

FINANCING PRIMARY EDUCATION IN MALAWI: EXPLORING LINKAGES
BETWEEN BUDGETING AND INTERNAL EFFICIENCY

A Thesis

By

CHIKONDI MALETA

Submitted to the Faculty of Education

University of Malawi

In partial fulfillment of the requirements for the Degree of

MASTER OF EDUCATION

May 2009

Policy, Planning and Leadership Programme

Chancellor College

DECLARATION

I hereby declare that the text of this dissertation entitled:
FINANCING PRIMARY EDUCATION IN MALAWI: EXPLORING LINKAGES
BETWEEN BUDGETING AND INTERNAL EFFICIENCY is substantially my own
work

CHIKONDI MALETA

SIGNATURE

MAY 2009

APPROVAL

University of Malawi

Chancellor College

Faculty of Education

The undersigned certify that they have read and recommend to the Postgraduate Studies and Research Committee and the senate for acceptance of this thesis entitled: FINANCING PRIMARY EDUCATION IN MALAWI: EXPLORING LINKAGES BETWEEN BUDGETING AND INTERNAL EFFICIENCY, Submitted by Chikondi Maleta in fulfillment of the requirements for the degree of Master in Education (M.Ed).

Richard Nyirongo, PhD
Main Supervisor

Bob Chulu, PhD
Internal Examiner

Mrs. E. Kumkwezu, PhD
Faculty Postgraduate Coordinator

Date: _____

DEDICATION

This thesis is dedicated to my son Mario Yamikani for his patience and eagerness to continue with this journey.

ACKNOWLEDGEMENTS

Producing a dissertation of this nature is a process of inputs, reviews and schooling that one has gone through. I therefore would like to thank God, Mum and Dad for providing the initial input '*health life*' with which I have been able to interact and share experiences with individuals too numerous to mention in the pursuit of knowledge and areas of research interest.

Specifically, I am grateful to Richard Nyirongo (PhD) and Ken Ndala; my main and co – supervisor respectively for academically and professionally directing and limiting my initial triangulation of issues to the specific area herein presented. Furthermore, my appreciation to Fred Msiska (PhD), Bob W. Chulu (Ed.D), Samson Mac Jessie Mbewe (Ed. D), Dixie Maluwa Banda (PhD), J.J. Bisika, Catherine Moleni, Joseph Chimombo (PhD) and Andrew Chipanga for imparting into me theory and practical issues that have enabled expansion of my view and insight into education issues.

Investment in education at this level is expensive; resources and energy have been expended during the course. I am therefore indebted to Wilfred Goetler (PhD) and GTZ (German Government) for providing resources for tuition and research. I am also indebted to Kenneth Maleta (PhD), Marc Maleta and Duncan Samikwa for financial, material and sociopsychological support during the

research period. Furthermore, I am thankful to Augustine Kamlongera (PhD) and Thokozire Chimuzu Banda for the encouragement and support rendered during the research period.

The necessities and pressure of such work could not have been accommodated had it not been for my loving and understanding wife, Rose; her sacrifices and redefinition of parameters in household expenditure enabled my going through this walk comfortably; Many happy returns. Finally, I encourage my son, Mario to consider this walk. I have set the pace.

May the Almighty God replenish your energies and resources meaningfully; you have all been wonderful.

ABSTRACT

The dissertation explores linkages between primary education internal efficiency and the recurrent budget in Malawi. Specifically it explores how the recurrent budget addresses factors that contribute to the internal efficiency of primary education system. It further examines the dynamics of the budgetary processes, financing policies and the composition of the education budget during the research period.

This is done through a correlation analysis on recurrent budget and internal efficiency indicators (enrolment, repetition rate and dropout). Furthermore, a cohort analysis is conducted to examine the extent of efficiency levels. This is complemented by financing policy and budget document analysis so that the financing policies that have guided the composition of the budget are clear. Lastly, interviews are conducted to get into the insights of technicians involved in the preparation and implementation of the primary education budget.

The results show that the primary education resources in the budget do not correlate with the internal efficiency indicators and that the recurrent budget does not specifically address core factors that tackles and contributes to the efficiency of the primary education system. The primary education system is muddled with significant levels of wastage to the extent that undermines the potential impact of resources on primary education.

Notwithstanding this, the conclusion and recommendations show that there is hope that continued policy dialogue, administrative reforms, and research will present strategies in areas of education budgeting, financing policies and addressing of pertinent issues for the improvement of the primary education system through interventions that tackles obtaining and emerging challenges with deserved flexibility, prudence and in a realistic manner

TABLE OF CONTENT

DECLARATION	I
APPROVAL	II
DEDICATION	III
ACKNOWLEDGEMENTS	IV
ABSTRACT	VI
CHAPTER 1	1
1.0 INTRODUCTION	1
1.1 BACKGROUND TO THE PROBLEM.....	1
1.2 STATEMENT OF THE RESEARCH PROBLEM	3
1.3 OBJECTIVES OF THE RESEARCH	4
1.4 RATIONALE FOR THE RESEARCH	4
1.5 DELIMITATION OF THE RESEARCH.....	5
1.6 CONCEPTUAL FRAMEWORK	6
1.7 ORGANIZATION OF THE DISSERTATION	7
CHAPTER 2	8
2.0 LITERATURE REVIEW	8
2.1 THEORETICAL LITERATURE REVIEW	8
2.1.1 PRIMARY EDUCATION FINANCING AND INTERNAL EFFICIENCY	8
2.1.2 STRATEGIC POLICY ISSUES ON EDUCATION FINANCING	14
2.1.3 CONCLUSION	20
2.2 EMPIRICAL LITERATURE REVIEW.....	21
2.2.1 EXPLORATION OF RELATIONSHIPS BETWEEN EDUCATION SPENDING AND EDUCATIONAL OUTCOMES.....	21
2.2.2 CONCLUSION	24
CHAPTER 3	25

3.0 RESEARCH METHODOLOGY	25
3.1 OVERALL RESEARCH APPROACH AND RATIONALE	25
3.2 RESEARCH DESIGN	25
3.3 SETTING OF THE RESEARCH	27
3.4 ACCESS NEGOTIATION	27
3.5 SAMPLING	28
3.6 DATA COLLECTION	28
3.7 DATA ANALYSIS	29
3.7.1 RELATIONSHIP BETWEEN THE RECURRENT EDUCATION BUDGET AND INTERNAL EFFICIENCY INDICATORS	29
3.7.2 DETERMINING THE EXTENT OF INTERNAL EFFICIENCY OF THE EDUCATION SYSTEM IN .. MALAWI WITHIN THE RESEARCH PERIOD	34
3.7.3 EXPLORATION OF ALTERNATIVE STRATEGIC POLICY OPTIONS FOR FINANCING PRIMARY EDUCATION IN MALAWI	37
3.7.4 ANALYSIS OF RESPONSES FROM THE INTERVIEWS	37
3.7.5 BUDGET DOCUMENT ANALYSIS	38
CHAPTER 4	39
4.0 RESULTS AND DISCUSSION OF FINDINGS	39
4.1 RELATIONSHIP BETWEEN EDUCATION RECURRENT BUDGET AND TO INTERNAL EFFICIENCY	39
4.2 EXTENT OF INTERNAL EFFICIENCY OF THE EDUCATION SYSTEM IN MALAWI WITHIN THE RESEARCH PERIOD	40
4.2.1 COHORT ANALYSIS	41
4.2.2. WASTAGE RATIO	43
4.2.3 SURVIVAL RATE	43
4.2.4 AVERAGE YEARS OF RESEARCH	43
4.3 PUBLIC PRIMARY SCHOOL FINANCING POLICIES (1994 – 2004)	43
4.1.4 INTERVIEW ANALYSIS	45
4.1.5 RECURRENT BUDGET ANALYSIS	45
4.2 DISCUSSION OF RESULTS	46
4.2.1 RELATIONSHIP BETWEEN RECURRENT BUDGET AND INTERNAL EFFICIENCY INDICATOR	46
4.2.2 EXTENT OF INTERNAL EFFICIENCY OF PRIMARY EDUCATION IN MALAWI WITHIN THE RESEARCH PERIOD	50
4.2.3 ALTERNATIVE STRATEGIC POLICY OPTIONS FOR FINANCING PRIMARY EDUCATION IN MALAWI	54
CHAPTER 5	59
5.0 CONCLUSIONS AND RECOMMENDATIONS	59
5.1 CONCLUSIONS AND IMPLICATIONS	59

5.2 RECOMMENDATIONS	60
5.2.1 BUDGETARY PROCESSES	60
5.2.2 EDUCATION FINANCING POLICIES	61
5.2.3 SUGGESTIONS FOR FURTHER RESEARCH	62
REFERENCES	63
APPENDICES	67

LIST OF FIGURES

FIGURE 1: TRENDS OF EDUCATION FINANCING IN MALAWI (1993/94 - 2003/04)	10
FIGURE 2: CONCURRENT TRIANGULATION DESIGN	26
FIGURE 3: CONCURRENT NESTED DESIGN	27
FIGURE 4: COHORT ANALYSIS METHODOLOGY	35
FIGURE 5: OTHER RECURRENT EXPENDITURE VS PERSONAL EMOLUMENTS (1993/94 – 2003/04)	46

LIST OF TABLES

TABLE 1:: DOCUMENTED STUDIES ON RELATIONSHIP BETWEEN EDUCATION OUTCOMES AND RESOURCES	22
TABLE 2: STATISTICAL DIAGNOSIS	33
TABLE 3: MATRIX ON THE ANALYSIS OF RESPONSES FROM INTERVIEWS	38
TABLE 4: STUDENT FLOW (1994 - 2000) {*FIGURES IN '000}	41
TABLE 5: CLASS BY CLASS SURVIVAL RATE RESULTS	43
TABLE 6: RESULTS ON PUBLIC PRIMARY SCHOOL FINANCIAL POLICIES ANALYSIS	44

APPENDICES

APPENDIX 1: BUDGET DATA (1993/94 - 2003/04)	67
APPENDIX 2: TOTAL ENROLMENT, REPETITION, DROPOUT AND RECURRENT BUDGET FIGURES (REGRESSED FIGURES) (1993/94 - 2003/04)	68
APPENDIX 3: AVERAGE REPETITION RATES, DROPOUT RATES AND STANDARD 1 ENROLMENT (1993/94 - 2000/01)	70
APPENDIX 4: REGRESSION RESULTS	70
APPENDIX 5: SUMMARY OF RESPONSES FROM INTERVIEW RESPONDENTS	75
APPENDIX 6: SAMPLE OF INTERVIEW GUIDE	79

CHAPTER 1

1.0 Introduction

1.1 Background to the problem

Primary education financing in Malawi has been perennially inadequate, budget ceilings are always below the estimated budgets (World Bank, 2001). Earlier studies conducted on financial aspects of primary education among other variables have replicated the same and have noted funding inadequacy of primary education as a hampering achievement of Universal Primary Education (UPE) and other targeted related outcomes such as quality of education, equity, efficiency and effectiveness among others (Kadzamira et. al., 2004; Coclough et. al., 2002; Chimombo, 1999; and Castro – Leal, 1996).

Among other recommendations, increasing expenditure on primary education as a share of the Gross Domestic Product (with a deliberate focus on education quality inputs) is highly put forward (Kadzamira et. al. 2004). This is a shift from the initial focus on access to education and consistent with the rates in Sub – Saharan Africa. Whilst agreeing to this recommendation, Al- Samarrai (2003) argued that increasing expenditure to primary education is not an end in

itself; he suggests that there should be more focus on the composition of the resources that are expended on public primary education. He also suggests a more focused analysis of education financing processes in institutions that govern the resources. This is done with the hindsight to strengthen the link between public spending and education process outcomes.

Agreeing to Al – Samarrai (2003) findings, the obtaining expenditure dimensions in Malawi requires focused exploration of linkages between primary education budget and internal efficiency indicators. This is validated on the fact that the development paradigm in Malawi is concentrated on economic growth sectors and related infrastructure development (Malawi Government, 2006); As such in the medium term it is indicative that they will not be significant increases in education expenditure as a share of Gross Domestic Product.

In essence, the triangulation, as mentioned, above necessitates engaging the theory of efficiency and narrowing it down to education financing in Malawi. This remains a fertile ground for research in the sense that earlier research has pursued a broader perspective on education financing and internal efficiency but failed to provide a comprehensive analysis as it relates to primary education budgets over the years.

In pursuance to the above, the concept of efficiency which according to Cordato (1980) has neo-classically been conceptualized around Pareto Optimality (a static state of affairs within which no possible change can be made that would

result in one person being made better off without another person being made worse off). In education terms of education, optimal efficiency refers to a situation whereby the average pupils years of schooling in an eight-year primary education is eight. This implies that promotion rates are 100% through out the classes in the education system. The concept of efficiency in this perspective will mean achieving maximum output from a given input. Therefore, the research will be examining the optimal relationship between education inputs (defined and measured in terms of pupil years) and education outputs (number of pupils successfully completing the cycle) and how these have related to primary recurrent education budget (other recurrent expenditure) over the research period (1994 – 2004).

1.2 Statement of the research problem

Earlier studies on education financing in Malawi have to a larger extent concluded that funding for primary education is inadequate (Kadzamira et.al., 2004; Coclough et.al., 2002; Chimombo, 1999; and Castro – Leal, 1996). Research shows that the poor quality education at primary school level in Malawi may be related or influenced by inadequate funding. However, studies in Malawi and elsewhere have concluded that levels of funding alone cannot explain performance in primary schooling (Al – Samurrai et.al., 2004). These findings suggest to a point that management, governance and prudence in the utilization of financial resources play a significant role in the performance of a school system. What has not been comprehensively studied is the extent to which the funding to primary education is explained by the internal efficiency and vice- versa in the

utilization of the funding on primary education.

