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THE IMPACT OF PERFORMANCE CONTRACTING ON THE FINANCIAL PERFORMANCE OF PUBLIC UNIVERSITIES IN KENYA

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DECLARATION

This research project is my original work and has not been presented for award of any degree in any University.

Signature---------- Date----------

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D61/8452/2006

This project has been submitted for examination with my approval as University of Nairobi Examiner.

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DEDICATION

To my family, friends and work mates for their patience and encouragement throughout my study period.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CHE	Commission of Higher Education
CEO	Chief Executive Officer
GPRA	Government Performance and Results Act
JKUAT	Jomo Kenyatta University of Agriculture and Technology
KRA	Key Result Areas
KU	Kenyatta University
MDA	Ministries, Departments and Agencies
OECD	Organization of Economic Co-operation and Development
PBC	Performance Based Contracting
PBR	Pay by Results
PC	Performance Contract
PCD	Performance Contracting Department
PCSC	Performance Contracts Steering Committee
RBM	Results Based Management
SPS	Sector Performance Standards
SWOT	Strengths, Weaknesses, Opportunities and Threats
EGU	Egerton University
UoN	University of Nairobi

ABSTRACT

This study focuses on determining the effectiveness of performance contracts in improving the efficiency of financial operations of public universities. Accordingly, the objective of the study is to establish the impact of Performance Contracting on the financial performance of public universities. The study focuses on all the seven public universities over a ten year period to 2009. This ten year period was divided into a five year pre implementation and a five year post implementation period of performance contracting.

It was expected that the incomes of public universities would rise dramatically in the post performance contract period and as such the Cost-to-Income ratio would decline significantly reflecting a positive impact of performance contracting on the financial performance of public universities. It was also expected that the net surplus to cost ratio and net assets would increase significantly in the post implementation period and thus reinforce the positive role of performance contracting on the financial performance of public universities

The study finds that there was no significant variation in cost-to-income, net surplus-to-cost and net assets growth in the period before performance contracts implementation when compared to the post implementation period despite the public university industry's cost-to-income and net surplus-to-cost trends indicating improved cost savings over the ten year period. Consequently, though the findings do show some positive attribution of Performance Contracting to public university financial performance, the results are not conclusive.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A Performance Contract (PC) is an agreement between a government and a public agency which establishes general goals for the agency, sets targets for measuring performance and provides incentives for achieving these targets. They include a variety of incentive-based mechanisms for controlling public agencies— controlling the outcome rather than the process. A large number of governments and international organizations are currently implementing policies using this method to improve the performance of public enterprises in their countries. They are now considered an essential tool for enhancing good governance and accountability for results in the public sector (Trivedi, 2007).

The arguments for linking pay to performance are the following. Effective financial incentives provide an opportunity to improve the productivity of public sector workers. With compensation linked to performance, employees should expend more effort, lifting the quantity and/or the quality of their output. Thus by promoting better performance internally, governments can use incentives as a means of delivering superior public services. The introduction of performance related pay can also motivate employees to pursue professional development opportunities that previously offered little in the way of additional benefits for the individual. Productivity is therefore likely to improve both in the short run, because employees are working harder, and also

in the longer run, as staff professional development generates further gains in productivity (Lavy, 2007).

In the public sector, financial incentives also project a clear message about which outcomes are valued by society, and by how much. Employees can then prioritize tasks correctly and allocate more time and effort to higher valued tasks. This is the so-called "efficiency" case for performance related pay, which demands that incentive scheme designers have a detailed understanding of the priorities of the users being served (Brugess and Propper, 2007).

First introduced in France after the publication of the famous Nora Report on the reform of state-owned enterprises in France, today almost all OECD (Organization of Economic Co-operation and Development) countries use some variant of performance contracts in managing their public sector. Adoption of Performance Contracts received a massive fillip after they were introduced in New Zealand as part of that country's pioneering public sector reforms. They gained further momentum and legitimacy when they were introduced in the US government as part of the Government Performance and Results Act (GPRA) of 1993. In the U.K. they were introduced by Margaret Thatcher as part of the creation of Next Step agencies (Trivedi, 2007).

In Kenya, the policy decision to introduce Performance Contracts in the management of public resources was conveyed in the Economic Recovery Strategy for Wealth and Employment Creation (2003- 2007). Further, Kenya's Vision 2030 has recognized performance contracting among the key strategies to strengthen public administration and service delivery. The strategies will, in this regard, focus on deepening the use of citizen service delivery charters as

accountability tools, and entrenching performance as a culture in the Public Service (Government of Kenya Performance Evaluation Report, March 2010).

The government of Kenya guide-books on performance contracting defines it as a 'management tool for measuring performance against negotiated performance targets. It further states that a performance contract is a freely negotiated performance agreement between the government, acting as the owner of the agency and, the management of the agency. The Performance Contract specifies the mutual performance obligations, intentions and responsibilities between the two parties. The success of this policy principle requires acknowledgement of the reciprocal relationship between principal and agent (Obong'o, 2009).

On 15th January, 2004, the Government directed that all Permanent Secretaries/Accounting Officers of Ministries/Departments and Chief Executive Officers of State Corporations be placed on Performance Contracts by June, 2004. To roll out the strategy, the Government established the Performance Contracts Steering Committee (PCSC) in August, 2003. The Committee was gazetted on 8th April, 2005. The PCSC is responsible for the overall administration and co-ordination of Performance Contracts in the public service. In the process of implementing performance contracts, the Committee is assisted by an Ad-Hoc Negotiation/Evaluation Task Force comprising experts drawn from outside the public service. The Ad-Hoc Task Forces are responsible for negotiating Performance Contracts, evaluating and moderating performance of Ministries/Departments on behalf of the Permanent Secretary, Secretary to the Cabinet and Head of Public Service. The Ad-Hoc Evaluation Task Force also evaluates and moderates the

performance of State Corporations, Local Authorities and Tertiary Institutions (Government of Kenya Performance Evaluation Report, March 2010).

Performance Contracts were first introduced on 1st October, 2004, in 16 largely commercial State Corporations. In 2005/2006, all the then 35 Government Ministries/Departments, 116 State Corporations and five pilot Local Authorities signed Performance Contracts and were evaluated in September, 2006. In 2006/2007, all the 38 Government Ministries/Departments, 127 State Corporations and 175 Local Authorities signed Performance Contracts and were evaluated in October, 2007. During 2007/2008 all the 38 Government Ministries/Departments, 130 State Corporations and 175 Local Authorities signed Performance Contracts and were evaluated in October, 2008. Evaluation of performance in respect of the Financial Year 2008/2009 involved 45 Ministries/Departments, 139 State Corporations, 175 Local Authorities and 68 Tertiary Institutions.

Performance Contracts in Kenya is currently guided by the Sector Performance Standards (SPS) 2009 – 2030 circulated by the Office of the Prime Minister, Performance Contracting Department. The Performance Contract document is divided into five (5) parts and starts with the vision, mission and strategic objectives. The second part deals with commitments and responsibilities that are entrusted to the management board or council while the third part addresses the commitments and obligations due from the Government. The fourth part of the Performance Contract is concerned with performance monitoring and information flow. Lastly, the fifth part states the duration of the Performance Contract (Government of Kenya Performance Evaluation Report, March 2010).

The critical component for performance contracts is the implementation of the performance matrix which is divided into six (6) performance criteria. The financial and stewardship criteria involves various aspects of compliance with set budgetary targets while the service delivery criteria looks into issues of customer satisfaction, innovations and resolution handling. The non financial criteria focuses on competence development of employees with the operation criteria zeros in on the efficiency by which the organization conducts its functions both in terms of cost and timeliness. The performance matrix also deals with qualitative aspects of the organization in its fifth criteria such as employee satisfaction and the ability of the organization to create conducive work environment for all genders and persons of disability. Corruption eradication monitoring completes the matrix as the sixth criterion of performance measurement (Government of Kenya Performance Evaluation Report, March 2010).

