has focused on education quality. While much of this work links inputs to outcomes, defining which inputs are important is relevant to this research. The work of Crouch (1996), Crouch and Mabogoane (1998a,b), Crouch and Vinjevold (2001), Van der Berg (2001, 2006) and Perry (2002) is particularly significant in this regard. These studies are important because they provide information about the significant variables that impact on inequality. These include socio-economic

⁹ An important observation by Moll (1991) which has significance for current policy debates is the relationship of the earnings of black workers to education quality. He notes that the rate of return for improving educator quality was higher than the rates of return for education of a constant quality.

¹⁰ Van der Berg (2002) has addressed to the relationship between education inputs and outcomes, Case and Deaton (1999), in a seminal study, emphasised context and concluded that higher learner:educator ratios in disadvantaged areas affect education attainment.

status and race (Fedderke, De Kadt & Luis, 2000; Crouch, 2005), class size and learner:educator ratios (Case & Deaton, 1999; Fleisch, 2002), school size (Perry, 2002), and educator quality and school type (Crouch & Vinjevold, 2001). All of these studies establish a broader set of variables and correlates by which to understand school finance equity and contribute to finding the appropriate variables for investigation in this research.

4.3 School Finance Equity – Specific Considerations

In Chapter 3, the scope of education policies and their application and relevance to different systemic processes of reform were discussed. It is clear that the achievement of equity is complex at the level of the availability of resources, the structural and governance relationships in education, the definitional concerns and slippages around the notions of equity, equality and redress, and the challenges of a fragile post-apartheid state trying to achieve fiscal stabilisation and meeting targets in social expenditure (Motala, 2001a). The *Government Review of Education Financing, Resourcing and Costs of Education in Public Schools* (DoE, 2003b) acknowledges much of the above – in particular the lack of systemic progress in achieving equity and the ongoing inequality in the public education system. Against this backdrop, the discussion below reviews research on education financing that is particularly relevant to this thesis.

This section addresses the specific question of understanding the application of equity in the context of public schooling through an analysis of school-level expenditure. Porteus *et al.* (2001), Van der Berg (2001, 2004), Fiske and Ladd (2002, 2004), Patel (2002), Wildeman (2002a), Lemon (2004), Dieltiens (2005), Godden (2005), Gustafsson and Patel (2006), Motala and Pampallis (2005), Reshovsky (2005) and Christie (2006) provide useful contributions to the study of school finance equity and contribute to our understanding of the achievement of equal education in South Africa. These contributions are important because they review the effectiveness of equity measures at both inter-provincial and intra-provincial levels, discuss the relationship between equity and redress, comment on the public-private model of public schooling, and address the differential

effects of race and socio-economic status on equity. They disaggregate various inputs such as personnel and non-personnel expenditure, educator qualifications and learner:educator ratios in order to better understand the effects of each. Of particular interest are their observations on inter-provincial equity and its relationship to intra-provincial equity. In an over-arching way, they also comment on the cost of basic education and contribute to the burgeoning discussion on education adequacy.

Addressing inter-provincial equity, Patel (2002), Wildeman (2002a,b, 2003) and Motala (2003) note that while significant strides have been made in terms of legislative frameworks and learner-educator ratio equity, there continue to be problems in providing equitable funding for basic education across provinces. One constraint has been the way in which provincial authorities are funded – the national government provides a lump sum to each province, but the actual distribution of funds to various functions is a provincial purview. There are still a large number of under-qualified and inappropriately trained educators in several provinces (GDE, 2003; Bot, 2001, 2002). Indirect costs, such as learner transport and books, have further disadvantaged poor communities. Despite important changes to the Equitable Shares Formula, Patel (2002) argues that poor learners are victims of regional disparities. Continuing with this theme, Wildeman (2002a) notes that while the application of the school funding norms has been relatively successful within provinces, the actual allocation between schools and between provinces has been very different. Historical disparities in school funding based on race and region have persisted. As a response to these criticisms, a national poverty ranking mechanism is currently being put in place which would disperse funds to provinces through a national poverty targeting framework. This would mean greater redress for poorer provinces (DoE, 2003b, 2004). While the research in this thesis locates the problem of equity at the intra-provincial level, Patel and Wildeman, and more recently Fiske and Ladd (2003) and Reshovsky (2005), persuasively argue that it is at the inter-provincial level that disparities need to be addressed.