This research therefore, explores the following research questions:

- i To what extent has there been linkages between recurrent budgeting and internal efficiency indicators in the Malawi primary school education system
- ii What policy alternatives in the management and financing of primary education has been effected in line with obtaining trends over the research period
- iii To what extent has constituencies in the budgeting process been engaged and how has been the impact on implementation of the budget.

1.3 Objectives of the Research

- i Analyze how education recurrent budget has related to internal efficiency indicators of primary education over the research period (1994 – 2004).
- ii Determine the extent of internal efficiency of primary education in Malawi within the research period
- iii Explore alternative strategic policy options and budgetary processes for the financing primary education in Malawi

1.4 Rationale for the research

Research that has been conducted on education financing in Malawi has focused on the education budget and education outcomes in terms of pass rates. Minimum effort has been expended on understanding the processes behind the

primary education budget and how it reflects the internal efficiency in the primary education system. Therefore, this research is important in the sense that it explores the *invisibles (processes)* behind the budget and the internal efficiency of the primary education system. In addition it explores the extent to which the processes in both budget and internal efficiency relate to the *visible (The approved budget and pass rates)*. This to a larger extent offers the opportunity for an in – depth understanding on the performance of the primary education financing in Malawi and linkages on internal efficiency thereof.

Secondly, the proposed research will add value to the existing knowledge base on financing of primary education in Malawi, in that, apart from building from the findings of studies conducted on primary education financing; it will concentrate on specific linkages between internal efficiency indicators and budgeting in Malawi, an area which remains fertile for more research and diagnosis.

1.5 Delimitation of the research

The research period (1994 – 2004) will entail use of time series data, therefore, reliance on secondary numeric data sources other than primary data. Nonetheless, for purposes of an in – depth understanding of issues behind the time series data, a structured interview schedule will be administered to purposively selected respondents (criteria will be based on experiences with budgetary issues and data collection and amalgamation). These will include District Education Managers, Education Division Managers, Primary School Managers, Directors

responsible for primary education, planning and budgeting in the ministries of Education and Finance.

1.6 Conceptual Framework

Based on Cordato's (1980) concept of efficiency which is defined as efficiency with which a given product is produced (not taking into account how much the output is actually valued by society) and applying the concept to education; where efficiency mean achieving maximum output (pupil completing a cycle) from a given input (pupil years) as advanced by United Nations Education and Scientific Cultural Organization (2006). The research attempts to understand the extent to which internal efficiency indicators in the Malawi primary education system have related to primary education budgets (as presented in Fig. 1 above) and how the relationship has influenced primary education financing policies and strategies over the research period

Having understood the linkages between the primary education budget and internal efficiency indicators, the research will adapt Haddad and Demsky (1995) policy analysis framework, which compels tackling issues prevalent in practice regarding policy alternatives and strategic options to enable advancement of improving obtaining scenarios in practice and theory (Knowledge bank). This will therefore catalyze an exploration of policies that have guided financing of primary education in Malawi. Results from the exploration will then set policy agendas that may complement objectives behind financing of primary education in Malawi.

1.7 Organization of the dissertation

Chapter 2 is a literature review where focus will logically structure the discussion, bring together the results of the existing research, show how the studies are related, point out areas of agreement and disagreement, and indicate where gaps or weaknesses exist that have given rise to the present research.

Chapter 3 specifies the research design, where the overall approach and rationale for the research approach will be presented, and more importantly the size and selections of the sample, the variables and the controls employed, the sources of data, the tools, and methods of gathering data, the reliability of instruments selected or constructed and the statistical procedures used in the analysis will be carefully described.

Chapter 4 presents results and discussion of findings; it contains an analysis of data collected, a statement of the findings and a summary statement of the research. It also provides a factual report of the results and findings with appropriate analytical tools. The presentation of the results starts with the statistical analysis followed by the narrative discussion on the same.

Chapter 5 comprehensively and clearly state the conclusions and implications of the results of the research and offer recommendations for practice and further research on the area of research; along with the restatement of the rationale/ significance of the research and contributions to the body of scholarship thereof.

CHAPTER 2

2.0 Literature review

2.1 Theoretical Literature Review

2.1.1 Primary education financing and internal efficiency

United Nations Education and Science Commission (2006) defined efficiency as optimizing outputs from an input with minimum costs and inputs; therefore, efficiency is the optimal relationship between inputs and outputs. Conversely, an activity is being performed efficiently if a given input yields maximum output. In an education system, internal efficiency is arrived at through minimum wastage rates within the system, survival rates and minimum average years a pupil spends in an education cycle. The process indicators that are of interest in the discussion of educational internal efficiency include dropout rate, repetition rate and promotion rate.

On education financing; Paul Glewwe (2002), World Bank (2001) and the United Nations Development Fund (1990) have noted that investment in education is a policy priority for developing nations. Whilst agreeing to prioritization of investment in education, Psachalapolous and Patrinos (2003)

extended this assertion by underwriting the significance of focusing the investment in education to primary education on the basis of high social returns to investment in primary education. This finding has informed investment decisions in Sub – Saharan Africa and in developing nations over the past decade. What has not been comprehensively studied and recommended is the mix of resources and outputs to be invested, and to what extent and dimension should this mix relate and reflect on education systems efficiency. This has been left to individual governments to decide through annual education budgets.

Research has focused on process indicators of efficiency, education financing and reasons behind obtaining trends in the research period (Kadzamira, et. al (2004), Malawi Government (2006), Al - Sammarai (2003), Chimombo (1999); Castro – Leal (1996), Rose (2003). Nonetheless, research on the relationship between the primary education budget and internal efficiency of the education system has been biased on the extent to which education resources are adequate. The relationship between the resources and internal efficiency of the system remains a question that is yet to be comprehensively understood.

In Malawi, primary education has on average had a larger share of the education budget over the last decade, the trend analysis in Fig. 2 below substantiate this fact. The magnitude of funds committed to primary education, has to a larger extent contributed to increased access to primary education (Malawi Government 2006)

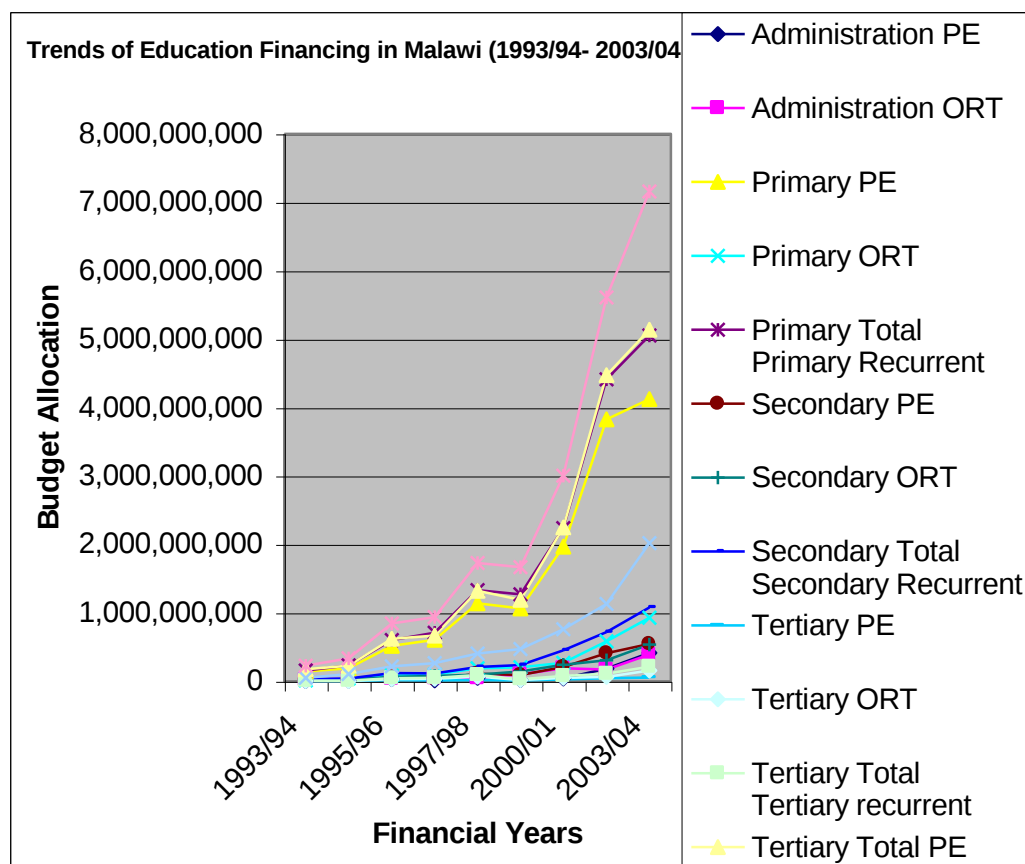


Figure 1: Trends of education Financing in Malawi (1993/94 - 2003/04)

Source: Budget documents various years (1993 – 2004), Ministry of Finance

However, Kadzamira, et. al. (2004) found out that in spite of gains in access at primary education (more especially to pupils in the lower income quintiles), dropout rate has remained high (around 18 %). This indicatively implies that either the resources being invested in primary education are inadequate to address dropout rates or the resources marginally target the dropout rates. Some of the reasons behind the dropouts include child poverty, inadequate

classrooms and teachers, low household income to complement education needs of pupils, poor sanitary facilities in schools and teacher – class allocation at the school level (Rose, 2003 and CSQBE, 2005).

However, the later seems to hold if the assertion by Sammarai and Zaman (2002) that smaller proportion of poor pupils reaches the last four standards of primary education is factored into the aggregate dropout rate. This becomes clearer on the fact that in practice, resources are skewed towards the senior levels at the school level, in the budget, as well as at the household level (Moser, et. al., 2004; and Malawi Government, 2005). Therefore, this validates need for research into how intervention in education budget has related to internal efficiency process indicators and research on alternative ways through which the obtaining scenario could be improved

Complementing to the findings on increased funding to primary education over the last decade Chimombo (1999) and Castro – Leal (1996) found out that inadequate funding impinges upon attainment of internal efficiency indicators among others. This finding, therefore, creates an imperative need for communities to supplement government investment in education, more so in an attempt to meet the demand for schooling inputs created through the surge in enrollment after the inception of Free Primary Education. This view is also replicated in studies on education financing at international level where it has been found out that education can not do it alone (Levin, 1997). What were not looked at in these studies though, is how efficiently the inadequate resources have been used and

whether the mixture of the budget outputs and complimentary interventions are reflective of internal efficiency process indicators.

Whilst agreeing with Chimombo (1999) and Castro – Leal (1996) on the significance of supplementing Government investment in primary education through community contributions, Rose (2002 and 2003) found out that community participation on public primary schooling in Malawi has been extractive to the extent that households in the community have been extracted of their income through informal fees and contributions that are widely prevalent in primary schools leading to persistent absenteeism in pupils from households that have not been able to meet the informal fees and contributions on the reason that pupils who have not contributed have not been allowed access to classrooms.

Related to the above, in a six country comparative research, Boyles et.al. (2002); found out that the poorest households in education communities are disproportionately vulnerable to economic and natural shocks at macro and micro levels. Therefore, demand for education can be said to be a vulnerable demand in the sense that even in cases of death of a breadwinner or low household agro – production may extinguish a child's chances of education. Consequently, this has led to high repetitions and dropouts, thereby low promotion rates; hence increased internal inefficiencies. Therefore, whilst appreciating the need for supplementary investment on primary education from the communities, there is need to critically explore how primary education budgeting has focused on internal efficiency and how well interventions in the primary education budget may be conceptualized to

mitigate problems pupils from low-income households face at school level so that completion of the primary cycle is equitable and no pupil is left out.

Complimenting the concluding position above, Mingat et al. (2003), argued that educational financing policies have not been effectively used as tools that guide strategy for educational development, and mobilizing support and cooperation for implementing the education visions and strategies from a wide range of constituencies. In this, Mingat et al. (2003) proposed the need for holistic approach to education financing and challenges education systems face. In Malawi, quality of education has been found to be of low standard (Malawi Government, 2004); however in addressing the quality aspect in education, there is also need to diagnose the primary education internal efficiency and education budgeting; this may triangulate possibilities of resource reallocation and free tied resources on financing of inefficiencies in the primary education system.

In tandem to this line of thinking, Abagi and Odipo (1997) in researching the efficiency of Kenyan education system found out that conceptualization of the term school or education efficiency in developing countries should take a ‘process perspective’ as opposed to ‘outcome perspective’. That is, there is need to go beyond the issue of “at what cost” is a school meeting its objectives - e.g. at what cost was the low or high score produced. In education, as opposed to a factory of physical goods, efficiency has to be pegged with how a system of education as a whole operates to meet its objectives; therefore, beyond earlier findings that resources financing primary education are inadequate in Malawi, there is need to

research how efficiently the resources have been used and explore the extent to which they reflect on the primary education internal efficiency.

This gap in research is also noted by Al – Samarrai (2003) in a cross – country research involving Malawi, Botswana and Kenya, in which it was found out that increasing expenditure to primary education is not an end in itself. He/She therefore suggested more focus on the composition of resources, institutions that governs the resources and improving the public expenditure management system in order to strengthen the link between public spending and education outcomes.