In the performance evaluation reports, the Ad-Hoc Evaluation Task Force concluded that, performance contracting is, on the whole a valid and necessary strategy. It observed further, that the success of the strategy is highly dependent on political goodwill and focused leadership. The speedy entrenchment of the process is attributable to the consistent support and encouragement by the President and the Prime Minister. The enthusiasm, commitment, competence and focus provided by the Permanent Secretary, Secretary to the Cabinet and Head of the Public Service, together with the Permanent Secretary, Performance Contracting Department (PCD) have significantly contributed to the success of the Strategy (Government of Kenya Performance Evaluation Report, March 2010).

There has been a proliferation of universities in Kenya in the recent past and most Kenyans are finding them a cheaper alternative than sending their children abroad. Most of these institutions are relatively young; besides there is a lot of competition amongst them. To ensure they become more competitive these institutions need to retain high caliber staff both teaching and non-teaching staff through effective performance appraisals (Bitange, 2010).

At independence in 1963, following a 1961 Act of the East African High Commission, the Royal Technical College was upgraded to the University College of Nairobi. In 1970, the University of Nairobi was established by an Act of Parliament. Kenyatta College, then a diploma-awarding college of education, became a constituent college of the University of Nairobi under the name, Kenyatta University College. In 1981, a Presidential Working Party recommended the setting up of the second public university. In response, Moi University was established in 1984, with the academic mission of producing graduates specialised in technological and environmental fields. Kenyatta University became a full-fledged university in 1985, with additional faculties of arts, science, commerce and environmental science. Egerton university acquired university status in 1987, with specialization in agriculture and environmental science. Jomo Kenyatta University College of Agriculture & Technology, previously a constituent of Kenyatta university, was elevated to full university status in 1993 (Abagi, 1997). Currently, there are seven (7) Public Universities in Kenya which are: UON, KU, Moi, Egerton, Maseno, JKUAT and Masinde Muliro.

As noted by Abagi (1997), the development of the public university system in Kenya is a product of both history and politics. On the aftermath of the regime change in 2002, the system of having

the Country's President as the Chancellor of all public Universities was done away with as the new regime decentralized the management of public universities. Subsequently, and in keeping with Government policy the universities have, in tandem with other parastatals, adopted performance contracts as a tool for measuring and monitoring top management performance.

1.2 Statement of the Problem

Traditionally, the shortcomings of the public sector institutions such as public universities were seen as organizational problems capable of solution by appropriate application of political will, powerful ideas and managerial will. The overriding concern with economic growth has led to a refocusing. Over the years, poor performance of the public sector, especially in the management of public resources has hindered the realization of sustainable economic growth. Some of the factors adversely affecting performance include: excessive regulations and controls, frequent political interference, poor management, outright mismanagement and bloated staff establishment. To improve performance, the Government has been undertaking a number of reform measures in public institutions such as the introduction of performance contracts in the public universities (Obong'o, 2009).

With the Government having directed that all Permanent Secretaries/Accounting Officers of Ministries/Departments and Chief Executive Officers of State Corporations be placed on Performance Contracts in 2004, the top level administrators in public universities have also come under performance linked job descriptions as set by their respective performance contracts.

It is possible that external financial incentives could overwhelm public service motivation, since it suggests to the employee that their employer recognizes no association between output and

effort other than that of a pure market relationship (Brugess and Propper, 2007). There are two recent developments to this argument. Brugess and Propper (2007) point to suggestions that intrinsically motivated employees should actually work best when incentives are small or even absent and employers commit not to divert any surpluses or public sector "profits" away from the organisation's mission. Besley and Ghatak (2003) develop this further, arguing that that if public sector organisations post missions during their recruitment process, the natural sorting of applicants will do the job of financial incentives. On the other hand, financial incentives may help to focus effort on other organisation goals which could have been neglected if employers relied on public service motivation alone.

Consequently, the link between target based pay, as undertaken in performance contracts, and productivity and performance is unclear a priori. First, the employer incurs costs through the introduction and maintenance of variable pay which might outweigh its potential benefits (Freeman and Kleiner, 2005; Levine and Tyson, 1990). Second, variable pay has the potential to demotivate workers (Brown and Nolan, 1988). Employees may perceive the pay/performance link to be unfair if, for instance, performance is measured with error (Marsden, 2004). In the realm of public sector performance contracting, much less research into financial incentives has been undertaken, and empirical evidence is particularly scarce (Brugess and Propper, 2007). Trivedi (2007) observes that in 2005/06, one and a half years after the introduction of performance contracts, Kenyan Treasury budgeted to receive Kshs. 849 million in dividends from state corporations but ended up receiving Kshs 2.14 billion which amounted to an increase of 200%. According to a report from PCSC, achievements noted after the latest round of performance evaluation included a more efficient service delivery, reduced reliance on

exchequer, better accountability for results and increased transparency in management of public resources.

In view of these differences in perspectives among various studies both local and foreign, this study intends to clarify the extent to which performance contracting has improved on economic the financial viability of public universities in Kenya.

1.3 Objective of the Study

The objective of the study was to establish the impact of Performance Contracting on the financial performance of public universities in Kenya.

1.4 Significance of The Study

This study stands to benefit a cross-section of players including public institution regulators, administrators of public universities and the various public institutions and academics/researchers.

With regard to public institution regulators the study will give them insights as to the effectiveness of the present nature of performance contracts in improving financial efficiencies within public universities in particular and public institutions in general.

In regard to public university administrators, the study will serve to highlight the performance benchmarks that can serve to improve the on the benefits performance contracting to the public institutions.

For academics and researchers the study shall also help to add to the knowledge of pay-performance trends within the public sector, which has not been as forthcoming as in the private sector.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter starts with an introduction of the performance contracting environment in Kenya and proceeds to highlight the various theories connected with performance contracting and performance rating approaches subsequently concluding with a literature review summary.

2.2 Historical Background of Performance Contracting in Kenya

While the implementation of reforms and performance contracting has been going on since 2004, it has been carried out in the context of largely discordant strategic plans with scant linkages to a common and integrated vision. Lack of clear sector standards has resulted in sectors concentrating on inputs, process and output indicators which do not link performance to outcomes. There have been concerns from stakeholders including the general public about the Government services delivery, and the inconsistency between perceived performance of various government agencies and their performance ratings. The Kenya We Want conference held in early 2009 is the most recent forum where these concerns were spelt out. The public was very clear on what it expects from the government. In addition, there is no integrated performance approach that captures inter-institutional influences on performance.

In order to develop the performance standards for the various sectors, a series of Key Results Areas (KRAs) were identified on the basis of sector and sub-sector mandates and aligned to Vision 2030. The KRAs are considered essential components for a globally competitive nation.

For each KRA, indicators have been designed that enable measurement of progress. In addition, each indicator's current status has been determined and targets for immediate, medium term and long term proposed. Together, these KRAs, indicators and targets form a framework for effective performance management system aimed at delivering high quality services and building public confidence and trust.

The Performance Contract (PC) is modeled along four key performance areas of good corporate governance namely; financial stewardship, non-financial, services, operations, and dynamic indicators. This SPS framework will apply to the formulation of operation performance indicators. This is the criteria under which the core mandates of MDAs (Ministries, Departments and Agencies) and expected results are reflected. Therefore, the SPS will be implemented and mainstreamed within the context of performance contract cycle namely; identification and development of performance indicators and targets, pre-negotiations, negotiations, vetting, signing, and quarterly monitoring and reporting, annual reporting, evaluations and moderations (Government of Kenya Sector Performance Standards [SPS] Report, March 2010).

2.3 Review of Theories

2.3.1 Contract Theory

As with so many major concepts in economics, contract theory was introduced by Adam Smith who, in his monumental *Wealth of Nations* (1776, book III, ch. 2), considered the relationship between peasants and farmers through this lens. For instance, he pointed out the perverse incentives provided by sharecropping contracts, widespread in 18th-century Europe. However, it is fair to say that the issues of incentives and contract theory were largely ignored by economists

until the end of the 20th century. By then, the focus of economic theory was on the working of markets and price formation. Firms were viewed only as production technologies, and the issue of the separation between ownership and control was most often put aside. This black-box approach was, of course, quite unsatisfactory. At the turn of the 1970s, with the methodological revolution of game theory, more emphasis was placed on strategic interactions between a small number of players in a world where informational problems matter. From this new perspective, the allocation of resources is no longer ruled by the price system but by *contracts* between asymmetrically informed partners. Contract theory has deeply changed our view of the functioning of organizations and markets.