Analysing the extent to which funds within the public school system are being allocated according to principles of equity, and the relationship of this to socio-

economic status, are also considered. Porteus *et al.* (2001), Dieltiens (2005), Godden (2005) and Motala and Pampallis (2005) note that schools in high socio-economic quintiles (as determined by the school funding norms) were better off financially in a variety of ways. This was due to higher personnel costs, special curriculum post provisioning, a concentration of more experienced and qualified educators in these schools, and higher school income through private contributions. Learner:classroom ratios demonstrate the same pattern, namely that schools in lower socio-economic quintiles face less favourable learning conditions than those in higher socio-economic quintiles. This point is reinforced by Yamauchi (2005) who notes that learner:educator ratios continue to differ, unfavourably to poor children, in the post-apartheid education system because of the presence of private funding in higher socio-economic quintiles. The authors conclude that the data motivate for an even more aggressive framework for achieving equity and redress in the educational system. Some recommend further shifts of non-personnel expenditure into schools, while others suggest that schools in the lower socio-economic ranks should be progressively better resourced, including in terms of personnel.

Using demographic characteristics, Van der Berg (2001), in a study of the rural poor and education, suggests that socio-economic inequalities are enduring and that resource shifts at the school level only partly explain these inequalities. Vally (2005), using a case-study approach, vividly describes the importance of the hidden costs of schooling, such as transport and uniforms, which create additional burdens for poor families. Crouch (2005) notes that in South Africa resources and poverty do matter in school achievement, but that efficiency in resource utilisation matters as well. In a detailed study of pro-poor spending shifts in the public schooling system, Gustafsson and Patel (2006), using a consolidated data set from a range of administrative systems, show that overall public spending in the schooling system was close to being equal although it marginally favoured the rich. They also note that certain economic categories are found to display a pro-poor distribution, whereas others show a pro-rich distribution. These differences are shown to be the result of specific political and labour relations dynamics. They note the enduring relationship of socio-economic inequality to education inequality, an aspect that will also be addressed in this

research.

Addressing the relationship of race to education equity, Van der Berg (2001) and Van der Berg, Wood and Le Roux (2002) note that fiscal resource shifts in education have increased education spending mainly to black schools. They found that the shift in fiscal incidence in schools was the most dominant resource shift in the overall education budget from 1991 to 1997. This has mainly taken the form of more educators and higher salaries for educators in historically black schools, as well as improved learner:educator ratios. However, because qualified and experienced educators are scarce in poorer schools, fiscal inequities continue to exist within black schools. Furthermore, private resources have supplemented the resources of affluent schools. Adding to the debate on equity and inequality, Van der Berg makes the distinction between discrimination and inequality in financial resource allocation – that while the aim of much policy was to remove discrimination, inequalities still persist. Speaking directly to this research study, he also attempts to establish the possible variables that are useful for studying resource allocation at the school level. He identifies these as race, schooling level, school size, demographic location, and fees as a proxy for socio-economic background.

Fiske and Ladd (2002) raise similar issues from a slightly different starting point. Utilising three separate concepts – fiscal equity, distributional equity, and adequacy and redress – they evaluate the progress South Africa has made towards a more equitable system. Using Western Cape and Eastern Cape as case studies, and concurring with Gustafsson and Patel (2006), they note that significant progress has been made towards a fairer distribution of public funds among the various provinces, and towards a more equitable allocation of state-paid educators. They argue, however, that a distributional approach to fiscal equity should be interpreted only as an initial step towards the development of an equitable funding system for education. True equity will require much more attention to the concepts of equity and redress, although, they caution, this will be costly.

Applying an adequacy concept to equity would have forced policy makers to

establish what a basic quality education would cost. They also draw attention to the reality that, while educational adequacy is typically required for a small number of at-risk learners in some developed countries, in South Africa it is needed for the majority of learners.. They also concur with Patel, Porteus *et al.*, Van der Berg, Fedderke *et al.*, and Motala and Perry that achieving educational adequacy must take account of redress and backlogs. The concept of adequacy is receiving increasing attention, and the contributions of Jansen and Amsterdam (2006), Amsterdam (2006) and Patel (2006) provide further interrogation of the concept of adequacy and its relevance in the South African context. Van der Berg (2006), while noting the improved equity in the distribution of fiscal resources, suggests that equity of educational outcomes (adequacy) continues to be elusive, particularly when education quality is considered. Amsterdam (2006) identifies three challenges in implementing adequacy in South Africa – clarifying the definition of adequacy, the availability of state resources to achieve adequacy, and linking resource inputs to outcomes, in particular defining a uniform set of output measures for all primary and secondary schools.