Further to Al - Samarrai's (2003) findings, there is need to go beyond the composition and governance of resources to examining how the resources reflect on the targeted outputs and outcomes. Of considerable significance value is the extent to which the resources in education budgets reflect on process indicators of internal efficiency (repetition, dropout and promotion rates) and summative indicators of internal efficiency in an education system (survival rate, wastage ratio and average primary education graduate years). In Malawi, this has not been comprehensively studied.

2.1.2 Strategic Policy issues on education financing

Researchers, policy makers and education innovators have stated that there are alternative ways of financing primary education that countries willing to absorb findings from the research and open up space for radical innovation may utilize in an attempt to achieve more with limited resources (efficiency).

However, this need be done through better informed models of learning that could be organized through a redistribution of expenditures and responsibilities, at a total cost no greater than obtaining levels of expenditure. This in itself entails a thorough analysis of the biological nature of Learning, the science of learning, culture and nurture: how ideas shape our thinking, the implications of new technologies of information and communication, and spontaneous, informal learning; and the significance of the home and the community (Johnson Foundation's Wingspread Conferences, 1995 and 1997).

In the case of Malawi policy directions under primary education; the education sector intends to encourage partnerships in educational development and introduce measures to increase the internal efficiency of the system. It further intends to introduce cost-saving measures regarding the maintenance of existing teaching and learning materials and promote the expansion of private primary schools. Furthermore, it intends to introduce double shift system, focusing on more effective use of physical facilities, particularly in urban schools (Malawi Government, 2000).

In terms of education policy, Mc Ginn and Broden (1995) emphasize on policies that to some extent target on education quality based on outcomes of the process. This is possible to know whenever the quality of education improves by the detectable gains in knowledge, skills and values acquired by students that occur when there is improvement in the student learning environment as advanced by Ross and Mahlch (1990).

On this premise, Heneveld and Craig (1997) advanced that education sector financing policies need to emphasize on school as a locus for making education effective and that inputs budgeted should be mutually reinforcing and focus should extend to how these factors interact within each other and how they are natured. In this context whilst exploring the linkages between budget and efficiency in the education sector in Malawi, it will be imperative to extend the analysis to the examination of policies that have governed education financing over the research period.

Furthermore, extensive review on how education budgets in the research period have reflected an analytical framework advanced by Heneveld and Craig (1996); which reflects on the school climate (pupil expectations, positive teacher attitudes, order and discipline, organized curriculum, rewards and incentives), enabling conditions (effective leadership, capable teaching force, flexibility and autonomy, high amount of time in school); and teaching and learning process (high amount of learning time in school, variety in teaching strategies, frequent homework, pupil assessment and feedback) as being core focus in financing policies on education.

These core factors are influenced by supporting inputs (strong parent and community support, frequent and appropriate teacher attention, sufficient textbooks and other materials; and children characteristics), the mutual interaction of these supporting factors and school factors on efficiency leads to pupil

outcomes (pupil participation, attendance, promotion, graduation among others). Therefore, analyzing budget documents in this framework will highlight what education budgeting in Malawi has in practice focused on. The findings of the budget document analysis and related financing policies will act as a launch pad for setting policy agendas that will guide policy alternatives on internal efficiency from education budgetary inputs.

In agreeing to a comprehensive analytic framework for reviewing education financing policies, Chang (2004) found out that holistic strategic policy linkages to education budgets enable better understanding of policy issues that affect costs and financing of the education system and managerial and institutional aspects of education systems. This position is elongated by the World Bank (2000) and broadly by Lockheed and Verspoor, 1991) where key elements of education management are highlighted to include clear school level annual goals, tasks, functions, communication channels, planning, monitoring and evaluation, training and school level management plans. In this context, much as effective leadership is contingent on sufficient resources to support the key management functions as noted by the World Bank (2000), in a situation whereby resources are limited the notion of efficiency arise. Therefore, intuitively the questioning dimension ought to shift to how good education managers and primary education budgets have inherently structured mechanisms that deliberately focus on key management functions so that most is obtained from the limited resources. This in Malawi remains a gray area for research and adding to the knowledge base; therefore this present research will seek an understanding

from prime movers of primary education in Malawi on how the scenario above is reflected in their managerial practices and implementation of primary education budgets.

Further to the education financing policy debate, Lockheed and Verspoor (1991) cognizant of brick and mortar projects (e.g. building of classrooms) argued that increasing the number of school places is not the only issue in broadening access since school participation entails an interaction of supply, demand and the learning process. The supply sides are the capital costs, which also include teaching and learning materials, and the learning process involves what the pupils have in schools. The demand refers to decisions households make in terms of the opportunity cost to schooling. In this perspective, it becomes necessary to examine the flexibility in education financing at incorporating issues on the learning process other than the development budget, which has largely focused on access to schooling interventions (e.g. construction of schools, rehabilitation of schooling facilities, teacher houses e.t.c).

Agreeing to Lockheed and Vespoor (1991) findings, the Malawian context demand that access be discussed with survival rate through the primary cycle. Therefore, household factors such as residence of pupils, gender, poverty and status does affect both school attendance and survival of pupils throughout the system to some reasonable extent (Kadzamira, et. al., 2004; Care Malawi, 2004; and Pinder, 2004).

This then necessitate need for an analysis on the comprehensiveness of primary education from a multi – sectoral perspective so as to determine the extent to which complimentary education factors that are crucial to attainment of several strategic policy issues have reflected on education budgets; this will compliment the analysis herein being suggested.

Verspoor (1994) noted that changes in practice from researching policy issues have met resistance on the basis that they are taken for reforms. Cognizant of potential resistance to findings and recommendation from policy analysis, especially on financing of primary education, the proposed research will discuss the policy alternatives with candor through alternative approaches with inherent in – built reflexes to cushion potentially perceived structural and implementation shocks. This will be done through a careful rational contingent approaches to policy issues analysis. This approach is intuitively agreed on by Hartwell (1994), where he emphasized on the need for negotiating change. On this he stated that policy shifts, as part of a larger effort of policy analysis and change must be the subject of negotiation to determine feasibility and acceptability. This negotiation will be inherent in the proposed research in the process of analyzing strategic policy options concurrent with the existing financial policies. The thesis will be examining the feasibility of these options in a pragmatic and validated manner so as to influence acceptability on the part of practitioners.

Further to the above, Reimers and McGinn (1997) hinted on the significance of policy options and strategic policy interventions in bringing about

planned changes in education organizations. He however, stated that much as change is possible it does not come as an abrupt shift from one state to another, rather as an outcome of ongoing negotiations where new ideas and practices fuse with old and the existing. In this aspect, it should be clear that in an attempt to put forward recommendations regarding strategic policy options and related issues to guide education financing efficiently; social learning and indigenous knowledge would inform the analysis.

Haddad and Demsky (1995) presented a framework to policy analysis, which tackles issues prevalent in practice regarding policy alternative and strategic options. Applying such frameworks to primary education financing policy issues that have guided the financing of primary education in Malawi, completes the analysis in the sense that examination on the implementation of financing policies on primary education will enable this research to determine a possible policy shift that is commensurate and complements the obtaining trend in the exploration of the linkages between the budget and education system internal efficiency in Malawi.

2.1.3 Conclusion

The literature review above highlights a situation whereby considerable research on education financing has been conducted in Malawi and elsewhere. The gap in the literature alludes to a scenario whereby focus has been on what funds allocated to primary education can do other than how those funds have been used. In addition, there remains a gap in literature in terms of comprehensive

research on the composition of the funds and how outputs or items highlighted in education budgets have a bearing on the schooling of pupils in Malawi.

This gap in literature therefore forms a basis for the research, notwithstanding earlier findings, but rather building from the findings and delving into more analysis in the exploration of the linkages between internal efficiency and primary education budget in Malawi. This will be aided by a mixture of analytical tools that should complement each other in trying to understand the dynamics in primary education budget and utilization of the budget as proxied by internal efficiency.

2.2 Empirical Literature Review

2.2.1 Exploration of relationships between education spending and educational outcomes

Mingat et. al. (2003), Gujarati (2006), Vaduganathan (2005) advanced analytical methodologies on impact and relationships analysis. In their studies they present regression analysis approaches as a one of the tools that could be engaged in analyzing the generic relationship between a dependent variable and a set(s) of variables.

Table 1, below is adapted from Al – Sammarrai (2003) and present studies that have used regression models, specifies the models, findings and authorities involved in the studies.

Table 1: Documented studies on relationship between education outcomes and resources

Research	Dependent Variable	Resource Variable	Sign of coefficient	Significance Level
Hanushek and Kimko (2000)	Mathematics and Science Test Scores	Pupil: Teacher Ratio	+	Not
		Current education spending/pupil	-	1%
		Total expenditure as a proportion of GDP	-	5%
Lee and Barro (1997)	Test Scores (Various)	Pupil Teacher Ratio	-	5%
		Average Teacher Salary	+	10%
		Current education spending	-	Not Significant
	Primary school repetition rates: UNESCO and Lockheed with Verspoor (1991)	Pupil Teacher Ratio	+	1%
		Average teacher salary	-	Not
		Current education spending	+	Not significant
Coclough with Levin (1993)	Primary Gross Enrolment Rate	Public recurrent expenditure on primary as a percentage of GNP)	+	Not significant
		Public recurrent expenditure/primary student (percentage of Gross National Product Per Capita)	-	1 – 5%
Woodsman (2000)	Test scores	Class size	+	1%

From the authorities among others, Al – Sammarrai (2003) shows that with regression analysis it is possible to empirically explore relationship between resources and education outcomes. Through these studies, he concludes that there is no consistent effect of resources on education outcomes. In addition, he notes

variations in cross country data findings on same variables, implying that resource directions matter more as to what impact is expected; for instance in Lee and Barro (1997) and Hanushek and Kimko (2000) as in Table 1 above.

It is noted that education outcomes above are used as dependent variables. This implies that in these studies, the key assumption is that education outcomes should be explained by the resource inputs. Nonetheless education outcomes are explainable by various factors as well. For instance repetition rate may also be explained by rates of absenteeism apart from classroom size alone. Therefore, education outcomes are more independent and without the span of control of education financing alone (Levin, 1996). In this case, what should be focused on are the education resources as a unit of analysis. This implies that the relationship between primary education financing and education outcomes should be traced from the financing side. Therefore education-financing composition ought to be reflective of targeted education outcomes.

As the debate over public school expenditures rages in primary school rages on, it is clear that econometric exploration of relationships between expenditure and performance only gives a generic relationship. Gubar (1999) writes that simple statistical analyses can be misleading. She therefore, advocates for an analysis of the composition of data and in – depth understanding of how the data is performing as such. United Nations Education and Scientific Cultural Organization (2006) notes that cognizant to econometric analyses on education internal efficiency indicators; efficiency is better understood through analysis of

student flow in the system. This gives a broader picture and complements discussion on the generic relationships between education expenditure and education system performance.

2.2.2 Conclusion

In conclusion, the use of econometric regression in the exploration of relationships between education resources and education outcomes present a generic relationship. However, understanding of composition and behaviour of data requires a mixture of methodologies. On internal efficiency indicators, student flow analysis compliments the regression analysis. Nonetheless, depending on results from these two analytical tools, further understanding may be obtained through surveys or interviews. This allows for further exploration on the obtaining trends in the analysis.

CHAPTER 3

3.0 Research Methodology

3.1 Overall research approach and rationale

The research involved quantitative and qualitative analysis; this being the case, mixed methods paradigm informed the overall research approach. Quantitative methods were used in analyzing how education budgeting related to internal efficiency of primary education and in the calculation of internal efficiency of the education system within the research period. Qualitative methods were used in assessing strategic policies that guided primary education budget implementation over the research period and exploration of alternative strategic policy options for financing primary education in Malawi. The qualitative and quantitative research designs were used concurrently hence the concept of mixed methods approach as advanced by seasoned researchers in qualitative and mixed methods research (Maxcy, 2003; Creswell, 2003; Rallis and Rossman, 2003 and Rossman and Wilson, 1994).

3.2 Research design

The research followed a concurrent research design in mixed methods. Due to the nature of the research problem and objectives; the research used both concurrent triangulation design and concurrent nested design visually presented below (Creswell, et. al. (2003).

Since this exploration was based on the emerging issues, the research also used a concurrent nested design within the broader context of mixed methods. However, qualitative data became the dominant feature at this level. Figure 4 below presents a diagrammatic rendition on the same.

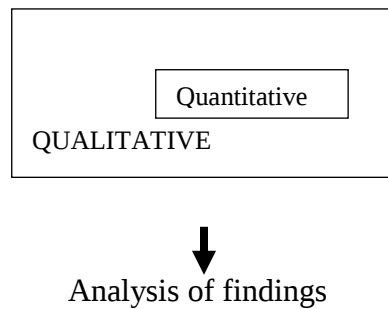


Figure 3: Concurrent nested design

3.3 Setting of the research

The research was set at the Ministry of Education, Science and Technology, District Education Offices and Ministry of Finance.

3.4 Access Negotiation

Access to research area was granted through the approvals of Principal Secretaries of the Ministries of Education, Science and Technology, Local Government and Finance to collect data based on an interview schedule as per appendix 5 on data collection instrument.