2.3.2 Compensation Theories

The central idea behind the Principal-Agent model is that the Principal is too busy to do a given job and so hires the Agent, but being too busy also means that the Principal cannot monitor the Agent perfectly. There are a number of ways that the Principal might then try to motivate the Agent: this note analyzes incentive contracts (similar to profit sharing or sharecropping); later notes discuss richer and more realistic models (Gibbons, 2004). Economic models of compensation generally assume that higher performance requires greater effort or that it is in some other way associated with disutility on the part of workers. In order to provide incentives, these models predict the existence of reward systems that structure compensation so that a worker's expected utility increases with observed productivity. These rewards can take many different forms, including praise from superiors and co-workers, implicit promises of future promotion opportunities, feelings of self-esteem that come from superior achievement and recognition, and current and future cash rewards related to performance. Economists, while

recognizing that non-monetary rewards for performance can be important, tend to focus on monetary rewards because individuals are willing to substitute non-monetary for monetary rewards and because money represents a generalized claim on resources and is therefore in general preferred over an equal dollar-value payment in kind (Jensens and Murphy, 1988).

Lazear and Rosen (1981) characterize merit pay as a "rank-order tournament," where individuals compete for salary "prizes" on the basis of relative, rather than absolute, performance. Where it is difficult for firms to obtain an *absolute* measure of worker productivity, or where it is cheaper to obtain a *relative* measure, firms establish a competitive game among employees and reward the winners with a prize. They offer the example of a handful of junior executives vying for a senior executive position within a firm. Differences in performance may be marginal and the best that can be achieved is a ranking of individuals. By offering promotion and a raise to the most productive, an incentive is created for all competitors to increase their output. Although the winner's new salary may exceed his/her value to the firm, it is an efficient arrangement if the total increase in productivity of all contestants is sufficiently large to justify the winner's higher salary (Lazear and Rosen 1981).

If the salary prize induces enough greater effort, the value of the resulting increase in productivity exceeds the higher salary costs. Alternatively, if production relies upon a high degree of cooperation among employees – in the form of common tasks, or the transfer of knowledge through on-the-job training – merit pay may be inefficient. Rank-order tournaments based upon relative performance create an incentive to withhold cooperative effort. According to Lazear (1989: 578-9): "Workers benefit not only by their own successes but also their rivals'

failures. Incentives exist, therefore, to making their opponents look bad." As the difference between the size of awards increases, and the relative importance of cooperation increases, the likely efficiency of a competitive game declines. And where sabotage is possible – such that one worker can adversely affect the output of another – the potential for the competitive game to be counterproductive increases.

2.3.3 Efficiency Wages

A separate line of development from neo-classical labour market theory is 'efficiency wage theory'. It abandons the conception of the spot market with a single wage for a given type of labour and acknowledges that employers can choose different wage levels to elicit different levels of effort. It therefore provides one potential means of explaining variations in wages among like workers. If wages fall short of what the worker considers a fair reference wage (such as the rate set in other firms) the theory posits that a rise in wages will raise workers' effort (Akerlof, 1982, 1984; Akerlof and Yellen, 1990). The rise might also allow a firm to recruit higher quality workers (Weiss, 1980), reduce turnover (Salop, 1979), and improve employee morale, all of which can be productivity-enhancing. But the wage must not be set too high as there are diminishing returns since effort can only rise so far. Accordingly, a wage exists – the efficiency wage – where the marginal cost of increasing the wage equals the marginal gain in productivity. The notable implication, from the perspective of this review, is that this wage is set independently of labour market conditions outside the firm: the principal determinant is the influence of wage changes on worker effort within the firm.

Shapiro and Stiglitz's (1984) version of efficiency wage theory focuses on the use of high wages to reduce work-avoidance (shirking) among employees. The problem arises because employment contracts are incomplete giving employees some discretion about the effort they put in. Where it is very costly to monitor worker inputs firms may choose instead to pay higher wages, thus increasing the cost of job loss to the worker. Krueger (1991) suggests that the higher rate of pay in company owned burger companies compared to franchised outlets in the same firms is accounted for by local franchise owners monitoring their employees more easily, and thus having less need to 'buy' the cooperation of their workers.

2.3.4 Linking Pay to Performance

Paying higher fixed wages under an employment contract where the firm pays a time based wage is only one way in which firms might tackle work-avoidance in situations where effort is difficult to monitor. An alternative is to offer a piece rate which allows the worker to decide how much to work and thus how much to get paid. Economists view piecework as a means of inducing greater effort by equating the marginal value of an extra unit of output with the marginal cost of producing it (Weitzman and Kruse, 1990). Both economists and sociologists point to the usage of piecework when monitoring the worker's effort is difficult. Economists couch this in terms of the imperfect information firms have about worker productivity when monitoring effort is difficult or costly. Sociologists, on the other hand, tend to view piecework – and other forms of performance-based pay - as a mechanism for managerial control when management can not provide adequate supervision (Gallie et al., 1998: chapter 3).

2.3.5 Equity Theory

These concepts first came to the fore among economists with Akerlof's (1982) partial gift exchange model of the labour contract in which he argues that worker effort depends on work norms of a relevant reference group and that the firm can alter these norms and thus effort by paying workers a wages 'gift' in excess of the minimum required in return for above- minimum effort. Akerlof and Yellen's (1990) 'fair wage effort' hypothesis suggests that workers form a notion of the fair wage and, if the actual wage is lower than this reference point, they will withdraw their effort in proportion. The fair wage thus plays a role in wage bargaining where entitlements are fashioned by reference points.

It is commonly recognised that exchanges between people are often conducted according to shared social norms of fairness and reciprocity which are anchored in reference points that are amenable to change. These notions are formalised in equity theory where the 'target relationship' sought by individuals is equality between their own reward per unit of input (effort, investment) and their cognition of others' rewards per unit of input. Employee perceptions of what they contribute to the organization and what they get in return, and how this ratio compares to others inside and outside the organisation, determines how fair they perceive their employment relationship to be (Adams, 1963). Naturally, only some 'others' are seen as salient in these comparisons and these are most likely to be in the same work- group, workplace or firm (Brown et al., 1998). This may explain why employees' pay satisfaction is so strongly associated with their wage rank within the workplace (Brown et al., 2005). However, employers have little influence over which individuals their employees choose as salient 'others' in their equity

assessments, so they may include similar workers in the external labour market. Such comparisons are particularly likely to be brought to bear in union bargaining.

The ‘inputs’ that form components of the equity calculation are variously defined in different occupations; in manual occupations it is common to prioritise physical effort, dexterity and skill in using tools and machines, whereas in non-manual occupations greater priority is accorded to literacy, communication, information processing, responsibility and so on. There is a broad correspondence between the ‘inputs’ forming the foundation of social norms of equity and the ‘investments’ that increase human capital. The pay premium for supervisory and managerial jobs, compared with workers they supervise, also rests upon a widely-held norm that responsibility for other peoples’ work should be rewarded.

2.3.6 Equalization Difference Theory

This approach reinforces the idea that wages are not simply the reward for effort or skill, but that the context in which that effort is delivered is important in determining the price of labour. Thus one should not necessarily expect wage equality between jobs of equal value, but rather equality between the overall ‘job package’, which takes into account not only money wages but also non-pecuniary benefits and the whole range of working conditions. The principle also departs from the traditional framework of supply and demand by according workers some measure of preference over issues other than the monetary rewards. The theory is often expressed in terms of the wage compensation for dangerous work that brings the risk of injury or even death. Most workers can be expected to value both higher wages and greater levels of safety, but some are presumed willing to accept some additional risk in exchange for a higher wage rate that is

sufficient to maintain the same overall level of utility. Equally, a specific firm can choose to invest in mechanisms and procedures that offer workers greater safety, or they can obtain the same level of profitability by economizing on safety and distributing the savings to workers in the form of higher wages.