Both Crouch (2005) and Gustafsson and Patel (2006), in different studies and using national data, note that in terms of achieving equal education the shifts in improved equity in intra-provincial education has been dramatic, particularly in relation to more favourable learner:educator ratios and educator redistribution. However, Crouch does note that the South African system starts from a much greater level of inequality and that the Gini co-efficient and absolute poverty have worsened in relation to certain key inputs such as infrastructure.

Much discussion on inequality in the public schooling system has taken place, including in government – for example, the *Review on the Financing and Resourcing of Public Schools* (DoE, 2003b) and the *Plan of Action* for improving access to free and quality basic education for all (DoE, 2003a). A detailed and critical discussion of this was undertaken in Chapter 3. However, one should note the emphasis that the latter policy plan places on cross-subsidisation of poor learners by parents of rich learners through the exemption mechanism, as well as a clear indication that government is committed to spending more on poor schools than on rich schools in its quest for free and basic education for all.

Whether these are complementary or contradictory “pulls and pushes” in the South African education system is an aspect that will be considered in the discussion of the findings of this research. Whether this redistribution is taking place and whether government spending is pro-poor – that is, privileging the disadvantaged – will also be considered.

Lemon (2004), using small-scale qualitative research case studies in the Eastern Cape, argues persuasively that since 1994 national policies have been rich in the political symbolism of equity and redress, but that in practice they have been characterised by acceptance of commodification and choice and very limited implementation of change on the ground. Following on the work of Fiske and Ladd, he suggests that class rather than race is now the main determinant of educational opportunity. For the poor majority, the system offers neither equality of opportunity nor significant redress. The debate on equality of opportunity has brought with it a discussion of private inputs into public education. Lemon suggests that such equality of opportunity can only be achieved in the present circumstances by ending the practice of charging school fees. Gustafsson and Patel (2006) note the complexity of this, and suggest that eliminating fees will reduce total spending and cause a flight of learners to the independent schooling sector. However, they do pose the question of whether it is “ideologically acceptable” to have the current level of total public plus private spending inequality in the public schooling system. In his study of rural education, Van der Berg (2001) provides evidence on intra-race inequality in public schooling, which relates largely to the presence of social resources in homes and how these translate into an effective and enabling environment for quality learning. A rich debate continues on the role of private inputs into public schooling (Motala, 2003; Vally, 2003; Fiske & Ladd, 2004; Fleisch & Woolman, 2004), and a much more detailed consideration of this can be found in Chapter 8. A particular contribution of this research is to consider the relationship of private inputs into public education and its contribution to continued inequity.

A recurring theme in the work of Patel, Wildeman, Fiske and Ladd, and Van der Berg *et al.* is that of the barrier poverty places in the way of achievement of equitable education. Both Wildeman and Fiske and Ladd point to the

recommendations of the Financial and Fiscal Commission (2004) on these issues. They argue that implementation of the FFC recommendations would begin to reduce inequities between provinces by addressing poverty and low urbanisation levels, thus allowing provinces to pass these new allocations on to the educational sector. The FFC suggested that the formula take into account the basic cost of education, the poverty index of communities around schools, whether learners are urban or rural, the age of learners (over-age learners would count against a province), and the special education requirements of learners. The FFC recommendations are particularly to the point in that they target resources to the poor and needy and are poverty-based. They also give primary and secondary learners equal weight, and tackle the provision of education as a constitutional right. As discussed in Chapter 3, these revisions regarding education will contribute profoundly to greater equity in education.

While South Africa has increased its public resources to the funding of primary and secondary education, the growth of per capita learner expenditure has been quite modest. Between 1995 and 2003 the rate of growth in education spending averaged 2.65%. In the 2004/2005 fiscal year total spending on primary and secondary education was only 4.7% of the Gross Domestic Product, relatively low compared to other developing countries (National Treasury, 2004). Various proposals are made in the current research which relate to more equitable distribution of public funds. Some of these are discussed below.

Reshovsky (2005) suggests that the Equitable Shares Formula be reviewed to give poorer families additional weight, and that the financing of fee exemptions for low-income families be transferred from parents to public funds. Lemon (2004) suggests decentralising responsibility to schools with bigger financial allocations as a way forward. Both Crouch (2005) and Gustafsson and Patel (2006) show how funding equity has improved with near equality attained through a greater level of spending on African learners. This investigation into convergence and equalisation of state per capita expenditure, and whether education inequity has been reduced, is the core subject of this research. Fiske and Ladd (2006) suggest that greater inter-provincial redistribution is important; however, they argue that South Africa's overall economic growth will influence the opportunities

for additional investments in education. This investment must be aimed at redressing the racial inequities of apartheid by having a strong redistributive component.

