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STUDY OF THE MODERATING EFFECT OF GLOBAL COMPETITIVENESS ON THE RELATIONSHIP BETWEEN PERFORMANCE CONTRACTING AND MEASUREMENT, AND PUBLIC SERVICE DELIVERY IN KENYA

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Abstract

In a world characterized by macroeconomic uncertainty, rapid social change and technological innovation and mounting citizen expectations of what government ought to deliver, there is imperative need to expose the management of the public sector and the country to global market forces and competition. Among the external factors that influence the performance of a government and the delivery of public services are the outcomes of relationships with other nations. This paper therefore, explored the moderating effect of global competitiveness on the relationship between performance contracting, measurement and service delivery (expressed as customer satisfaction) in Kenya. The study was based on the results of measurement and evaluation of the performance of 470 public agencies that operated on performance contracts between 2004 and 2011. Using regression analysis, it was found initially that global competitiveness had a weak positive relationship with customer satisfaction. The results show that global competitiveness explained 0.7 percent (Δ R2 = 0.007) on the direct effect of performance measurement on customer satisfaction and had an average mean of 3.698 on a scale of 1 (very low) and 7 (very competitive). The change in the F-value caused by the

moderating effect was 0.343 and was not significant since the derived p-value of 0.569 was greater than 0.05. Since the derived p-value was greater than 0.05, the hypothesis was supported and was that there is no significant moderating effect of global competitiveness on the relationship between performance contracting, measurement and public service delivery in Kenya. The performance measurement variable had a t-value of 5.789 and was statistically significant while the effect of global competitiveness was positive although not statistically significant.

Keywords: Performance contracting, performance measurement, performance improvement, competitive advantage, global competitiveness, service delivery, customer satisfaction

INTRODUCTION

The quest for excellence in the delivery of public services has given rise to all manner of innovations by governments and public service management in both developed and developing countries. This is in the belief that regional or global partnerships may have potential to positively impact on the welfare of the citizen and ultimately, on the delivery of public services. Effective participation in meaningful regional or global partnerships, whether this is trade or simply diplomacy, is premised largely on what a country can offer other countries (whether this is the exchange of goods, services and manpower or strategic locationing), which is in turn dependent on the competitive advantage a country is able to create for itself. The significance of competitive advantage is that it is the foundation of global competitiveness for a country. Porter (1990), defines competitive advantage of a nation as its capacity to entice firms (both local and foreign) to use the country as a platform from which to conduct business. He proceeds to opine that government has a critical role to play in the creation of competitive advantage for the country. This role entails acting as a catalyst to encourage and even push companies to raise their aspirations and move to higher levels of competitive performance; stimulating early demand for advanced products; focusing on specialized factor creation; and stimulating corporate rivalry by limiting direct cooperation and enforcing anti-trust regulations, (Porter, 1990).

As observed, competitive advantage is a critical construct for regimes desirous to improve the welfare of their citizens. This in turn forms a veritable foundation for the global competitiveness of a country. It is no great wonder then that a government would seek to establish whether, and the extent to which global competitiveness affects or influences the relationship among performance contracting, measurement and public service delivery. The

purpose of the study has been to analyze the moderating effect of global competition on the relationship between performance contracting and measurement and the delivery of public services by 470 agencies. These are made up of 46 ministries and accounting departments, 178 state corporations, 175 local authorities and 71 tertiary institutions.

LITERATURE REVIEW

This study considered and analyzed the effects of global competitiveness - as a key factor in governance and how, and the extent to which, it influences performance and ultimately service delivery. As mentioned above, global competitiveness is grounded on the competitive advantage that a country is able to muster. Further, that government has a critical role in the creation of competitive advantage, driven largely by excellence in the execution of policies, programs and projects. Competitive advantage is therefore, impelled by public sector efficiency and effectiveness and customer centric approach to public sector governance; this then is the link that defines the difference in performance excellence between virtually resource-deficit countries and resource-abundant nations, mainly in the developing world, imparting a clear and huge performance margin for the former. This then is about performance improvement and management, and efficiency in the exploitation and management of public resources.

According to Hansen et al, (1989), there are two streams of research regarding the determinants of firm performance. One is based on the economic tradition and emphasizes external market factors, while the other builds on the behavioral and sociological paradigms focusing on organizational factors as they fit into the environment; the latter therefore focuses on factors internal to the firm. Organizational researchers have developed a wide variety of performance models. Research by Cameron, 1986; Goodman and Pennings, 1977; Steers, 1975 suggests that managers can influence organizational performance by influencing the behavior of employees. This entails taking consideration of multiple factors, among them the formal and informal structures, planning, reward, control and information systems, their skills and personalities and relating these to the environment.

One research stream that has managed to capture these multidimensional aspects is that of organizational climate. The latter encompasses the perceived properties and characteristics found in the work environment that result from actions taken consciously or unconsciously by an organization and which affect behavior, (Steers and Lee, 1983:82). It refers to a broad class of organizational and perceptual variables that reflect individual - organizational interactions which affect the behavior of the individual and provides the conceptual link between analysis at the organizational level and at the employee level. This means that changes in organizational structures, systems and practices can alter climate measures and hence

individual performance. Other studies have suggested that organizational climate was directly linked to performance (Lawler *et al* (1974), and that there are strong linkages between managerial practices and dimensions of organizational climate and firm performance (Simmons and Mares, 1983; Likert, 1961). These studies brought out three key classes of factors that influence performance. These are the following: Organizational factors – structure, systems, size, history; Environmental factors – political, sociological, economic, technological; and People factors – skills, personalities, age.