3.5 Sampling

The sample was purposively selected based on the mandate vested on the proposed respondents and in relation to the research problem and objectives. The sample size was 50 and was purposively selected from the Ministry of Education Headquarters, Ministry of Finance, Ministry of Local Government (Chiradzulu District Assembly, Mulanje District Assembly, Lilongwe District Assembly, Mchinji District Assembly, Kasungu District Assembly, Salima District Assembly and Mzuzu and Mzimba District Assemblies)

3.6 Data collection

Secondary data was collected from the Basic Education Statistics available at the Ministry of Education, Science and Technology and budget figures from the Ministry of Finance. Specifically, information that was extracted from the Basic Education Statistics, which included repetition, dropout, enrollment and promotion rates. These are already calculated in the statistical bulletins on annual basis and segregated by class. Therefore, for purposes of year-by-year cohort progression analysis, this data was paneled and calculated so as to obtain the average annual rates across the standards. This data was used in the regression and cohort analysis herein explained. The secondary data enabled the research trend analysis (regression and cohort); the weakness however, is that in cases of missing data, the results of the analysis may be distorted as postulated by Mingat, et. al. (2003). However, the data set was subjected to tests that determined whether the analysis was based on statistically viable data set or not.

Primary data was collected through a standard semi – structured interview guide that was administered to respondents specified in 3.7 above. This data enabled deeper understanding on issues in budgeting and policy implementation as agreed to by Kadzamira, et. al. (2004). During the interviews, names of officers interviewed are not recorded to allow for confidentiality during transcription of the recorded primary data.

3.7 Data Analysis

3.7.1 Relationship between the recurrent education budget and internal efficiency indicators

In analyzing how primary education recurrent budgeting related to internal efficiency of primary education over the research period, data analysis was at two levels; firstly, a regression analysis was conducted in order to look at the generic relationship between recurrent primary budget and indicators of education internal efficiency (numbers of dropout, repeaters and enrolment rates); the regression methodology was adapted from Mingat et. al., (2003). The dependant variable is the recurrent financial allocation to primary education; and its regressed by the internal efficiency indicators specified above, the analysis was conducted at education division level per financial year over the research period.

The rationale in running the regression was aimed at getting a glimpse of the impact the recurrent financing on primary education has had on internal efficiency in generic terms. The underlying concept that drove the regression was that recurrent budget allocation should vary negatively with the number of repeaters and dropouts and positively with enrolment rate, specifically; the recurrent budget should vary negatively with repetition and dropout rate on the basis that the rationale behind public spending in education is to reduce repetition and dropout, therefore with increases in recurrent resources one would expect repetition and dropout rate to be reducing. The relationship between repetition and recurrent budget is in such a way that with increasing enrolment rate, education supply factors would increase, hence the expected positive relationship. In addition, the research has made use of changes in financing policies behind the recurrent budget as a dummy variable. In essence the expectation is that changes in education trends should inform financing policies which in turn should determine the composition and commitment of resources in the recurrent budget.

3.7.1.1 Measures of dependent and independent variables

Based on annual basic education statistics and financial data from the Ministries of Education and Finance (1993 to 2003/04); the research used multiple regression to examine the association of repetition rate, dropout rate and promotion rate to the recurrent budget (rb). This analysis was done in the Statistical Package for Social Sciences (SPSS); below are detailed calculation methodologies for the enrolment, repetition and dropout and the ORT.

Enrolment is calculated as below:

$$Enrolment_t = \sum_{n=1}^{2003} E_{nt} \dots (i); \text{ Where } E = \text{Enrolment}; n = \text{class (standard)}; \text{ and } t =$$

year. It should be hereby noted that n (class) is calculated up to standard eight due to the fact that maximum primary education in Malawi is eight years; therefore classes run from standard 1 to 8. This will be done on annual basis throughout the timeframe of the research.

Similarly, repetition is calculated through the formulae below:

$$repetition_t = \sum_{n=1}^{2003} R_{nt} \dots (ii); \text{ Where } R \text{ is the number of repeaters and others are}$$

as defined above.

Dropout is calculated as:

$$Dropout_t = \sum_{n=1}^{2003} D_{nt} \dots (iii); \text{ Where } D \text{ is the number of dropouts}$$

and $rb_t = \sum_{t=1993}^{2003} (PE_{cc}, RT_{cc}) \dots (iv);$ where rb_t is the total ORT, the analysis is done at divisional level, and there are six divisions in total.

(Summation of Personal Emoluments (PE) and Recurrent transactions (RT) in public primary school); these are as recorded in the financial data from the Ministry of Finance budget documents.

Finpolic was introduced as dummy variable meant trace policy alternatives that

have been introduced during the research period. Therefore $finpolic = 0 \dots (v)$; where financing policy did not change and $finpolic = 1 \dots (vi)$; where there has been a change in financing policies.

3.7.1.2 Model specification and statistical diagnostics

Before the model specification was made tests are conducted to determine whether the model is significant and that independent variables collectively explains the dependent variable (F – statistic), whether there is no serial autocorrelation in the data set (Durbin – Watson test), multicollinearity (Eingen – Value, regression coefficient and the squared regression coefficient and finally the significance of the independent variables (t – statistic). These tests were conducted to ensure that the specified model was statistically significant and the variables were not serially autocorrelated (Gujarati, 2006); Table 2 below highlights the criterion under which the model is tested

Table 2: Statistical diagnosis

Test item	Test (0.05)	Detection criterion /condition
Autocorrelation	Durbin – Watson (DW)	Reject H_0 {No positive autocorrelation} if $0 < d < d_L$ Indecision on H_0 if $d_L \leq d \leq d_U$; Reject H_0 {No negative autocorrelation} if $4 - d_L < d < 4$ Indecision on H_0 {No negative autocorrelation} if $4 - d_U \leq d \leq 4 - d_L$ Accept H_0 (No positive nor negative autocorrelation) if $d_U < d < 4 - d_U$ In cases where there is indecisiveness, conduct a runs test and proceed with the model if $\text{Prob}[E(k) - 1.96\delta_k \leq k \leq E(k) + 1.96\delta_k] = 0.95$; implying that H_0 is not rejected at 95% confidence interval if k, the number of runs, lies in the interval, otherwise reject H_0 (i.e. randomness is not sustainable). Where d_L is the lower bound in DW tables, d_U is the upper bound, $E(k)$ is the mean, k is the number of runs and δ is variance.
Multicollinearity	Eigen value (EV)	EV should not equal 0
Model fitting	F-statistic (ANOVA)	Reject H_0 if Output Value > tabulated value, where H_0 is the null hypothesis (the model is not significant).
Coefficients sig. Prom_t repeat dropout _t	t-statistic	Reject H_0 if OV > tabulated value at 0.05significance level, where H_0 = no significant variable)

Model specification

After the tests were conducted as specified above, the model is as specified below:

$$rb_t = \alpha + \alpha_1 enrol_t + \alpha_2 repeat_t + \alpha_3 dropout_t + \alpha_4 finpolic_t + \varepsilon_t$$

... (vii);

Where α is the constant coefficient of the regression; $\alpha_1, \alpha_2, \alpha_3$ and α_4 are coefficients of independent variables ($enrol_t, repeat_t, finpolic_t$ and $dropout_t$). These coefficients explain the partial degree of association of the individual independent variables to the dependent or explained variable rb_t . ε_t is the estimation error term (residuals).

3.7.2 Determining the extent of internal efficiency of the education system in Malawi within the research period

Having analyzed the relation between the recurrent budgetary allocation and internal efficiency indicators; an attempt was made in looking at the overall efficiency within the system by calculating the wastage ratio, survival rate, retention capacity (making use of retention rates), and average duration of research per primary education graduate and promotion rates. Cohort analysis was used in the calculation of the wastage ratio; this analysis was done using flow diagram (United Nations Education and Scientific Cultural Organization, 2006) as specified in fig. 4, below:

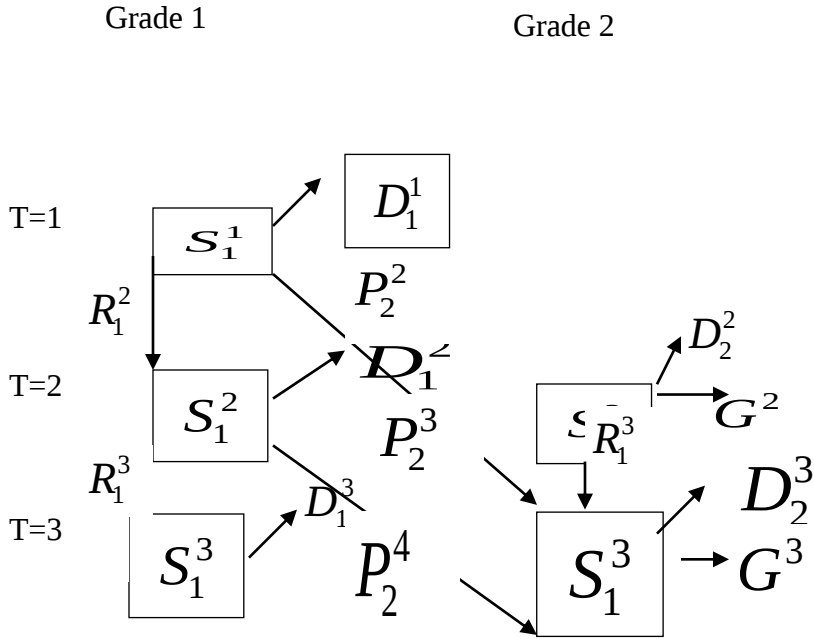


Figure 4: Cohort analysis methodology

Assuming a two grade cohort, the flow diagram was specified as in figure 5 above; in the diagram, S = pupil numbers, D = number of dropouts, G = successful completer's, R = number of repeaters; and P = number promoted.

S^1 Denotes pupil numbers in year 1 ($t = 1 \dots n$); S^1 denotes pupil numbers in grade 1 ($g = 1 \dots 4$); and S_1^1 accordingly denotes pupil numbers in year 1 and in grade 1, etc.

In conducting this cohort analysis, it was assumed that there will be no additional entrants in subsequent years, other than the original cohort; at any grade, the same rates of repetition, promotion and dropout apply, regardless of whether a pupil has reached that grade directly or after one or several attempts (hypothesis of homogeneous behaviour); and that the flow rates for all grades

remain unchanged as long as members of the cohort are still moving through the cycle (United Nations Education and Scientific Cultural Organization, 2006).

From the flow diagram, in a perfectly efficient system, all pupils who enter grade A, are exactly those completing at Grade B, nevertheless in the Malawian education system we will have repetitions and dropouts; therefore, in the ideal situation the input/output ratio will be 1 and otherwise in Malawian terms. This therefore implies that the wastage ratio is calculated by weighing down the actual input/output ratio by the ideal input/output ratio. Below is a mathematical calculation of the wastage ratio.

$$WR = \frac{AI \times I_dO}{AO \times I_dI}; \text{ Where } WR = \text{Wastage Ratio, } AI = \text{Actual Input, } AO = \text{Actual Output, } I_dO = \text{Ideal Output, } I_dI = \text{Ideal Input}$$

Therefore, for instance a wastage ratio of 1.5 would imply that a graduate of primary education is being produced at one and a half the ideal cost.

The survival rate is given by weighing down the total number of pupils promoted in successive years within the cohort by the initial pupil intake; this gives a rough guide of the retention capacity within the education system.

Further to this, and on the basis of the flow diagram; each successive batch of graduates is multiplied by the number of years it has taken to complete the cycle and this indicates the average years of research per graduate within the

education system.

3.7.3 Exploration of alternative strategic policy options for financing primary education in Malawi

In the analysis of policy issues that have guided the budget and financing of public primary education, the policies are related to the significance of such issues to financing of primary education in relation to internal efficiency process indicators (repetition rate, dropout rate and promotion rates). The sociopolitical and economic context surrounding the policy issues were analyzed along with an analysis of the legal context behind the policy issues and a discussion of conceptual frameworks that guided the policy issues.

Further to this, the essence of such an analysis was to examine formation and implementation issues from which a position is determined as regards policy alternatives and strategic policy options; their implications and recommendations that enabled financing of public primary education with focused attention to the internal efficiency indicators. In conducting, this policy analysis, tools that were used included the policy analysis conceptual framework as advanced by Haddad and Demsky (1995) and policy analysis and process models as advanced by Dye (2002).

3.7.4 Analysis of responses from the interviews

Data from the interviews was transcribed and interpreted based on theme category. The themes were generated from the budget processes, financing policies on primary education during the research period and from the dialogue

space that has been created through the interview guide to allow interviewees to explain further and give in their insights on the education efficiency of the primary education system and what would they recommend on education financing policies (see appendix 4 for the interview guide).

The general responses from the interviews were then put in a matrix and critically analyzed to decipher policy options on the obtaining scenario. The matrix template is as presented in Table 2 below:

Table 3: Matrix on the analysis of responses from interviews

Interview issue by Sub Theme	General Response / Institution		
	District Assembly (DA)	Ministry of Education (MoE)	Ministry of Finance (MoF)

3.7.5 Budget document analysis

In trying to understand the extent to which interventions in the public education budget have been targeted, budget document analysis was conducted in order to understand the composition of the recurrent budget. This was conducted so that a proxy on intervention targeting is conducted over the research period simultaneous to the analysis herein.

CHAPTER 4

4.0 Results and discussion of findings

4.1 Relationship between education recurrent budget and to internal efficiency

Appendix 4 presents results from the regression analysis; the results show that the model is fitting and that all explanatory variables influence the dependent variable collectively; the F- distribution with 4 degrees of freedom for denominator and 54 degrees of freedom for numerator at 0.05 degrees of freedom gives a critical F value of 5.7. The computed F value of approximately 36.98 far exceeds the critical F value. Individually however, only three variables have an impact on the dependent variable, $Enrol_t$ ($p = 001$), $Finpolic_t$ ($p = 000$), and $Repeat_t$ ($p = 000$) are significant while $dropout_t$ ($p = 0.133$) is not significant; this is also verified by the explanatory variable individual t-statistic in appendix 4.