2.3.7 Tournament Theory

Where promotion slots are limited, workers are thus motivated to supply effort by virtue of the wage increases they would earn if promoted, with the competition for promotions then resembling a form of tournament where 'winner takes all' (Lazear and Rosen 1981). The advantage of tournaments to an employer is that it is often easier to observe relative performance than absolute performance. Additionally, it may be in the interests of the company to structure pay so that the winner makes very large sums as a way of spurring on those lower in the hierarchy as well as giving the CEO herself the incentive to perform well.

Tournament theory therefore provides one possible explanation for the high wages of CEOs and, more generally, wage inequality within firms. Tournaments might be viewed as one form of "deferred compensation" whereby worker and firm commit to each other. Under schemes of deferred compensation, workers are paid above their marginal product when old and below it when young. This may be because firms want to limit costly labour turnover (Salop and Salop, 1976) or because distinguishing good from poor workers takes time.

2.4 Approaches to Performance Contracting

2.4.1 Performance Rating Approaches

Performance reporting approaches are found almost exclusively in the social services. These approaches simply require that performance measures (output, quality, outcome) be included in contracts and reported on by contractors. Contractors are required to track and report on these performance measures, but compensation and/or contract extensions are not necessarily tied to any levels of accomplishment. Performance reporting approaches to performance based contract transfer little if any risk for performance failure to contractors because cost reimbursement continues to be the primary payment mechanism (Martin L, 2007).

2.4.2 Bonus Approaches

Bonus approaches to performance based contracting (PBC) attempt to increase a focus on output, quality and outcome performance by allowing contractors to earn additional compensation or contract extensions by meeting or exceeding defined levels. In bonus approaches, the method of payment frequently remains cost reimbursement. Consequently, bonus approaches again represent minimal risk to contractors (Martin L, 2007).

2.4.3 Step-Up/ Step-Down Approaches

Step-up/step-down approaches place contractors at moderate risk for performance failure. In this approach, performance levels are stepped-up and stepped-down from a baseline. The baseline represents minimal acceptable performance. Performance above or below the baseline has associated positive or negative financial implications. In a PBC approach such as this, numerous performance measures can be employed, each of which is stepped-up and stepped-down in a

similar fashion. The implications of superior and inferior performance are made quite clear to contractors by this approach to PBC (Martin L, 2007).

2.4.4 Hold Back Approaches

Hold back approaches to PBC involve the government contracting agency retaining a portion of a contractor's compensation (e. g, 10%, 15%, etc.) and releasing it only if contractor performance is considered acceptable. Hold back approaches place contractors at moderate risk for performance failure. A simple application of the hold back approach applied to a one year (12 month) cost reimbursement social service contract might involve dividing the contractor's total compensation by 13. The contractor is paid 1/13 of the total contract amount monthly according to the terms of the contract. An additional 1/13 of the total contract amount is held back and paid to the contractor only after the contract term has expired and only if the contractor's performance is acceptable. A detailed definition of acceptable performance must, of course, to include up front as part of the contract (Martin L, 2007).

2.4.5 Gain Sharing Approaches

Gain sharing approaches involve contractors generating a portion (or in some cases all) of their compensation from cost savings achieved or additional revenues generated as a result of service provision. Gain sharing approaches fall into two main categories: (1) share-in-savings and (2) revenue sharing. Gain sharing approaches place contractors at moderate to major risk for performance failure depending upon the proportion of compensation tied to cost reduction or revenue enhancement.

In share-in-savings, incentives (bonus payments or other forms of increased compensation), are utilized to encourage contractors to reduce service delivery costs. The incentives are generated from contractor cost savings, hence the name: share-in-savings. Share-in-savings contracting was first utilized by the private sector and involved targeted reductions in energy consumption and related costs. Revenue sharing approaches are just the reverse of share-in-savings. In revenue sharing approaches, contractors can earn incentives payments (bonus payments or other forms of increased compensation), tied to increased revenue generation.

2.4.6 Milestone Approaches

In milestone approaches to PBC, clients are essentially treated as individual projects. Each client has a definable start point (entrance into service) and a desired end point (exit from service) and identifiable major milestones along the way. This approach is most likely borrowed from construction contracting which has a start date (ground breaking) and a stop date (a completed structure) and readily identifiable milestones along the way (e. g, foundation, framing, plumbing, dry walling, roofing, etc.) with contractors receiving “progress payments” as the milestones are accomplished.

2.4.7 Output Approaches

Output approaches to PBC for social services directly link contractor compensation to the amount of service provided (see Table 6). Output approaches are also referred to as “unit cost contracting” (Kettner & Martin, 1987) and are perhaps the oldest form of PBC for social services. Under output approaches, contractors are paid a fixed-fee, fixed price or fixed rate (identified in the contract) for each output, or unit of service, provided. Output approaches

represent a major transfer of risk for performance failure to contractors who only receive compensation for the actual number of outputs (units of service) provided at the specified contract rate or price.

2.4.8 Outcome Approaches

Outcome approaches to PBC tie contractor compensation directly and exclusively to results, accomplishment, or impacts. Outcome approaches constitute major risk to contractors for performance failure because they are only paid for the outcomes actually achieved.

2.5 Performance Evaluation Criteria in the Kenyan Public Service

The process of identifying performance targets is carried out after the budget process has been completed and institutions informed about their resource allocation. This ensures that targets are realistic and achievable within the available resources. The targets emanate from the institutions and are freely negotiated and not imposed arbitrarily by the government. The process of negotiation is carried out in two phases. The first phase is the pre-negotiation consultations. At this stage the negotiating parties carry out a SWOT analysis in order to determine the institution's performance capacity. This helps to determine whether the targets being developed are realistic, achievable, measurable, growth oriented and benchmarked to performance of similar institutions. This stage in the process is a storming stage where parties hold lengthy meetings, often disagreeing but finally come to a consensus. The second phase in the negotiation process is where all issues agreed upon are factored into the performance contract. The draft contract is then submitted to the performance contracting secretariat for vetting. The vetting process ensures among other things that the contracts comply with the guidelines and that they

are linked to the strategic objectives of the institutions, anchored on the strategic plans, growth oriented and relevant to the mandate of the institution (Abong'o, 2010).

2.6 Empirical Studies

The movement towards merit-based pay systems in American universities has been described as "slow and painful": largely abandoned in the 1930s and 1940s in favour of standard seniority-based increases that were easier to administer, they gained renewed popularity after 1950. Despite the expressions of support for merit pay by some administrators, particularly within business schools (Prewitt, Phillips and Yasin 1991), it is deemed by others as "pestiferous and professionally demoralizing" (Hoko 1988: 29). And while the data on merit pay in American universities in limited, the most exhaustive survey finds a "preponderance of evidence of merit plan failure," largely due to problems of implementation (Taylor, Hunnicutt and Keeffe 1991: 52). Similar views are expressed in Canadian universities, albeit with less exuberance. Most complaints stem from the difficulty in translating the university's objective function into clear, financial signals. A committee at the University of Guelph reported that: "Surveys of the Faculty have repeatedly found that faculty: a) support merit evaluations, and b) dislike and distrust the present system [due to] variable departmental rating distributions, changing amounts available for distribution, varying dispersal schemes". If the evaluation system is unpredictable, or the rules of the game are deemed to be biased, a merit plan will not evoke the correct response from faculty and, indeed, may engender sufficient discontent to be counterproductive (Grant, 1998).

Heneman (1992) argues that for merit plans to be both feasible and desirable, there must be a clear link between individual effort and performance; performance must be accurately measured; and higher pay must be an appropriate reward. Their success, therefore, depends on the nature of the work performed and the relative importance of competitive versus cooperative behaviour in the production process; on the capacity to measure output in a relatively inexpensive manner; and on the ability to provide clear financial signals consistent with the organization's objectives.