Specific equity levers in education policy and legislation – such as the post provisioning model, the school funding norms and the implementation of learner:educator ratios – have been given critical consideration in Chapter 3. While the literature on private inputs into public schools is discussed, a much more detailed consideration is provided in Chapter 8.

The wide-ranging literature above illustrates that education financing reforms and the attempt to achieve the policy outcome of equity has been complex. The complexity relates to the translation of macro-economic frameworks into workable inter- and intra-provincial finance equity mechanisms, the readiness of the implementation context to receive these reforms, the lack of clear agreement about the meaning of equity (pro-poor, equality, adequacy), the contestation over limited resources by different social sectors and the slow progress in enabling the socio-economic environment to provide a context for these reforms. The establishment of quasi markets in education (Woolman & Fleisch, 2006) and the exercise of school choice through the presence of private funding has also led to debates about whether this differentiation has led to greater inequity in public schooling. While the subject of this thesis is not adequacy, the concept has relevance and resonance when it suggests that a central question is not whether equity has been achieved in terms of resource allocation, but whether there are enough resources to begin with. An increasing preoccupation in the literature is the definition of basic education; the concept of vertical equity has particular relevance to this discussion.

4.4 Conclusion

In locating the work of this thesis within the current South African literature on education financing, two observations are relevant. The first is that the building of a consistent and comprehensive body of knowledge on school finance equity has

only recently begun to take place. This research builds on that tradition in South Africa, and it aims to contribute to the rich discourse on education equity that is currently taking place. This research is different from the current South African research on education finance equity because it addresses the divide, noted by Jansen and Amsterdam (2006), between the theoretical and the technical. It does this theoretically through a detailed consideration of the construct of equity and technically through its use of the ingredient and disaggregated methodology, within a quantitative research approach. In this way, it aims to create knowledge that has greater relevance to social theory and education change.

Much of the valuable South African work on education equity (Patel, Wildeman, various *Quarterly Reviews*, IDASA) deals with an aggregate picture and provides macro observations on system change. Some of these publications are written in the form of policy briefs, monitoring studies and other observations that are not based on in-depth, sustained research. Other work (for example, Porteus *et al.*, 2001) is limited in that it measures the impact of one variable – socio-economic status – and is less than explicit about its methodological approach. The contribution of education economists (Fedderke, De Kadt & Luis, 2000; Bhorat, 2004) has focused largely on the human capital approach and its linkages to economic growth. While useful, it does not directly contribute to questions about equity of inputs disaggregated to the school level. While the contribution of rigorous theoretical and conceptual policy reviews (De Clercq, 1998; Christie, 1999, 2004; Kallaway, 2002) must not be underestimated, they provide little information about events on the ground. This research moves away from reviews of the secondary literature, and uses its specific methodological approach – disaggregating personnel and non-personnel expenditure, and reviewing the contribution of each component. – to generate knowledge that will discover the impact of equity reforms at the school level. More recent research – for example, Reshovsky (2005) and Yamauchi (2005) – is useful in providing an overview of trends; however, it deals with the secondary literature in education. The case studies of Lemon (2004) and Vally (2003) are important in providing the detailed picture of the impact of education financing policies. However, they are small-scale and it is difficult to make informed judgments from their findings.

The research presented in this thesis also contributes to and extends the body of knowledge in the international school finance equity literature, where models of finance equity at a school level are researched. Its particular contribution is that it does this in a developing country and comparative context. At the heart of this research is the question of whether equal education, which encompasses equity, has been achieved. This review of research confirms that the use of per capita expenditure as an equity indicator is valid. Broadly, there is some concurrence about how equalisation has taken place and what accounts for the inability to effect redress. The focus, though not extensive, continues to be on educator qualifications and experience and on historical backlogs. What is missing from the discussion is clarification of the concepts of equity and inequality, particularly in policy implementation, as well as a more detailed consideration of resource inputs and the relationship of these inputs to a wider range of variables including school size, school type, and the impact of specific inputs in relation to race and socio-economic variables. The use of a variety of variables to explain equity shifts at the school level will contribute to a more fine-grained and nuanced analysis of policy making and implementation in South Africa.

While there is some consideration in the current research that the hierarchy of racial distribution of expenditure has been addressed positively, new alignments, particularly in relation to a deracialising middle class and greater internal differentiation within specific race groups, have not been considered. The role of private inputs and their contribution to inequity and equity requires much greater attention. Finally, from a policy perspective, whether there is equalisation, redress or redistribution in the implementation of policy is important. It is hoped that this research will contribute to some of these aspects.