In addition, the Durbin Watson test of 1.6 ($d_L = 1.408$; $d_U = 1.67$) from the regression results implies that a decision of whether the data has serial positive autocorrelation exists or not cannot be made. However the case of no serial autocorrelation is verified through the results of the runs tests, the calculated numbers of *runs* are within the range are more than three and the asymptotic values shows a normal distribution. Cases of no multicollinearity are also verified by the fact Eigen Value (4.123) is not equal to zero.

Finally, the explanatory variables explain 73% of the dependent variable collectively; otherwise, individually, holding other explanatory variables constant; a unit change in enrolment explains a (0.354) unit change in recurrent budget, similarly, a unit change in financial policies explain a 0.371 unit change in recurrent budget, and a unit change in repetition rate explains a 0.844 unit change in recurrent budget. Dropout is statistically insignificant, however a unit change in dropout explains a (0.127) unit change in recurrent budget.

4.2 Extent of internal efficiency of the education system in Malawi within the research period

Further from understanding the relationship between recurrent budget and internal efficiency indicators, the research went further to look into the actual efficiency levels through the use of pupil flow cohort analysis, where the actual extent is measured by the system wastage ratio, average years of research taken by a student to complete a primary education cycle and survival rate. Below are the results

4.2.1 Cohort Analysis

Table 4: Student flow (1994 - 2000) {*figures in '000}

		1993		1994		1995		1996		1997		1998		1999		2000
Std 1	Enrolment	632*														
	Repeaters		147													
	Dropouts		134													
Std 2	Promoted			351												
	Repeaters				72											
	Dropouts				60											
Std 3	Promoted					219										
	Repeaters						39									
	Dropouts						38									
Std 4	Promoted							142								
	Repeaters								16							

	Dropouts								22							
Std 5	Promoted									103						
	Repeaters										13					
	Dropouts										16					
Std 6	Promoted											74				
	Repeaters												8			
	Dropouts												11			
Std 7	Promoted													56		
	Repeaters														5	
	Dropouts														8	
Std 8	Completers															43

4.2.2. Wastage Ratio

$$WR = \frac{AIIIC}{AQI} = 15$$

4.2.3 Survival Rate

Table 5: Class by class survival rate results

Std 1 - Std 2	Std 2 - Std 3	Std 3 - Std 4	Std 4 - Std 5	Std 5 - Std 6	Std 6 - Std 7	Std 7 - Std 8	Cohort
2	3	4	5	6	7	8	(Average)
56	62	65	72.6	72	74.8	77	68

4.2.4 Average Years of Research

Average pupil years of research is 22 (Total of successive batches weighed down by the number of completers)

4.3 Public Primary School Financing Policies (1994 – 2004)

Table 8 below presents a matrix where financing policies that has guided the formulation of the recurrent budget over the research period are highlighted. It gives out areas that have been prioritized, context of policy formulation, area of focus and how the policy has been implemented.

Table 6: Results on public primary school financial policies analysis

Prioritized Policy	Formulation	Socioeconomic Context	Political Context	Area of Focus	Implementation Status
Free Primary Education (FPE) – 1994	Presidential Decree	Schooling communities and administrators overtaken by events	Based on pre-elections promises	Access to primary education	Improved access to Primary education; enrolment increased from 1.8 million to 3.2 million
Increase in equitable access to primary education ¹	Donor Influence and reaction to the Poverty Alleviation Programmes (PAP)	Critical shortage of schooling inputs	Reactionary to the presidential decree on FPE	Access to primary education	A number of schools and classroom blocks built in urban and rural areas of the country; nonetheless equally, a number of schools and classroom structures were either abandoned or not completed, especially in the rural areas
Increase in equitable access to primary education ²	Donor Influence and requisite need to refocus on financing strategies	Low quality in primary school graduates and low pass rates at National Examinations	Realignment of educational development plans due to donor pressure	Access to primary education	Stagnated enrolment (around 3.2 million)

¹ Policy Investment Framework (1995 – 2000)

² Policy Investment Framework (2002- 2012)

4.1.4 Interview Analysis

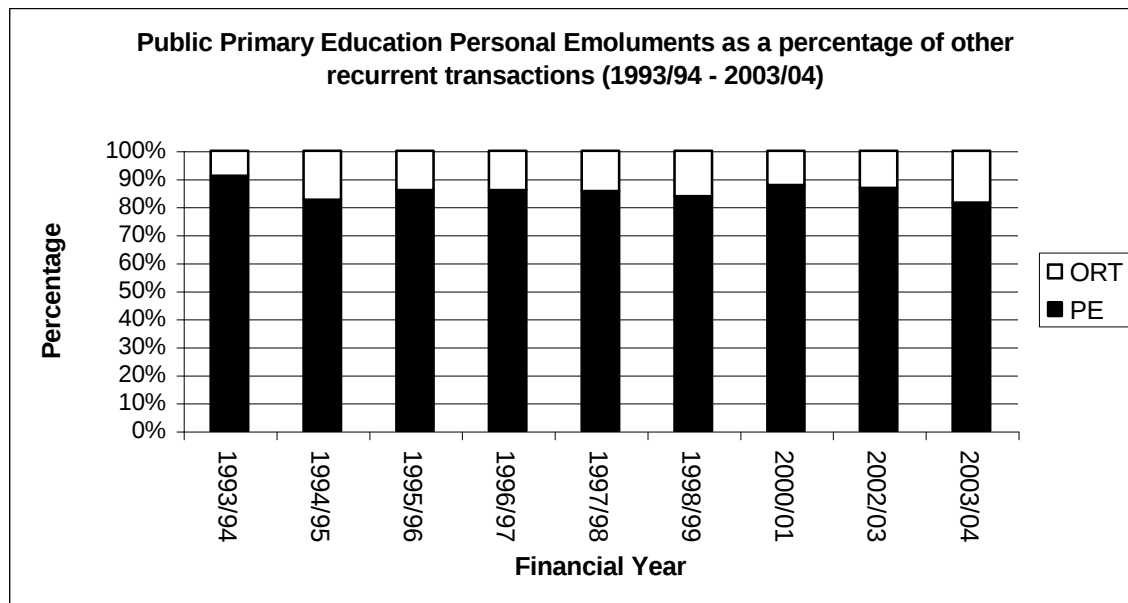
Appendix 5 summarizes results from the interviews conducted. The general picture from the responses indicates a variation in terms of understanding of the budgetary process and its value addition to operations of primary education institutions in Malawi. Specifically, the budget process and information on the budget preparation involves institutions on the ground. Nonetheless, these institutions are not offered the opportunity to align the budget estimates to budget ceilings that are generated and provided at the central level. These epitomize the school or district based budgets cosmetic; realignment is conducted centrally without prioritization that is informed by the implementers of the budgets.

It has also been noted that budgetary ceiling from the treasury are presented way into the budget preparation process and often late. This does not offer education central institutions opportunity to ably consult on priorities from the initial budgetary inputs, thereby rendering the realignment haphazard.

4.1.5 Recurrent budget analysis

Figure 6 below presents a comparison of major composition of the Recurrent Transactions; notably, about 88 to 90% of the recurrent budget is expended on personal emoluments with the primary education sub sector.

Figure 5: Other Recurrent Expenditure Vs Personal Emoluments (1993/94 – 2003/04)



4.2 Discussion of results

4.2.1 Relationship between recurrent budget and internal efficiency indicator

The regression analysis has shown the generic relationship between the recurrent budget and enrolment, dropout, financial policies and repetition rate. From the results show a unit change in enrolment explains a (0.354) unit change in recurrent budget, holding other variables constant. This does not confirm earlier expectations, the direction of unit change in recurrent budget is negative; the ideal expectation is that with increase in enrolment, there will be increased demand for teaching and learning materials, and teachers among other things therefore expecting the recurrent budget to vary positively. The above obtaining depict that increase in enrolment over the research period has had a negative impact on the recurrent budget, either suggesting that too many pupil have had to

share a small recurrent budget or composition of the budget itself and policies thereafter has not taken care of the need to align recurrent expenditure to pupil unit costs, where the ideal expectation would be agreeable to.

The relationship between recurrent budget and repetition presents a two – way situation; prima-facie the direct and positive relationship between repetition and recurrent budget holds in the sense that with increasing numbers of repeaters, more resources have to be spent e.g. teaching and learning materials.

Nonetheless, the assumed rationale behind spending on public primary education is to have improved promotion rates so that pupils progress through the primary system. Therefore implying low repetition rates. This means that on the other hand with increased spending on primary education, it is expected that repetition will be reduced. Therefore the sign of the coefficient on repetition is expected to be negative. This scenario indicates that the recurrent budget does not directly target interventions and strategies that contribute to the improvement of promotion rates, thus reducing repetition rate in the public primary education

Of critical significance and attention from the above is the fact that repetition is driving costs in the recurrent budget, a unit change in repetition explains 0.84 unit change in recurrent budget. This observation imply that funds are tied within the primary education system on the financing of repeaters; therefore despite the generally agreed assertion that public financing on education in Malawi is inadequate; the relationship herein points to the observation that

other recurrent budget has not been targeted at reducing increasing repetition trends among other factors. This position is vindicated in Table 9 where general results from the interviews indicate that budgeting process is in fact a top – down exercise in principle and on the basis that there is no feedback on the initial budget estimates; in such a way that what schools and districts prioritise is not what is itemized in the budget or given priority when budget readjustments are conducted at central level.

Dropout rate is varying negatively to the recurrent budget at a unit change in dropout rate explains a (0.47) unit change in the recurrent budget. This is explained on the premise that major factors contributing to dropout are largely covered by the development budget which caters for expenditure on construction of classrooms and schools. This case is based on earlier findings in studies that have concluded that some of the reasons for pupil dropout include long distances to school, over – crowding in schools and poor sanitary facilities in schools (Rose, 2002, Malawi Government, 2007a and 2007 b, Lockheed and Verspoor (1991)). The statistical insignificance of this variable indicates a weak relationship between the dropout rate and the recurrent primary education budget. This therefore vindicates earlier studies that have indicated a weak relationship between development education resources and education outcomes (Hanushek and Kimko (2000), Lee and Barro (1997), and Coclough with Levin (1993).

Finally, financial policies have had a direct impact on the composition of recurrent budget to the extent that, all other variables held constant, a unit change in financial policies have had a 0.371 unit change in the recurrent budget. This is substantiated by the composition of the recurrent budget which indicates that personal emoluments have averaged 80 – 90% over the research period, following the expansion policies that have been implemented from the inception of free primary education as also agreed by Kadzamira et. al., (2004). For instance, personal emoluments; which are mandatory payments on teacher salaries have been 80% of the recurrent budget. Therefore, funds expandable on interventions facilitating schooling have had a 20% share of the recurrent expenditure. The generic relationship above suggests that this proportion has been expended on operations in the administration of schooling with less other direct linkages to interventions that address efficiency indicators such as repetition and dropout rates other than making teachers available in schools.

In summary, the generic relationship between enrolment and recurrent budget is positive as per prior expectations, however the relationship is to a greater extent aided by the direct relationship between enrolment and personal emoluments other than other recurrent expenditures. Further to this, the relationship between repetition rate and the recurrent budget is positive; this relationship is indicative of the fact that the recurrent budget does not actually target repetition rate, otherwise the increased spending on recurrent expenditure over the research period could have reduced repetition rates to some extent. Lastly, the relationship between the recurrent budget and dropout is insignificant

and inverse; this alludes to two issues, (i) There is no clear relationship between dropout rate and recurrent budget, dropout rate is better explained by the development budget; (ii) there is an inverse relationship between the recurrent budget and the government funded development budget based on the implicit fact that much as the recurrent budget has increased over the research period, dropout rates have increased, implying that lesser resources have been allocated to development budget to help with addressing challenges contributing to the increase in dropout rates.

4.2.2 Extent of internal efficiency of primary education in Malawi within the research period

Further to the generic relations discussed in 4.2.1; we examine the extent of efficiency within the education system to better understand the generic relationship explored above. From the cohort analysis above, wastage ratio is at 15, implying that a graduate of primary education is being produced at 15 times more than the ideal cost. This indicates that to a larger extent public primary education financing in Malawi is expending on pupils that would otherwise be out of the primary education system. Put differently, the working capital in producing a primary education graduate is being managed inefficiently. This contributes to the inadequacy of primary education financing unlike research findings that alludes to such challenges on inadequate financing (Kadzamira et.al. 2004, Chimombo, 1999, Castro – Leal, 1996). Therefore the question of low financing levels is in itself not conclusive if the extent of wastage in the system is brought to

fold among other issues. Rather, where the resources are invested in is the question that has to be grappled with. This replicates findings by Al – Sammarrai (2003).

On the other hand, the obtaining generic relationship above could be a contributing factor to the magnitude of the wastage. Therefore the issue becomes two – fold. The recurrent budget relationship to variables herein examined affects and is also affected by the wastage ratio. However, the initial point of correction is at the formulation and execution of the recurrent budget. Therefore, unless the targeting on efficiency indicators is reflected and reflects the recurrent budget implementation; the inadequacy of public primary education financing as a reason for low performance in public primary schooling will always arise and consequently affect the extent of wastage in the system.

From the above discussion, we examine how effectively budgeting decisions could be targeted at reversing the efficiency relations being explored. For instance, the average survival rate at 68% indicates that 32% of the pupils who started standard 1 in 1993 did not manage to reach standard 8 by 2000. This confirms the position that inadequacy of funds is to a greater extent due to low internal efficiency within the system; therefore implying that funds have either been committed on the same successive batch of students in repetition or spent on pupils who have dropped out of the cycle altogether. The analysis herein while not fully rejecting the earlier causative findings that inadequate funds leads to the low survival rates, it is found that wrong initial budget targeting is contributing to

both low survival rates and inadequate funds by virtue of resources being tied in the financing of dropouts and repeaters.