In 2004, the Government introduced Results Based Management (RBM) in the Public Service as a deliberate policy in order to improve performance, service delivery and governance. Result Based Management (RBM) is a participatory and team based management approach designed to achieve defined results by improving planning, programming, management efficiency, effectiveness, accountability and transparency. The introduction and institutionalization of RBM concept in the public service was aimed at refocusing the public servants mind-set on results in service delivery to citizens. RBM strategy would refocus the operational systems in both financial and human resources arrangements with more emphasis placed on results and not mere adherence to procedures (Abong'o, 2010).

Lawler (1971, p. 158) cites six separate studies of the relationship between pay and performance, and finds that "their evidence indicates that pay is not very closely related to performance in many organizations that claim to have merit increase salary systems. . . . The studies suggest that many business organizations do not do a very good job of tying pay to performance. The potential benefits of tying pay to performance are obvious, and it is surprising to economists that firms apparently resist introducing bonus-based compensation plans with enough financial "action" to have a major motivational effect. One explanation for the lack of pay-for-

performance plans, offered primarily by psychologists and behaviorists, is that monetary rewards are counter-productive. Deci (1972) argues that money actually lowers employee motivation, by reducing the "intrinsic rewards" that an employee receives from the job. Similarly, Slater (1980) concludes that "Getting people to chase money . . . produces nothing but people chasing money. Using money as a motivator leads to a progressive degradation in the quality of everything produced."

The originators of the British Workplace Industrial Relations Surveys reported their findings on payments-by-results (PBR) under the heading 'Systems of payment and control' alongside methods for controlling time keeping and payments while sick (Daniel and Millward, 1983: 200 -205). They went on to argue that "Traditionally the purpose of PBR systems of pay has been to encourage workers to increase effort and output….In practice….there has been a tendency for PBR to become more an instrument of management control designed to ensure consistency of output." In the Donovan tradition, PBR was treated as part of the problem of shop floor bargaining and a cause of industrial unrest (Daniel and Millward, 1983: 292).

On the other hand, Lazear (1979) shows how the common upward-sloping age-earnings profile can discourage workers from shirking. However, tournaments may make workers reluctant to help one another. Freeman and Gelber's (2006) laboratory experiment shows that total tournament output depends on pay inequality according to an inverse-U shaped function. They find productivity is lowest when payments are independent of the participants' performance; it rises to a maximum at a medium level of inequality, but then it falls at the highest level of inequality. Thus inequality can be too high as well as too low for efficiency. In one case study, a

fruit farm registered a 50 per cent increase in worker productivity after moving away from relative incentives to piece rates, an increase that the authors of the study explained by the shift away from a system in which workers knew that increased individual effort could have negative effects on co-workers' earnings (Bandiera, Barankay and Rasul, 2005). One implication is, however, that where a system generates positive externalities – as in the case of group incentive schemes – this should generate still greater productivity. A further implication is that notions of fairness are clearly important in the labour market.

Kohn (1988) in his article "Incentives Can Be Bad for Business," offers three reasons why merit-pay systems are counterproductive. "First, rewards encourage people to focus narrowly on a task, to do it as quickly as possible, and to take few risks . . . Second, extrinsic rewards can erode intrinsic interest . . . [Finally], people come to see themselves as being controlled by a reward." Engvall (2010) also adds that the notion of merit pay within academic circles tends to the individual at the expense of the community hence the notion of merit pay only makes sense for some organizations and not for academic organizations. This he states is due to the fact that true pay for performance is not possible unless outcomes are known and measurable in which case the work that professors do and the output they produce are far from known and measurable, but that does not make those outputs any less valuable.

With the public service reforms laying more and more emphasis on performance management, the introduction of performance contracts was not a surprise, reform initiatives had shown telltale signs of eventual movement in that direction. The performance contracts were introduced as a management tool for measuring performance against negotiated performance targets (Kobia and

Mohammed, 2006). They were a freely negotiated agreement between the government acting as the owner of an agency and the management of the agency (Greiling, 2005). Although signed at the corporate level, the outcome also to a large extent reflected on the performance of the individual managers, especially the chief executive officers (Abong'o, 2010).

2.7 Literature Review Summary

In theory, performance-based pay will generate inequalities in output and thus earnings where workers are heterogeneous in effort and ability, but it can only do so if there is a direct link at individual level between output and earnings; this link is not always present as some forms of performance-related pay measure output at group or even firm level (Bryson and Forth, 2006). Using the Workplace Employment Relations Survey 1998, Belfield and Heywood (2001) found incentive pay increased wage dispersion at workplace level whereas profit-sharing and share-ownership did not. Bryson and Freeman (2006) find the only performance-based pay associated with employees' gross earnings was individual performance-based pay, which was associated with higher earnings. It was also the only form of pay affecting workplace- level pay dispersion. The link between variable pay and productivity and performance is unclear a priori. First, the employer incurs costs through the introduction and maintenance of variable pay which might outweigh its potential benefits (Freeman and Kleiner, 2005; Levine and Tyson, 1990). Second, variable pay has the potential to demotivate workers (Brown and Nolan, 1988). Employees may perceive the pay/performance link to be unfair if, for instance, performance is measured with error or employees have not been consulted about the criteria governing the scheme (Marsden, 2004).

2.8 Conclusion of the Literature Review

Financial incentives may help to focus effort on other organisation goals which could have been neglected if employers relied on public service motivation alone. This brings us back to the efficiency argument in which financial incentives help well meaning, intrinsically motivated employees to prioritise tasks in the "right" way. While there is a large literature on financial incentives in the private sector, particularly at CEO level, actual empirical evidence forms only a relatively small part of this. In the public sector, much less research into financial incentives has been undertaken, and empirical evidence is particularly scarce (Brugess and Propper, 2007). Trivedi (2007) observes that in 2005/06, Kenyan Treasury budgeted to receive Kshs. 849 million in dividends from state corporations but ended up receiving Kshs 2.14 billion which amounted to an increase of 200%.

With the Government having directed that all Permanent Secretaries/Accounting Officers of Ministries/Departments and Chief Executive Officers of State Corporations be placed on Performance Contracts in 2004, the top level administrators in public universities have also come under performance linked job descriptions as set by their respective performance contracts. Accordingly, with regard to public universities in particular, the study seeks to find evidence that indeed there has been an improvement in financial efficiency in the public universities on account of the implementation of performance contracting.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter delves into the approach undertaken in data collection and analysis. The study applied empirical cross-sectional design to a sample of seven public universities out of the total of eighteen accredited universities. Secondary data on financial performance was analyzed using analysis of variance for the five-year periods, before performance contract implementation and after, to ascertain whether the introduction of performance contracts had had a significant impact on the financial performance of public universities.

3.2 Research Design

The study used empirical cross-sectional design. This is a study in which data are gathered just once in a single point in time over a period of time in order to answer a research question. The empirical analysis assessed the impact of performance contracts in public universities by assessing their financial performance before and after the implementation of the performance contracts in the respective institutions. In September 2005, the Performance Contract Steering Committee (PCSC) used this approach to evaluate the effectiveness of performance contracts introduced in the 16 Kenyan commercial state corporations in 2004 (Trivedi, 2007).

3.3 Population

The population of the study constituted all the 7 public universities in Kenya, as indicated by the Commission of Higher Education (CHE) in 2010.

3.4 Sampling

The sample comprised the seven public universities for a period of ten years to 2009; five years before the introduction of performance contracts and five years after.

3.5 Data Collection

Secondary data on financial performance, namely Income and Expenditure and the growth of the Balance Sheets of the Public Universities was collected. The data was sourced from the Accounts Departments of the various Universities and the Auditor General's office.

3.6 Data Analysis

Data collected on Universities Income and Expenditure Statements was analyzed using the cost-to-income ratio. In this case, the variance in the Cost-to-Income ratio for the seven universities was assessed, five years before the implementation of Performance Contracts and five years after, using the analysis of variance (ANOVA); the cost-to-income ratio indicated the level of cost saving given that cost savings were used as a financial benchmark indicator for public sector performance contracting to assess the extent to which a public institution reduces leakages in expenditure (Trivedi, 2007). In line with the findings of the PCSC, it was expected that the incomes of public universities would rise dramatically in the post performance contract period and as such the Cost-to-Income ratio would decline significantly reflecting a positive effect of performance contracting on the financial performance of public universities.