Further to the above, budget presentation is generic in nature; interventions therein are not class or age – specific despite the fact that challenges on internal efficiency on primary schooling are class and age – specific. For instance, average survival rates between standard 1 and standard 4 is at 61% and 75% between standard 5 and standard 8; meaning that interventions on survival rates in the budget do not have to be generic. In this case interventions have to focus on standard 1 to standard 4 where there is a low retention capacity or rates and specifically, 44% of a pupil – cohort is lost between standards 1 and 2.

Contrary to the above, observation has it that focus at primary schools is on pass rates in national examinations (standard 8); as such, resources (e.g. qualified teachers) are targeted at the upper classes hence contributing to the higher survival rates on the same at higher levels of primary education and the converse holding for lower levels. Therefore interventions targeting internal efficiency in the recurrent budget if any, have to be informed by the actual performance of the system other than the traditional generic budgeting where partial composition of public schooling is not taken into consideration.

Further to the above, appendix 5; presents a generalized response from interviewees on their understanding on budgetary issues. The results show inconsistency in knowledge levels across the controlling levels on primary

education (i.e. Ministry of Education headquarters, Ministry of Finance and District Levels). For instance, whilst the districts are to fill in their budgetary estimates in pre – defined templates they are not involved in re - definition of priorities once budget ceilings are presented to the Ministry of Education, Headquarters from the Ministry of Finance. The redefinition of these priorities at central level is not dependent on prime factors initially behind the prioritization at district level. Decisions to arrive at budgetary ceilings on the part of Ministry of Finance are based on prioritized activities at national level and projected total revenue (from domestic and foreign sources); reallocation at sectoral level thereof is the sole responsibility of the Ministry of Education. Therefore what actually gets approved, as a primary education budget by the National Assembly is significantly different from what implementing institutions on the ground budget for. This implies that what they expend the moneys on is not specifically what they would have wanted since controlling officers at District Level are bound by the law to strictly spend on line items as approved by the National Assembly.

With the current approach the effects as stated above are carried on to budget execution and thereby overlooking what would otherwise be mandatory expending areas, hence onward contribution to the vicious circle of internal inefficiencies within the primary education system and weak relationships between internal efficiency indicators and the recurrent budget.

4.2.3 Alternative strategic policy options for financing primary education in Malawi

Table 7 presents major policies that have guided and influenced financing decisions on public primary education in Malawi over the research period. Notably, in the policy matrix is fact that financing of primary education has targeted expansion of access to primary education. For instance, in 1994 there was a presidential declaration on Free Primary Education (FPE) apparently this was done without due consideration of financing implications and planning process (Kadzamira et. al., 2004, Leal, 1996 and Chimombo, 1999). The post – planning process had to be conducted within a short period and the Policy Investment Framework (1995 - 2005) was developed to facilitate the implementation of the declaration, and there was an obvious targeting of access as a major focus area in primary education. Consequently, primary education financing had a bigger share of the education budget, more specifically, the development budget. This managed to facilitate the increase in total enrolment between 1995 and 2000 and had direct effects on the recurrent budget, specifically the personal emoluments due to unqualified teachers employed.

During the first year of implementing the FPE, 44% of total enrolment in standard 1 in 1994 either repeated or dropped out of school. This confirmed that the surge in enrolment did not meet respective schooling supply factors e.g. quality teaching and learning materials and reasonable access to schooling factors. These factors include schools that are within the recommended 5km radius (Malawi Government, 2002) apart from other socioeconomic factors in

households. The socioeconomic factors may include better household dietary composition, household income expenditure on education e.t.c.

After the end of first five years of implementing the FPE programme, only 16.3% of the initial total enrolment had successively progressed through to standard 6; implying that the achievement of access is in aggregate terms and not achieved in cohort – specific – terms. However, the major financing policy remained targeted at access, hence misconceived efforts and disinvestments in public primary education schooling within this period; suggestively, parallel to the prioritized focus on access to primary education would have been initiatives and efforts in directing partial focus on maintaining or improving the quality of education offered to the masses through the FPE programme. This would have been one of the alternative policies guiding financing of primary education. Therefore, access to primary education would have been maintained. In addition, focus on education quality would have not only improved internal efficiency but also sustained access resulting from the introduction of FPE programme. This confirms Lockheed and Verspoor (1991) assertion on need for holistic approaches to primary school programming.

Irrespective of the increasing inefficiencies within public primary education, access to schooling remained a major target area in the first five years of the FPE programme implementation; thus execution of respective budgets was without cognizance of the need to reflect on the internal efficiency performance of the primary sub sector. Initiatives complimenting the surge in enrolment included

brick and mortar interventions, however, by 2000, the sector came into realization that most of the brick and mortar programmes were implemented unsuccessfully, thereby most projects abandoned or uncompleted including the World Bank funded programme (Primary Education Programme); and the quality of educational pedagogy was below standard as also reflected in earlier reviews on education sector (World Bank, 2000; Ngwira, 2006).

Failure to accomplish most of the strategies and objectives laid out in the 1995 – 2005 Policy Investment Framework among other factors, led to the review of the framework and the resultant document was the 2002 – 2012 Policy Investment Frameworks. Nevertheless, the new policy framework had limited changes in prioritization of focus areas with exception of qualifying access to include equity. Therefore equitable access to primary education became the central focus in guiding financing decisions on primary education. Apart from continued investment in brick and mortar programmes, there was considerable focus on teacher qualifications. This was aimed at improving efficiency in the system through quality pedagogy in classroom facilitation. Nonetheless the initial effects of FPE programme overtook the benefits of such initiatives in the short – term. This is the reason because without the homogenous assumption, the system had repeaters who had undergone the initial scenarios herein presented. This comes to fold especially with the fact that average years of research per pupil within the primary education system are 22 years against the normal 8 years (implying that on average about 16 years are wasted).

Further to the above, the inclusion of equity in the strategies and policies did not address the urban – rural disparities in terms of teacher deployment, new classrooms allocation and indeed education of pupils with special needs. Nonetheless, donor implementation of parallel policies and strategies such as a 1:2 pupil text book ratio has enabled a contribution to the quality of education in terms of pass rates despite the fact that the average survival rates (standard 1 – 4) within the primary education system has gone down to 54 in 2006 from 56% in 2000. This indicates that apart from lack of focus on targeting inputs on the provision of quality education, the recurrent issues in addressing the challenges of repetition and dropouts (such as pupil household preparation for classes in low income households and education of parents) have not been addressed through the primary education budgets. Therefore implying that complimentary issues of primary education need be looked at from a multi - sector – wide approach than is the case now, this position is also advanced by Haddad and Demsky (1995), (Chang 2002) and

Based on the weak relationship between the recurrent budget and internal efficiency indicators herein explored; failure in addressing specific policy issues contributing to increased magnitude of repetitions and dropouts is not due to inadequacy of funds. Rather, it is critical and contingent on prioritization and engaging a budgeting process reflective of actions and institutions that are actually implementing schooling of pupils on the ground.

The above discussion present the alternative policies through which the

primary education system could have mitigated inefficiency challenges within the same resource envelopes and hope for the achievement of better results in terms of equitable and quality primary education targeted in the financing strategies and policies presented in the Policy Investment Frameworks.

CHAPTER 5

5.0 Conclusions and Recommendations

5.1 Conclusions and implications

The recurrent budget on public primary education has had a weak relationship with indicators on internal efficiency (especially on repetition and dropout rate). This implies that there has been limited focus on interventions aimed at addressing the challenges on internal efficiency of the education system over the research period and that budgetary preparation process is cosmetic in the sense that there is one way flow of budgetary information (bottom up) during formulation and the converse is not obtaining.

Enrolment has related with the recurrent budget on the basis of mandatory personal emoluments on primary education teachers, implying that personal emoluments are the major cost driver in the recurrent budget.

Primary education system has had a lot of wastages during the research period, implying that working capital for the production of a primary school graduate has not been liquid, therefore a lot of resources have been tied in the system, especially on repeaters, and financing of dropouts

Inadequate financial resources on primary education is not a conclusive reason behind low performance of the primary education sub sector, rather poor management and prioritisation of expending areas contributes to internal inefficiency within the primary education sub sector. This in turn reduces the impact financial resources invested therein would otherwise have; implying a vicious circle of internal inefficiencies and under – performance in the primary education sub sector.

Access to primary education has been the main trigger policy behind investment decisions on primary education within the research period without due consideration of the performance of the primary education sub sector, implying that formulation of the budget and implementation thereof has not been reflective of emerging issues in primary education, therefore wrong policy prioritisation, targeting and focusing.

5.2 Recommendations

The recommendations that are drawn from this research are in three parts. Areas that need attention in the research perspective are: Budgetary processes, Primary education financing policies and questions in need of more research.

5.2.1 Budgetary processes

Refocus and re – examine the budgetary preparation process so that it allows flow of information from schools to Ministry of Education headquarters and vice – versa; this will ensure that school based priorities are funded and

implemented. This is very meaningful on the basis that schooling take place at the primary schools and implementers of the schooling process are more knowledgeable on challenges within the primary education sub sector than otherwise.

5.2.2 Education financing policies

Education policies triggering public primary education financing decisions should be based on a proper diagnosis of the sub sector, obtaining data, performance of the sub sector and indigenous knowledge from the school level. This will ensure that education financing is targeted at facilitating internal efficiency of primary education among other intended targets.

Prioritized primary education policies should not be implemented without hindsight of complimenting factors for the success of the policies; sole policy direction in primary education brings about other challenges e.g. over emphasis on attaining access to primary education without due regard to quality and efficiency of the sub sector as a whole undermined internal efficiency of the sub sector and created commitment of funds on repeaters and dropouts during the research period. These funds could be used for the betterment of other schooling factors complimenting access to education.

5.2.3 Suggestions for further research

The research has presented a macro picture on the relationship between recurrent budget and internal efficiency of the education system. Nonetheless, the extent to which school based policies, planning, budgeting and implementation (based on access to budgeted resources) may impact on the relationship between the school budget and school internal efficiency remains an area for further exploration.

The research has showed that primary education provisioning has to be approached through a multi – sectoral approach. However, the cost – effective way of implementing primary education through a multi – sectoral approach remains an area that need comprehensive exploration (This is based on the fact that education cannot do it alone, education provisioning complimentary factors are within the span of other stakeholders other than educationists).

The research has not segregated the data in the analysis. Therefore results are generic. Nonetheless, it could be interesting to do a parallel analysis that is gender aware. This may examine whether gender really matter in approaches to education financing based on gender aware diagnostics that should complement the diagnosis in the research.

References

- Al-Samarrai, S. and Zaman, H. (2002). The Changing Distribution of Public Education Expenditure in Malawi, In *Africa Region Working Paper Series No. 29*. Retrieved on 4th June 2004 from <http://www.worldbank.org/afr/wps/>
- Avenstrup, R., Liang, X. and Nellemann, S. (2004). *Kenya, Lesotho, Malawi and Uganda: Universal primary education and poverty reduction, in Reducing Poverty, Sustaining Growth. What Works, What Doesn't, and Why, A Global Exchange for Scaling Up Success, Scaling Up Poverty Reduction*. Shanghai: A Global Learning Process and Conference, (May 25 – 27).
- Brinkerhoff, D.W. and Crosby, B.L. (2002). *Managing policy reform: Concepts and tools for decision – makers in developing and transitioning countries*. Bloomfield: Kumarian Press Inc.
- Boyles, S., Brock, A., Mace, J., and Sibbons, M. (2002). *Reaching the poor: The 'cost' of sending children to school – a six country comparative research*
- Care Malawi (2004). *Underlying causes of livelihood vulnerability and insecurity in Malawi*.
- Caillods, f. and j. Hallak. (2004). *Education and PRSPs, a review of experiences*. Retrieved on 30th June 2005 from <http://www.UNESCO.org/iiep> .
- Castro – Leal, F. (1996). Who benefits from public education spending in Malawi? Results from the recent education reform, In *World Bank Discussion Papers*; 350. Washington D.C.: World Bank.
- Chang, G. (2004). *Development of a plan of action for education methodological brief*. Paris: United Nations Education and Scientific Cultural Organization.
- Chimombo, J.P.G. (1999). *Implementing educational innovations: A research of free primary education in Malawi*. Unpublished Phd. Thesis: University of Sussex
- Civil Society Coalition for Quality Basic Education. (2005). *Budget Monitoring Report*
- Colclough, C., Rose. P. and Tembon .M. (1994). Gender inequalities in primary schooling: The roles of poverty and adverse cultural practice. In *IDS working paper no 78*. Brighton: University of Sussex.
- Colclough, C. and Al – Samarrai, S. (2000). Achieving schooling for all: Budgetary expenditures on education in Sub-Saharan Africa and South Asia. In *'World Development Vol. 28, No. 11, pp. 1927±1944*. Retrieved on 9th September 2004 from www.elsevier.com/locate/worlddev

- Colclough, C. with Lewin, K., 1993, *Educating All the Children: Strategies for Primary Schooling in the South*, Oxford: Clarendon Press
- Creswell, J.W., Clark, V.L.P., Gutmann, M.L., and Hanson, W.E. (2003). *Advanced mixed methods research designs*. In A. Tashakkori and C. Teddlie (eds.), *Handbook of mixed methods in social and behavioral research*. (pp. 209). Thousand Oaks, CA: Sage
- Creswell, J.W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*, 2nd ed. Thousands Oaks, CA: Sage.
- Dye, T.R. (2000). *Understanding public policy*. New Jersey: Prentice Hall.
- Elmore, R.F. (1979). 'Backward mapping: Implementation research and policy decisions' in *Political Science Quarterly* Vol. 94 Number 4.
- Glewwe, P. (2002). Schools and skills in developing countries: Education policies and socioeconomic outcomes, *Journal of Economic Literature* Vol. XL, pp. 436–482
- Gubar, D. (1999). Getting What You Pay For: The Debate Over Equity in Public School Expenditures. *Journal of Statistics Education* v.7, n.2
- Gujarati, D. N. (2006). *Essentials of Econometrics*, McGraw – Hill Companies, Inc. New York
- Haddad, W.D. and Demsky T. (1995). *Education policy – planning process: an applied framework*. Paris: United Nations Education and Scientific Cultural Organization.
- Hanushek, E.A. and Kimko, D.D., 2000, 'Schooling, labor-force quality, and the growth of nations', *American Economic Review*, Vol 5: 1184–208
- Hartwell, A. (1994) Education Policy in Anglophone Africa: The Work of Education Commissions. In D. R. Evans (ed) *Education Policy Formation in Africa: A Comparative Research of Five Countries*. Washington, DC: USAID.
- Heneveld, and Craig (1997). *Education Financing and Education Policy: Primary Education*. Retrieved from www.law.utoronto.ca/documents/ihrp/HIV_rsenzweig.doc
- Johnson Foundation (1997). *The strategic and resource implications of a new model of learning: The 21st century learning initiative*. Wingspread Conference Centre
- Kadzamira, E.C. and Rose, P.M. (2001). 'Educational policy choice and policy practice in Malawi: Dilemmas and disjunctures'. In *IDS working paper no 124*. Brighton: University of Sussex.
- Kadzamira, E., Nthara, K. and Kholowa, F. (2004). Financing primary education for all:

- Case of Malawi. UK: Institute of Development Studies, University of Sussex.
- Lee, J.-W. and Barro, R.J.(1997), *Schooling Quality in a Cross Section of Countries*, Cambridge: National Bureau of Economic Research
- Lockheed, M.F. and Verspoor, A.M. (1991). *Improving primary education in developing countries: disparities in schooling in terms of residence, gender, economic status, and region*
- Maxcy, S.J. (2003). *Pragmatic threads in mixed methods research in mixed research in social sciences: The research for multiple modes of inquiry and the philosophy of formalism*. In A. Tashakkori and C. Teddlie (eds.), *Handbook of mixed methods in social and behavioral research*. (pp. 51 – 90). Thousand Oaks, CA: Sage
- Malawi Government (2005). *Annual economic report*. Government Printer: Lilongwe, Malawi.
- Malawi Government (2006). *Draft Sector Implementation Plan*. Ministry of Education
- Malawi Government (2000). *Policy Investment Framework*. Ministry of Education
- Malawi government (2007a). *Annual Economic Report*, Ministry of Economic Planning and Development
- Malawi Government (1994 – 2004). *Various budget Documents*. Ministry of Finance
- Malawi Government (2007b). *Performance Report on Millennium Development Goals*. Ministry of Economic Planning and Development.
- Mbewe, S. (2004). Rural communities-education relationship in developing countries: the case of Malawi, *In International Education Journal Vol. 5, No 3*, Retrieved on 30th June 2005 from <http://www.iej.cjb.net> .
- Moser, C, M'Chaju-Liwewe O, Moser A and Ngwira, N (2004). *DFID Malawi Gender Audit: Evaporated, invisibilized or resisted?* Lilongwe: DfID.
- Mc. Ginn, N. and Broden, A. (1995). *Framing questions, constructing answers: Linking Research with education policy for developing countries*. Boston: Harvard University Press.
- Mingat, A., Tan, J. and Sosale, S. (2003). *Tools for education policy analysis*. Washington: World Bank
- Ngwira, N. (2006). *Blundering and plundering in the Malawi Education Sector*. OSISA
- Pinder, C. (2004). *Economic pathways for Malawi's rural households*. Unpublished

research report for Care Malawi

- Psacharopoulos, G., and Patrinos H.A. (2002). *Returns to Investment in Education: A Further Update*. Retrieved on 9th September 2004 from <http://econ.worldbank.org>
- Rallis, S.F., and Rossman, G.B. (2003). *Mixed methods in evaluation contexts: A pragmatic framework*. In A. Tashakkori and C. Teddlie (eds.), *Handbook of mixed methods in social and behavioral research*. (pp. 491 – 512). Thousand Oaks, CA: Sage
- Reimers, F. and McGinn, N. (1997). *Informed dialogue: Using research to shape education policy around the world*. Westport: Praeger.
- Rose, P. (2003). Community Participation in School Policy and Practice in Malawi: Balancing Local Knowledge, National Policies and International Agency Priorities, In *British Association for International and comparative Education journal* Vol. 33. No.1. U.K.: Carfax Publishing.
- Ross, K.N. and Mahlck, L. (1990). *Planning the quality of education: The collection and use of data for Informed Decision – Making*. Paris: United Nations Education and Scientific Cultural Organization/ Pergamon Press.
- Rossman, G.B., and Wilson, B.L. (1994). Numbers and words revisited: being “shamelessly eclectic.” *Quality and Quantity: International Journal of methodology*, 28: 315 – 327.
- Vaduganathan, N. (2005). *Do Perceived Benefits or Costs Drive the Demand for Primary Education in Karnataka?* Department of Economics, Stanford University, Stanford, CA 94309
- Verspoor, A.M. (1994). Planning educational reforms: Use of contingency approach. In Husen and Postlethwaite (eds.). *The international encyclopedia of education* (2nd ed.). London: Pergamon Press.
- World Bank (2001). *World development report 2000/2001: Attacking poverty*. Washington, DC: World Bank.
- World Bank (2001 b). *Malawi public expenditures: Issues and options*. Washington: World Bank.

Appendices

Appendix 1: Budget data (1993/94 - 2003/04)

		1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	2000/01	2002/03	2003/04
Administration	PE	6,487,671	11,169,094	32,973,600	12,802,174	51,466,100	18,917,259	39,891,400	188,832,842	414,216,661
	ORT	20,362,273	40,026,052	39,467,870	48,567,394	44,577,013	102,139,422	191,119,755	171,434,738	394,930,300
Primary	PE	145,833,775	192,128,596	519,570,182	609,126,362	1,140,081,204	1,067,382,996	1,967,892,000	3,829,470,769	4,122,620,929
	ORT	14,300,670	40,734,258	84,491,300	99,426,364	190,409,328	205,707,962	273,349,500	586,411,667	932,581,429
	Total Primary Recurrent	160,134,445	232,862,854	604,061,482	708,552,726	1,330,490,532	1,273,090,958	2,241,241,500	4,415,882,436	5,055,202,358
Secondary	PE	20,668,108	17,936,383	54,949,900	34,111,646	112,303,604	93,948,342	209,990,400	410,045,063	544,728,776
	ORT	12,101,510	22,085,144	64,557,023	81,582,866	99,130,021	144,823,058	243,727,800	309,049,720	535,719,994
	Total Secondary Recurrent	32,769,618	40,021,527	119,506,923	115,694,512	211,433,625	238,771,400	453,718,200	719,094,783	1,080,448,770
Tertiary	PE	5,661,424	6,864,249	16,558,500	13,207,288	19,625,875	14,167,919	29,045,800	46,470,750	55,863,293
	ORT	4,405,454	3,740,117	31,423,800	38,999,538	72,455,973	20,683,190	52,133,000	66,937,297	158,035,180
	Total Tertiary recurrent	10,066,878	10,604,366	47,982,300	52,206,826	92,081,848	34,851,109	81,178,800	113,408,047	213,898,473
	Total PE	178,650,978	228,098,322	624,052,182	669,247,470	1,323,476,783	1,194,416,516	2,246,819,600	4,474,819,424	5,137,429,659
	Total ORT	51,169,907	106,585,571	219,939,993	268,576,162	406,572,335	473,353,632	760,330,055	1,133,833,422	2,021,266,903
	Total Recurrent	229,820,885	334,683,893	843,992,175	937,823,632	1,730,049,118	1,667,770,148	3,007,149,655	5,608,652,846	7,158,696,562

Source: Budget Documents (1993/94 – 2003/2004)

Appendix 2: Total Enrolment, Repetition, Dropout and Recurrent Budget Figures (Regressed Figures) (1993/94 - 2003/04)

Year	Division	Recurrent Budget	Enrolment	Repetition	Dropout	Financing Policy (Dummy Variable)
1994/95	NED	47932990	328293	57451.27	54168.35	.00
	CWED	26585434	440300	49287.35	46470.93	.00
	CEED	16776966	281642	77052.50	72649.50	.00
	SWED	49945004	294760	48657.70	45877.26	.00
	SEED	19512975	278044	51583.00	48635.40	.00
	SHED	42570073	273384	47842.20	45108.36	.00
1995/96	NED	143535400	414144	66263.00	49668.00	.00
	CEED	88601500	435685	69710.00	60945.00	.00
	CWED	137051400	689267	110283.0	122261.0	.00
	SEED	56986282	435743	69719.00	149799.0	.00
	SWED	78429500	443466	70955.00	45951.00	.00
	SHED	60452800	442516	70803.00	73651.00	.00
1996/97	NED	92548800	451869	69610.00	37957.00	.00
	CEED	74510400	455256	78499.00	38241.50	.00
	CWED	114636800	687242	106414.0	57728.33	.00
	SEED	58524900	497219	72998.00	41766.40	.00
	SWED	83622100	344622	55851.00	28948.25	.00
	SHED	61143100	406817	63135.00	34172.63	.00
1997/1998	NED	120313440	410871	74678.00	38747.00	.00
	CEED	96863520	508945	65881.00	51794.00	.00
	CWED	149027840	722826	82419.00	97437.00	.00
	SEED	76082370	477464	64214.00	55164.00	.00
	SWED	108708730	396606	53130.00	39669.00	.00
	SHED	79486030	389638	51599.00	55570.00	.00
1998/99	NED	204487949	473242	72081.00	38747.00	.00
	CEED	166842741	457421	64084.00	51794.00	.00
	CWED	295343085	689950	101079.0	97437.00	.00
	SEED	220031704	429945	63792.00	55164.00	.00
	SWED	182976948	401241	52536.00	39669.00	.00
	SHED	106332412	353986	51182.00	55570.00	.00
1999/2000	NED	337505711	481445	78127.00	33556.00	.00
	CEED	199542222	484568	74127.00	49282.00	.00

	CWED	426781290	717730	119830.0	79352.00	.00
	SEED	185906294	433558	64196.00	48977.00	.00
	SWED	252908545	390756	53867.00	38679.00	.00
	SHED	213647189	388223	61203.00	52062.00	.00
2000/2001	NED	350937336	525244	82733.00	36237.00	.00
	CEED	321224800	521996	77229.00	49920.00	.00
	CWED	423624300	807617	120563.0	83614.00	.00
	SEED	252116400	509658	83741.00	61456.00	.00
	SWED	243604200	402371	54968.00	37765.00	.00
	SHED	205265800	420949	62578.00	56509.00	.00
2001/2002	NED	545831400	251754	83222.00	35309.00	.00
	CEED	514836100	254894	77236.00	53725.00	.00
	CWED	925626074	398477	120377.0	82177.00	.00
	SEED	220031704	244177	83711.00	63681.00	.00
	SWED	470405000	190472	55101.00	42580.00	.00
	SHED	376001900	204732	62601.00	59779.00	.00
2002/2003	NED	410836000	507136	99062.00	37211.00	1.00
	CEED	635134700	543548	89328.00	55194.00	1.00
	CWED	1067792800	754751	139837.0	85687.00	1.00
	SEED	387501700	515817	96622.00	64297.00	1.00
	SWED	371807500	422750	64883.00	39318.00	1.00
	SHED	483837100	420199	71476.00	54177.00	1.00
2003/2004	NED	787200700	502993	98641.00	26026.00	1.00
	CEED	720319200	522551	91877.00	43405.00	1.00
	CWED	929005000	767159	147871.0	66551.00	1.00
	SEED	511789500	497334	102844.0	52261.00	1.00
	SWED	562967300	390941	72652.00	30785.00	1.00
	SHED	437652400	386865	81261.00	45539.00	1.00

Source: Calculations from Basic Education Statistics (1993 – 2004), Policy Documents and Budget Documents (1993 – 2004)

Appendix 3: Average repetition Rates, Dropout Rates and Standard 1 Enrolment (1993/94 - 2000/01)

Year	Repetition Rate	Dropout Rate	Standard 1 Enrolment
1993/1994	23.2	21.2	632000
1994/1995	20.4	17.2	
1995/1996	18	16.5	
1996/1997	11.6	15.8	
1997/1998	12.5	15.4	
1998/1999	10.2	15	
1999/2000	9.6	13.7	
2000/2001	16.5		

Source: Calculations from Annual School Census Data (1993 – 2001), Ministry of Education

Appendix 4: Regression Results

Descriptive Statistics

	Mean	Std. Deviation	N
RB	280525055.97	246901764.97	60
ENROLLMENT RATE	452884.48	137841.54	60
REPEATITION RATE	76742.55041666670000	22495.11208385645000	60
DROPOUT RATE	54931.198250000000000	22091.98171029375000	60
FINPOLIC	.2000	.4034	60