In similar fashion the study also looked into growth in costs and surpluses over the same period with a view to assessing whether the net surplus-to-cost ratio has improved in the post Performance Contract era to bring about increased cost savings. It was expected that the net surplus to cost ratio would increase significantly and thus reinforce the positive role of performance contracting on the financial performance of public universities.

The study also assessed the impact of performance contracting on the financial health of the public universities by looking into their Balance Sheet trends. In this regard growth in Net Assets was compared in the five year period before and after performance contract initiation using ANOVA. It was expected that there would be significant growth in Net Assets in the post performance contract period.

The F-test was applied to ascertain the significance of the variance in both the cost-to-income, net surplus-to-cost and the net asset growth performance indicators, five years before performance contract implementation and five years after using Microsoft Excel software.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter contains descriptive statistics of data collected and subsequent mean and variance analysis after which it concludes with a summary of the findings and their implications.

4.2 Descriptive Statistics

Cost-to-income	UoN	KU	MOI	JKUAT	EGU	MASENO	AVERAGE
2000	112.57%	99.04%	100.35%	98.79%		101.48%	102.45%
2001	105.60%	98.26%	98.89%			110.14%	103.22%
2002	108.93%	99.89%	92.70%			91.84%	98.34%
2003	107.14%	96.27%	102.06%			85.10%	97.64%
2004	96.30%	104.88%	96.18%	95.70%		98.79%	98.37%
2005	100.42%	96.31%	90.93%	109.53%	92.20%	90.96%	96.73%
2006	99.13%	87.74%	88.35%	100.39%	86.57%		92.44%
2007	94.95%	85.95%	96.86%	99.31%	97.08%		94.83%
2008	97.89%	88.09%	95.79%	99.96%	96.75%		95.70%
2009	95.51%	88.55%	114.32%	99.40%	96.32%		98.82%

Cost-to-income ratio above 100% indicates the occurrence of a deficit while that below 100% indicates the generation of a surplus. Industry average in cost-to-income ratio has generally improved over the 10 year period as it improved from 102.45% in 2000 to 98.82% in 2009.

From the above table all the highlighted Universities, with the exception of Moi University, generally recorded surpluses after the introduction of Performance Contracts as reflected by the relatively lower cost-to-income levels.

Net surplus-to-cost	UoN	KU	MOI	JKUAT	EGU	MASENO	AVERAGE
2000	-11.17%	0.97%	-0.34%	1.22%		-1.46%	-2.16%
2001	-5.31%	1.77%	1.13%			-9.20%	-2.90%
2002	-8.20%	0.11%	7.87%			8.89%	2.17%
2003	-6.67%	3.87%	-2.02%			17.51%	3.17%
2004	3.84%	-4.66%	3.97%	4.49%		1.22%	1.77%
2005	-0.42%	3.83%	9.98%	-8.70%	8.46%	9.93%	3.85%
2006	0.88%	13.97%	13.18%	-0.39%	15.51%		8.63%
2007	5.32%	16.34%	3.24%	0.69%	3.00%		5.72%
2008	2.16%	13.52%	4.39%	0.04%	3.36%		4.69%
2009	4.70%	12.93%	-12.52%	0.61%	3.82%		1.91%

The net-surplus-to-cost position also depicts a general improvement in the financial performance of public universities in the post performance contract period especially for Kenyatta University which recorded tremendous increase in its surplus-to-cost position from 2005 going forward. The University of Nairobi (UoN) and Moi University also witnessed considerable improvement in their net surplus-to-cost performance although Moi University recorded a sizeable decline in its 2009 performance. The 10-year industry average also bears similar trends in which a marked improvement in net surplus-to-cost was realized in the post performance contract period.

Net Assets growth	UoN	KU	MOI	JKUAT	EGU	MASENO	AVERAGE
2000	15.11%	-0.94%	3.83%	-1.59%			4.10%
2001	-13.13%	69.16%	4.83%			-3.22%	14.41%
2002	479.22%	-2.72%	3.38%		10.95%	4.04%	98.97%
2003	3.60%	-7.54%	-0.84%			10.30%	1.38%
2004	-1.80%	-8.43%	-1.56%			2.96%	-2.21%
2005	-0.32%	-2.49%	5.35%	-4.05%		15.23%	2.74%
2006	7.15%	18.93%	8.83%	0.89%	15.72%		10.30%
2007	181.18%	23.43%	2.41%	3.76%	31.44%		48.44%
2008	9.79%	21.51%	3.47%	3.29%	5.06%		8.62%
2009	0.56%	20.56%	-15.09%	2.92%	-6.30%		0.53%

With the exception of University of Nairobi, the rest of the highlighted universities recorded relatively higher net asset growth rates in the post performance contract period. University of Nairobi appears to have undergone significant assets valuation in 2002 and 2007 hence its capital base was influenced by other external factors other than the accumulation of surplus income from normal operations.

	Cost-to-income		Net surplus-to-cost		Net assets growth	
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
UoN	101.84%	6.24%	-1.49%	5.90%	68.14%	155.14%
KU	94.50%	6.44%	6.26%	7.27%	13.15%	23.55%
MOI	97.64%	7.21%	2.89%	7.15%	1.46%	6.53%
JKUAT	100.44%	4.29%	-0.29%	4.04%	0.87%	3.12%
EGU	93.78%	4.49%	6.83%	5.34%	11.38%	13.91%
MASENO	96.38%	8.93%	4.48%	9.51%	5.86%	7.10%
INDUSTRY	97.85%	3.26%	2.69%	3.44%	18.73%	31.72%

Cost-to-income trends indicate that the majority of the public universities have, on average, been able to break even over the ten year period to 2009 with the exception of the University of Nairobi (UoN) and Jomo Kenyatta University of Agriculture and Technology (JKUAT). Accordingly, the average net surplus over the ten year period was negative for these two Universities. Kenyatta University (KU) and Egerton University (EGU) recorded the highest mean net surplus-to-cost indicating they were able to post consistently superior cost savings compared to their peers over the ten year period. Moi University and Maseno University were the middle order performers. The industry's cost-to-income and net surplus-to-cost trend also indicates improved cost savings over the ten year period.

On the other hand, University of Nairobi (UoN) was the trailblazer when it came to net assets growth registering a ten year average growth of 68.14% with a standard deviation of 155.14% over the same period. Kenyatta University (KU) and Egerton University (EGU) were a distant second and third respectively. However, the UoN's net asset growth was mainly from external funding and not from cost saving by virtue of its generally negative cost savings profile over the period while KU and EGU net asset growth can be, to a large extent attributed to their high cost savings profile.

4.2.1 Mean Comparisons (Before and after PCs)

	Cost-to-income (Mean)		Net surplus-to-cost (mean)		Net Assets growth (mean)	
	Before	After	Before	After	Before	After
UoN	106.11%	97.58%	-5.50%	2.53%	96.60%	39.67%
KU	99.67%	89.33%	0.41%	12.12%	9.90%	16.39%
MOI	98.04%	97.25%	2.12%	3.65%	1.93%	0.99%
INDUSTRY	100.00%	95.70%	0.41%	4.96%	23.33%	14.13%

In comparing means before and after, data for three public universities, namely UoN, KU and Moi, was used for its completeness in particular and subsequently data available for all public universities constituted the industry. These three Universities controlled over 70% of the total asset base of all public universities by 2005 and have continued to accumulate assets at a much faster pace compared to their smaller peers (see appendix I and II). All the three universities witnessed improved cost-to-savings ratio in the period after the implementation of Performance Contract with similar results being posted by the industry. The net surplus-to-cost position also

improved across the board however with the exception of KU the net asset growth was in general decline.

4.3 Analysis of Variance (F-test)

		UoN	KU	MOI	INDUSTRY
Cost-to-income	F-statistic	6.76361*	1.57639	7.61723*	1.23137
	F Critical one-tail	6.38823	6.38823	6.38823	6.38823
Net surplus-to-cost	F-statistic	5.32381	2.32283	6.47356*	1.22114
	F Critical one-tail	6.38823	6.38823	6.38823	6.38823
Net Assets growth	F-statistic	7.30584*	9.71066*	10.21809*	4.75275
	F Critical one-tail	6.38823	6.38823	6.38823	6.38823

*Significant at the 95% Confidence Level

Complete 10 year data sets were only available for University of Nairobi (UoN), Kenyatta University (KU) and Moi University hence the F-test were carried out for these three public universities. In addition, an industry F-test was also carried out with all the available data for public universities to determine whether there was a significant variation in the five year period before performance contract implementation and the five-year period after implementation.

With regard to the three highlighted public universities, Moi University was the only university to register significant variation in its net surplus-to-cost ratio between the period before the implementation of performance contracts and the period after. Both UoN and Moi Universities registered significant variance in their cost-to-income before and after the inception of

performance contracting. On the other hand, the three universities managed to record significant variance in net assets growth between the pre and post implementation period.

Overall, industry statistics give indication that there was no significance in the variation of cost-to-income, net surplus-to-cost and net assets growth in the period prior to and the period after performance contracts came into operation for the public university industry as whole.

4.4 Summary of the Findings

Industry average in cost-to-income ratio has generally improved over the 10-year period as it improved hence cost-to-income trends indicated that the majority of the public universities have, on average, been able to break even over the ten year period to 2009. The 10-year industry average also bears similar trends in which a marked improvement in net surplus-to-cost was realized in the post performance contract period. In regard to net assets growth, the public universities recorded relatively higher net asset growth rates in the post performance period with the exception of the University of Nairobi. University of Nairobi appears to have undergone significant capital injections in 2002 and 2007 hence its capital base was inflated by external funding as opposed to internal funding arising mainly from the accumulation of surplus income from normal operations.

University of Nairobi (UoN) and Moi Universities registered significant variance in both cost-to-income and net assets growth before and after the inception of performance contracting while Kenyatta University recorded significant variance in net assets growth between the pre and post implementation period.

Overall, industry statistics give indication that there was no significance in the variation of cost-to-income, net surplus-to-cost and net assets growth in the period prior to and the period after performance contracts came into operation for the public university industry as whole.

4.5 Implications of the Findings

General trends in cost-to-income, net surplus-to-cost and net assets growth are a pointer to improvements in financial performance of public universities on the aftermath of performance contract implementation. Despite this, the findings of the study also reveal that there was no significant variation in cost-to-income, net surplus-to-cost and net assets growth in the period prior to and the period after performance contracts came into operation for the public university industry and these results therefore render mixed evidence on the effectiveness of performance contracting as a tool to enhance the financial performance of public universities.

On the whole, much less research into financial incentives has been undertaken in the realm of the public sector and empirical evidence is particularly scarce (Brugess and Propper, 2007). However, Trivedi (2007) did observes that in 2005/06, Kenyan Treasury budgeted to receive Kshs. 849 million in dividends from state corporations but ended up receiving Kshs 2.14 billion which amounted to an increase of 200%. Nevertheless, these findings were not subjected to statistical significance tests and as such may not be deemed to have been conclusive although they do indicate a general improvement in the performance of state corporations in the post performance contract period. Similarly this study does find consistent patterns that show a general improvement in financial performance of public universities on introduction of

performance contracts but subsequent statistical testing does not give a strong indication of financial performance improvement on the aftermath of performance contracting.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The objective of this study was to establish the impact of Performance Contracting on the financial performance of public universities in Kenya. The study used empirical cross-sectional design to assess the impact of performance contracts in public universities by assessing their financial performance before and after the implementation of the performance contracts in the respective institutions. In September 2005, the Performance Contract Steering Committee (PCSC) used a similar approach to evaluate the effectiveness of performance contracts introduced in the 16 Kenyan commercial state corporations in 2004 (Trivedi, 2007).

Data collected on Universities Income and Expenditure Statements was analyzed using the cost-to-income ratio. In this case, the variances in the cost-to-income ratio, net surplus-to-cost ratio and net assets growth for the seven universities were assessed, five years before the implementation of Performance Contracts and five years after, using the analysis of variance (ANOVA). It was expected that the incomes of public universities would rise dramatically in the post performance contract period and as such the Cost-to-Income ratio would decline significantly reflecting a positive effect of performance contracting on the financial performance of public universities while the net surplus-to-cost ratio and net assets growth would increase significantly and thus reinforce the positive role of performance contracting on the financial performance of public universities.

The study found that both UoN and Moi Universities registered significant variance in both cost-to-income and net assets growth before and after the inception of performance contracting. While Kenyatta University recorded significant variance in net assets growth between the pre and post implementation period. But for the industry as a whole, the study did not find any significance in the variation of cost-to-income, net surplus-to-cost and net assets growth in the period prior to and the period after performance contracts came into operation for the public university sector as whole.

5.2 Conclusions

In general the findings of the study do corroborate those of Trivedi (2007) who observed that in 2005/06, Kenyan Treasury budgeted to receive Kshs. 849 million in dividends from state corporations but ended up receiving Kshs 2.14 billion which amounted to an increase of 200%. However, subsequent statistical testing of the industry as a whole does not reveal a significant variance in financial performance in the post performance contracting period as compared to the period before its implementation.

In this context, the public university industry's cost-to-income and net surplus-to-cost trend indicate improved cost savings over the ten year period. In addition, trends in the average mean before and after show a general improvement of financial performance in the post implementation phase of the performance contracts. However, there was no significant variation in cost-to-income, net surplus-to-cost and net assets growth in the period before performance contracts implementation when compared to the post implementation period. Consequently

though the findings do show some positive attribution of Performance Contracting to public university financial performance, the results are not conclusive.

5.3 Policy Recommendations

Although the findings of the study do not show strong evidence of the effectiveness of performance contracts in improving the financial viability of public universities, the general indications are that Performance Contracts have had some impact on performance and as a result the Government should continue with this policy in all public universities.

At the individual level, performance contracting implementation appears to have been most effective at the University of Nairobi (UoN) and Moi University and to a smaller extent Kenyatta University. Both universities have been able to reign in costs significantly in the post performance contracting period leading to increased surpluses. Accordingly, whereas other public universities have shown indications of improved performance in the same period, they are yet to post significant cost savings.

In view of this, other public universities should adopt the operational techniques of their trailblazing peers with a view to improving on their cost efficiencies over time. Further, future performance contracts should also be tailored with more emphasis on cost savings so that all public universities may give more attention to this performance contracting criterion in their budgetary operations.

5.4 Limitations of the Study

In the collection of financial data from the public universities, the study encountered gaps in the data as the office of the auditor general did not have all the data for all the seven public universities over the ten-year period to 2009.

By focusing on the impact of performance contracting on financial performance, the study restricted its scope to quantitative aspects of performance contracting and did not delve into the qualitative aspects of performance contracting.

Further, there were instances whereby net assets growth emanated from external sources thus distorting the overall net asset growth trend and as such the office of the auditor general accounts did not distinguish net asset proceeds due to normal internal operations and those resulting from non-recurring external funding.

The study also incurred the constraint of time as the data collection was limited to a 10-year period, five years before and five years after. Going forward, a longer study period may improve the normalization of the variances in cost-to-income, net surplus-to-cost and net assets growth and subsequently enhance the findings of the study.

5.5 Suggestions for further studies

Given that this study's findings do not indicate that Performance Contracts have had a strong impact on the financial performance of public universities, there is need to expand the scope of

the study to assess whether performance contracting has had a greater impact on other government institutions and state corporations being operated under performance contracts.

There is also need to undertake the study over longer time periods, say ten years before and after performance contracting and assess whether financial performance improves or deteriorates over longer periods of time with the implementation of performance contracting.

Further studies may also look into the qualitative aspects of performance contracts such employee satisfaction as opposed to limiting themselves to the quantitative aspects such as cost savings and assets growth.