Correlations

		RB	ENROLLMENT RATE	REPEATITION RATE	DROPOUT RATE	FINPOLIC
Pearson Correlation	RB	1.000	.298	.698	.029	.670
	ENROLLMENT RATE	.298	1.000	.728	.419	.243
	REPEATITION RATE	.698	.728	1.000	.410	.440
	DROPOUT RATE	.029	.419	.410	1.000	-.112
	FINPOLIC	.670	.243	.440	-.112	1.000
Sig. (1-tailed)	RB	.	.010	.000	.412	.000
	ENROLLMENT RATE	.010	.	.000	.000	.031
	REPEATITION RATE	.000	.000	.	.001	.000
	DROPOUT RATE	.412	.000	.001	.	.198
	FINPOLIC	.000	.031	.000	.198	.
N	RB	60	60	60	60	60
	ENROLLMENT RATE	60	60	60	60	60
	REPEATITION RATE	60	60	60	60	60
	DROPOUT RATE	60	60	60	60	60
	FINPOLIC	60	60	60	60	60

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	FINPOLIC, DROPOUT RATE, ENROLLMENT RATE, REPEATITION RATE		Enter

a All requested variables entered; b Dependent Variable: RB

Model Summary

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change in Statistics					Durbin-Watson
Model					R Square Change	F Change	df1	df2	Sig. F Change	
1	.854	.729	.709	13313754.656	.729	36.977	4	55	.000	1.632

a Predictors: (Constant), FINPOLIC, DROPOUT RATE, ENROLLMENT RATE, REPEATITION RATE

b Dependent Variable: RB

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2621760064570305000.000	4	655440016142576000.000	36.977	.000
	Residual	974908346728468000.000	55	17725606304153970.000		
	Total	3596668411298773000.000	59			

a Predictors: (Constant), FINPOLIC, DROPOUT RATE, ENROLLMENT RATE, REPEATITION RATE

b Dependent Variable: RB

Coefficients

		Unstandardized Coefficients		Standardized Coefficients		Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
Model		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-111201724.927	68091516.362		-1.633	.108	-247660174.091	25256724.237					
	ENROLLMENT RATE	-633.316	187.251	-.354	-3.382	.001	-1008.575	-258.057	.298	-.415	-.237	.451	2.217
	REPEATITION RATE	9268.531	1281.012	.844	7.235	.000	6701.326	11835.735	.698	.698	.508	.362	2.764
	DROPOUT RATE	-1422.453	932.408	-.127	-1.526	.133	-3291.040	446.133	.029	-.201	-.107	.708	1.412
	FINPOLIC	226960721.973	51302122.670	.371	4.424	.000	124148969.900	329772474.046	.670	.512	.311	.702	1.425

a Dependent Variable: RB

Coefficient Correlations

Model			FINPOLIC	DROPOUT RATE	ENROLLMENT RATE	REPEATITION RATE
1	Correlations	FINPOLIC	1.000	.341	.062	-.456
		DROPOUT RATE	.341	1.000	-.160	-.297
		ENROLLMENT RATE	.062	-.160	1.000	-.625
		REPEATITION RATE	-.456	-.297	-.625	1.000
	Covariances	FINPOLIC	2631907790480609.000	16319452095.874	592514273.556	-29964161405.445
		DROPOUT RATE	16319452095.874	869383.985	-27858.533	-354218.217
		ENROLLMENT RATE	592514273.556	-27858.533	35062.884	-149863.143
		REPEATITION RATE	-29964161405.445	-354218.217	-149863.143	1640990.842

a Dependent Variable: RB

Collinearity Diagnostics

		Eigenvalue	Condition Index	Variance Proportions				
Model	Dimension			(Constant)	ENROLLMENT RATE	REPEATITION RATE	DROPOUT RATE	FINPOLIC
1	1	4.123	1.000	.00	.00	.00	.01	.01
	2	.741	2.359	.00	.00	.00	.01	.68
	3	7.323E-02	7.504	.18	.03	.01	.92	.09
	4	4.352E-02	9.734	.77	.30	.06	.04	.09
	5	1.939E-02	14.583	.04	.66	.93	.02	.13

a Dependent Variable: RB

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	667840.00	905786176.00	280525055.97	210799931.84	60
Residual	-304475872.00	290364704.00	1.41E-07	128545207.16	60
Std. Predicted Value	-1.328	2.966	.000	1.000	60
Std. Residual	-2.287	2.181	.000	.966	60

a Dependent Variable: RB

Runs Test

	RB	ENROLLMENT RATE	REPEATITION RATE	DROPOUT RATE
Test Value	204876864.00	435714.00	71778.50	50857.00
Cases < Test Value	30	30	30	30
Cases >= Test Value	30	30	30	30
Total Cases	60	60	60	60
Number of Runs	8	17	24	36
Z	-5.990	-3.646	-1.823	1.302
Asymp. Sig. (2-tailed)	.000	.000	.068	.193

a Median

Runs Test 2

	RB	ENROLLMENT RATE	REPEATITION RATE	DROPOUT RATE
Test Value	280525056.00	452884.47	76742.54	54931.19
Cases < Test Value	37	35	35	37
Cases >= Test Value	23	25	25	23
Total Cases	60	60	60	60
Number of Runs	12	17	24	31
Z	-4.788	-3.529	-1.653	.450
Asymp. Sig. (2-tailed)	.000	.000	.098	.653

a Mean

Appendix 5: Summary of responses from interview respondents

Interview issue by Sub Theme	General Response / Institution		
	District Assembly (DA)	Ministry of Education (MoE)	Ministry of Finance (MoF)
Theme 1.0. Public primary education budgeting			
1.1 Primary education financing in Malawi has been perennially inadequate, budget ceilings are always below the estimated budgets. Upon the releasing of budget ceilings there is short period of time whereby Ministries are required to readjust the budgets to fit into the ceilings. In the Ministry of Education, this involves adjusting budgets for almost all cost centers			
1.1.1 How is primary education budget readjustment done after ceilings are released from MoF?	Don't know, budget documents are top heavy, guess adjustments are done at MoE	Cuts are proportional to ceiling percentages and the estimates from cost centres	Responsibility of the line Ministries
1.1.2 How does the process of budget readjustment affect the primary education budgets?	Critical issues in need of recurrent attention are at times over – cut, after all we only handle the PE payments, the recurrent is not even enough to handle district office operations with exception of TandL materials which is handled centrally through Supplies Unit	MoE does not do sub sectoral budgets, it merely compiles budgets from cost centres; the proportional cuts according to given ceilings is the most practical; since duration between ceilings and dateline of budget submission cannot accommodate reworking by the districts	Responsibility of the line Ministries

1.1.3 How would you suggest as an alternative way to do the budget readjustment process?	After the ceilings, Districts should be allowed to consult with schools on prioritization of areas that could be necessary but not a priority in facilitation of schooling at the institutions; such areas would possibly be cut to accommodate the pre - defined ceilings	The MoF should release the ceilings in good time so that we consult with the budgets framers and we are more pragmatic in the readjustment process	Work out mechanisms and possibilities of projecting returns and revenue (domestic and international) so that line Ministries have information about budget ceilings in good time
1.1.4 What would be the reasons for your suggested alternative	Readjustments will be more realistically; hence tackling locally prioritised schooling problems and reducing resources spent on requests for virements on line items	Readjustment process will be more practical	Line Ministries will be able to readjust their budgets properly
1.2 Much as there is high potential of economic growth, the Malawi Growth and Development Strategy is pro – growth oriented; as such social sectors may not enjoy substantial increases in budgetary allocation as is expected. This will affect the education sector, and primary education may also be affected in one way or the other			
1.2.1 Should this be the case, what strategies are in place or in the pipeline to overcome this potential situation?	Schooling issues will be better done at the local assembly level, this remains one of the priorities; therefore we will be able to get the desired attention	Within the education sector, primary education remains a priority; therefore it will have a bigger proportion in terms of financial allocations. Furthermore, we are working on exploring parallel resources in financing primary education in collaboration with donors in the sector e.g. the Fast Track Initiative (FTI)	The MGDS does not mean to reduce attention to social sectors like education; all it seeks is to create local wealth that should be spent on social sectors; thereby the attention on wealth creating sectors. Simultaneously to this will be cushioning financing measures that will see to it that significant resources also goes to social sectors e.g. financing trend shows increasing levels on education financing
1.2.2 What commensurate structures are on the ground or will be set for the implementation of these strategies?	The development of local development fund	Comprehensive and generally acceptable and credible National Education Sector Plan – One of the requisite conditions in the application for FTI	Significant initiatives on the involvement of the private sector in the development and economic growth initiatives e.g. infrastructure development and communications sector
1.2.3 Specifically, enlighten more on who was or is involved in the development of such structures?	Ministry of Local Government and Rural Development and stakeholders	Ministry of Education and stakeholders	The people of Malawi

1.2.4 At what level have you or will involve the intended benefactors of such structures	Formulation and implementation (will)	Formulation and implementation	Formulation
Theme 2.0 Efficiency in public primary schools			
2.1 Primary sub sector in the Ministry of Education has for the past decade been allocated the largest share amongst the sub sectors in the Ministry of Education			
2.1.1 In your opinion why do you think this has been the case?	Size of the sector, in terms of pupil numbers and teachers	Covering for requisite necessities to implement the FPE	Government financing direction has been pro – social sectors, therefore education of the masses (basic education) has been seen to have a larger contribution in poverty reduction strategies
2.1.2 What relationship exists between the increase of funding to the primary sub sector and the internal efficiency in this sub sector in general?	We have been able to manage the initial increase in access to education (enrolment	Enrolment has increased, but quality remains poor and a challenge	The sector has had a low absorptive capacity of resources, especially on development programmes
2.1.3 What would you say are the reasons behind this relationship, if any?	Introduction of FPE	Introduction of FPE	Low capacity in terms of human capacity, rigid and obsolete institutional arrangements
Theme 3.0 Public primary education financial policies implementation			
3.1 The education sector intends to encourage partnerships in educational development and introduce measures to increase the internal efficiency of the system; it further intends to introduce cost-saving measures regarding the maintenance of existing teaching and learning materials and promote the expansion of private primary schools. Furthermore, it intends to introduce double shift system, focusing on more effective use of physical facilities, particularly in urban schools (PIF, 2000).			
3.1.1 Would you please explain how you have implemented or intend to implement these financial policies?	Do not have much knowledge, nevertheless most policy issues are implemented through directives from MoE	Most of the policies are yet to be implemented	Implementers should know better, otherwise our support is through the budget
3.1.2 What specific financial policy would you rate as highly achieved?	Double shift systems	Double shift systems	Not applicable

3.1.3 What could be the reasons behind this achievement?	Pressure on demand for school places	Pressure on demand for school places	Not applicable
3.1.4 What financial policy would you rate as the worst achieved?	Cost – sharing on maintenance of teaching and learning materials	Cost – sharing on maintenance of teaching and learning materials	Not applicable
3.1.5 What could be reasons behind the failure	Maintenance of TandL materials through cost – sharing imply that communities should make contributions; nonetheless, the communities have been massively indoctrinated to the concept that primary schooling is for free in totality; as such there is negative response on the same, once initiatives are made.	Maintenance of TandL materials through cost – sharing imply that communities should make contributions; nonetheless, the communities have been massively indoctrinated to the concept that primary schooling is for free in totality; as such there is negative response on the same, once initiatives are made	That would also mean contradiction to the political paradigm in this decade (Free things for all from public coffers (FTFA).

Appendix 6: Sample of interview guide

INTERVIEW SCHEDULE

Interview #...

Institution.....

Date.....

Theme 1.0. Public primary education budgeting

1.1 Primary education financing in Malawi has been perennially inadequate, budget ceilings are always below the estimated budgets. Upon the releasing of budget ceilings there is short period of time whereby Ministries are required to readjust the budgets to fit into the ceilings. In the Ministry of Education, this involves adjusting budgets for almost all cost centers.

(i) How are the adjustments done?

(ii) How does the process of readjustment in (i) above affect the primary education budgets?

(iii) If you were in a position to change how the readjustment process is done, what would you suggest as the best way possible?

(iv) What would be the reasons for your suggested method of budgetary readjustment?

1.2. Much as there is high potential of economic growth, the Malawi Growth and Development Strategy is pro – growth oriented; as such social sectors may not enjoy substantial increases in budgetary allocation as is expected. This will affect the education sector, and primary education may also be affected in one way or the other

(i) Should this be the case, what strategies are in place or in the pipeline to overcome this potential situation?

(ii) What commensurate structures are on the ground or will be set for the implementation of these strategies?

(iii) Would you specifically enlighten more on who was or is involved in the development of both the strategies and structures referred to in (i) and (ii) above?

(iv) At what level have you or will involve the people or partners mentioned in (iii) above?

Theme 2.0. Efficiency in public primary schools

2.1. Primary sub sector in the Ministry of Education has for the past decade been allocated the largest share amongst the sub sectors in the Ministry of Education.

(i) In your opinion why do you think this has been the case?

(ii) What relationship there exists between the increase of funding to the primary sub sector and the internal efficiency in this sub sector in general?

(iii) What would you say are the reasons behind this relationship, if any?

Theme 3.0 Public primary education financial policies implementation

3.1 The education sector intends to encourage partnerships in educational development and introduce measures to increase the internal efficiency of the system; it further intends to introduce cost-saving measures regarding the maintenance of existing teaching and learning materials and promote the expansion of private primary schools. Furthermore, it intends to introduce double shift system, focusing on more effective use of physical facilities, particularly in urban schools (PIF, 2000).

- (i) Would you please explain how you have implemented or intend to implement these financial policies?
- (ii) What specific financial policy would you rate as highly achieved?
- (iii) What could be the reasons behind this achievement?
- (iv) What financial policy would you rate as the worst achieved?
- (v) What could be reasons behind the failure in (iv) above?