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Appendix I: Financial Data (Before Performance Contract Implementation)

		UoN	KU	MOI	JKUAT	EGU	MASENO
		Kshs	Kshs	Kshs	Kshs	Kshs	Kshs
2000	Income	1,953,243,253	1,175,749,199	1,002,839,000	468,380,794		484,682,003
	Expenditure (Cost)	2,198,764,355	1,164,477,274	1,006,302,000	462,721,693		491,852,644
	Surplus	-245,521,102	11,271,925	-3,463,000	5,659,101	0	-7,170,641
	Net Assets	2,198,428,170	1,400,697,441	3,979,608,000	2,240,168,220		1,204,296,327
2001	Income	2,492,478,703	1,253,257,757	1,094,472,000			551,788,951
	Expenditure (Cost)	2,632,118,520	1,231,496,376	1,082,280,000			607,724,338
	Surplus	-139,639,817	21,761,381	12,192,000	0	0	-55,935,387
	Net Assets	1,909,781,900	2,369,410,929	4,171,699,000		1,441,649,000	1,165,503,587
2002	Income	2,264,873,654	1,324,464,444	1,343,621,000			576,623,784
	Expenditure (Cost)	2,467,066,817	1,323,056,823	1,245,552,000			529,553,318
	Surplus	-202,193,163	1,407,621	98,069,000	0	0	47,070,466
	Net Assets	11,061,753,570	2,304,897,531	4,312,725,000		1,599,463,000	1,212,574,052
2003	Income	2,841,905,869	1,514,721,577	1,596,830,000			672,006,209
	Expenditure (Cost)	3,044,949,250	1,458,285,917	1,629,789,000			571,854,369
	Surplus	-203,043,381	56,435,660	-32,959,000	0	0	100,151,840
	Net Assets	11,459,805,543	2,131,035,668	4,276,602,000			1,337,488,643
2004	Income	3,175,587,131	1,578,644,152	1,722,105,000	921,623,023		621,300,994
	Expenditure (Cost)	3,058,123,126	1,655,720,922	1,656,361,000	881,985,464		613,794,089
	Surplus	117,464,005	-77,076,770	65,744,000	39,637,559	0	7,506,905
	Net Assets	11,253,843,592	1,951,412,517	4,209,710,000	2,304,706,376		1,377,095,968

Appendix II: Financial Data (After Performance Contract Implementation)

		UoN	KU	MOI	JKUAT	EGU	MASENO
		Kshs	Kshs	Kshs	Kshs	Kshs	Kshs
2005	Income	4,572,287,357	2,517,537,604	2,483,416,000	1,166,626,118	1,959,201,000	1,013,855,102
	Expenditure (Cost)	4,591,691,392	2,424,728,920	2,258,132,000	1,277,786,016	1,806,313,000	922,245,131
	Surplus	-19,404,035	92,808,684	225,284,000	-111,159,898	152,888,000	91,609,971
	Net Assets	11,218,267,530	1,902,791,836	4,434,994,000	2,211,286,191	2,711,863,000	1,586,852,570
2006	Income	4,822,963,873	2,856,849,499	3,244,142,000	1,582,742,207	2,471,089,000	
	Expenditure (Cost)	4,780,832,588	2,506,714,691	2,866,306,000	1,588,926,162	2,139,203,000	
	Surplus	42,131,285	350,134,808	377,836,000	-6,183,955	331,886,000	
	Net Assets	12,020,310,652	2,262,926,641	4,826,662,000	2,231,027,792	3,138,291,000	
2007	Income	5,773,859,138	3,360,225,103	3,419,140,000	1,861,117,008	2,437,233,000	
	Expenditure (Cost)	5,482,352,401	2,888,217,406	3,311,805,000	1,848,306,373	2,366,158,000	
	Surplus	291,506,737	472,007,697	107,335,000	12,810,635	71,075,000	
	Net Assets	33,798,834,639	2,793,036,336	4,942,893,000	2,314,970,849	4,125,056,000	
2008	Income	5,896,056,404	3,862,084,321	4,041,590,000	2,041,598,121	2,652,052,000	
	Expenditure (Cost)	5,771,381,506	3,402,203,984	3,871,522,000	2,040,874,491	2,565,861,000	
	Surplus	124,674,898	459,880,337	170,068,000	723,630	86,191,000	
	Net Assets	37,106,502,690	3,393,916,669	5,114,423,000	2,391,123,987	4,333,957,000	
2009	Income	6,534,773,361	4,055,306,805	4,148,226,000	2,652,784,905	2,672,237,000	
	Expenditure (Cost)	6,241,443,265	3,590,969,069	4,742,137,000	2,636,748,293	2,574,006,000	
	Surplus	293,330,096	464,337,736	-593,911,000	16,036,612	98,231,000	
	Net Assets	37,316,148,947	4,091,631,150	4,342,621,000	2,460,985,675	4,060,858,000	

Appendix III: Industry Analysis of Variance Tables

Cost-to-income (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.957022	1.000048
Variance	0.000555	0.000683
Observations	5	5
df	4	4
F	1.231368	
P(F<=f) one-tail	0.422512	
F Critical one-tail	6.388233	

Net surplus-to-cost (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.049593	0.004113
Variance	0.000617	0.000754
Observations	5	5
df	4	4
F	1.221138	
P(F<=f) one-tail	0.425576	
F Critical one-tail	6.388233	

Net asset growth (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.141297	0.233315
Variance	0.038424	0.182621
Observations	5	5
df	4	4
F	4.752754	
P(F<=f) one-tail	0.080145	
F Critical one-tail	6.388233	

Appendix IV: University of Nairobi (UoN) Analysis of Variance Tables

Cost-to-income (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.975798	1.061091
Variance	0.000544	0.00368
Observations	5	5
df	4	4
F	6.763607	*
P(F<=f) one-tail	0.045499	
F Critical one-tail	6.388233	

Net surplus-to-cost (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.025272	-0.05499
Variance	0.000601	0.003201
Observations	5	5
df	4	4
F	5.323809	
P(F<=f) one-tail	0.067109	
F Critical one-tail	6.388233	

Net asset growth (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.396731	0.966002
Variance	0.627602	4.585163
Observations	5	5
df	4	4
F	7.305843	*
P(F<=f) one-tail	0.039996	
F Critical one-tail	6.388233	

Appendix V: Kenyatta University (KU) Analysis of Variance Tables

Cost-to-income (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.893306	0.996711
Variance	0.001621	0.001028
Observations	5	5
df	4	4
F	1.576392	
P(F<=f) one-tail	0.335009	
F Critical one-tail	6.388233	

Net surplus-to-cost (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.121172	0.004113
Variance	0.002315	0.000997
Observations	5	5
df	4	4
F	2.322828	
P(F<=f) one-tail	0.217196	
F Critical one-tail	6.388233	

Net asset growth (F-test)

	5 years before PCs	*5 years after PCs*
	Variable 1	*Variable 2*
Mean	0.163864	0.099046
Variance	0.011402	0.110719
Observations	5	5
df	4	4
F	9.710658	*
P(F<=f) one-tail	0.024523	
F Critical one-tail	6.388233	

Appendix VI: Moi University Analysis of Variance Tables

Cost-to-income (F-test)

	5 years before PCs		*5 years after PCs*
	Variable 1		*Variable 2*
Mean	0.972504		0.980358
Variance	0.010317		0.001354
Observations	5		5
df	4		4
F	7.617231	*	
P(F<=f) one-tail	0.037275		
F Critical one-tail	6.388233		

Net surplus-to-cost (F-test)

	5 years before PCs		*5 years after PCs*
	Variable 1		*Variable 2*
Mean	0.036536		0.021206
Variance	0.00983		0.001519
Observations	5		5
df	4		4
F	6.473563	*	
P(F<=f) one-tail	0.04892		
F Critical one-tail	6.388233		

Net asset growth (F-test)

	5 years before PCs		*5 years after PCs*
	Variable 1		*Variable 2*
Mean	0.009941		0.019277
Variance	0.008682		0.00085
Observations	5		5
df	4		4
F	10.21809	*	
P(F<=f) one-tail	0.022422		
F Critical one-tail	6.388233		