The study selected key constructs from each of the three categories. That is; organizational factors – performance contracting and measurement system, environmental factors – political stability and global competitiveness and people factors - effective and efficient public service. As suggested elsewhere in this study the issue of political stability is critical to the performance of the public service and the country at large (*Ndubai et al (2016*).

Data on global competitiveness is compiled by the World Economic Forum (WEF) of the World Bank. The World Economic Forum in its Global Competitiveness Report, defines competitiveness in the context of a grouping of factors that drive productivity and competitiveness. These include institutions, infrastructure, the macro economy, health and primary education, higher education and training, market efficiency, technological readiness, business sophistication and innovation. The level of productivity, in turn, sets the level of prosperity that can be realized by an economy. The productivity level also determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growth rates. In other words, a more competitive economy is one that is likely to grow faster over time. The concept of competitiveness thus involves static and dynamic components. Although the productivity of a country determines its ability to sustain a high level of income, it is also one of the central determinants of its return on investment, which is one of the key factors explaining an economy's growth potential. The index organizes the pillars into three sub-indexes: efficiency enhancers, innovation and sophistication factors and is based on a 1-7 scale (the higher the average score, the higher the degree of competitiveness).The Global Competitiveness Indices for Kenya for the years 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11 were, respectively, 3.57, 3.61, 3.84, 3.67 and 3.65.

RESEARCH METHODOLOGY

The orientation of the study was positivistic and employed a cross-sectional design entailing identification of the research problem, review of previous and synthesizing of published literature, and specifying of hypotheses relating to the research questions. The study sought to explore the effect of global competitiveness on the relationship between performance

contracting and measurement, and public service delivery. The hypothesis that formed the basis of the study was that there is no significant moderating effect of global competitiveness on the relationship between performance contracting and measurement, and public service delivery in Kenya. Ultimately therefore, the study focused on the effect of global competitiveness on customer satisfaction with the services provided by the public sector.

The study relied on secondary data drawn from the results of measurement and evaluation of the performance of public agencies on performance contract for the period 2007 to 2011, which was readily available. In 2010/11, which was the terminal year for data collection and analysis, the number of public agencies on performance contract was 470, made up of 46 ministries and accounting departments, 178 state corporations, 175 local authorities and 71 tertiary institutions. The focus of the study was the entire population of 470 public agencies. Further, the various categories of public agencies had, by 2010/11, been on performance contract for differing periods; these are 6 years for both ministries and state corporations, 5 years for local authorities and 4 years for tertiary institutions.

ANALYSIS AND RESULTS

The study focused on the five years of 2006/07, 2007/08, 2008/09, 2009/10 and 2010/11, during which period customer satisfaction in the majority of the categories of public agencies was measured. The distribution of the various categories of institutions is shown in Table1 below.

Table 1: Distribution of public agencies on performance contract in 2011

Category of MDA	No.	Percent
Ministries and Accounting Departments	46	9.79
State Corporations	178	37.87
Local Authorities	175	37.23
Tertiary Institutions	71	15.11
Total	470	100.00

Source: *Organization of Government; Office of the President (2006-2011)*

The performance measurement and evaluation methodology in Kenya graded excellence on a composite – scoring scale ranging from 1 to 5 with 1 denoting the upper limit of ‘excellent’ achievement and 5 representing the lowest limit of 'poor' achievement. The composite scores were inverted, in order to give a rising visual effect to positive achievement and a declining visual effect to poor achievement. Further, the composite scores in each of the four categories

of public agencies were averaged for each year to contain the data within manageable parameters.

The data from the agencies was organized, summarized and collated in a manner that linked with the research question and subsequently analyzed using both descriptive statistics and inferential statistics. The analysis was carried out using the Statistical Package for Social Sciences (SPSS), version 21. Descriptive statistical analysis was carried out to summarize the data and to bring out variability, using the mean, the standard deviation and then computing the coefficient of variation. Correlation coefficients were computed to establish the relationship between the study variables. The extent to which the dependent variable could be predicted from the independent variable, was seen by deriving the regression equation. Coefficient of determination was computed to reflect the goodness of fit of the model. Linear regression analysis was further used to examine the model's overall and individual statistical significance by using F-value and t-value, respectively. A model equation was derived for the hypothesis using variables that were significant. Table 2 shows the descriptive and inferential statistics of the study's variables.

Table 2: Descriptive/Inferential statistics of the study's variables

Variable	T-value	Sig. (2-tailed)	Mean	Std. Deviation	CV %
Customer Satisfaction	8.699	.000	0.27779	.12368	44.52
Performance Measurement	37.720	.000	2.65439	.27255	10.27
Global Competitiveness	157.181	.000	3.69800	.09112	2.46
Political Stability	-47.656	.000	-1.31533	.10690	-8.13

As indicated in the table, the public sector in Kenya had an average customer satisfaction index of 0.27779, implying that nearly 73 percent of customers were dissatisfied with the public sector service delivery. Among other variables pitted against customer satisfaction, political stability was found to be the weakest with a mean of -1.31533 on a scale of -2.5 (very weak) and 2.5 (very strong) and had the lowest variability (CV= -8.13%) across the public sector made up of ministries, state corporations, local authorities and tertiary institutions. The coefficient of variation was computed to show the variability in the data of the study parameters. Customer satisfaction shows the greatest variability, followed by performance measurement. The global competitiveness shows the least variability and political stability has fairly negative variability.

A correlation analysis of the study variables (Table 3) established that customer satisfaction and global competitiveness were negatively related with political stability (R = -.134

and R = -0.468) although the relationship was not significant. This relationship shows that social chaos and turmoil, which result in political instability, will negatively impact the attractiveness of a country in the global arena.

The regression analysis further provided an estimated equation to predict the magnitude of the dependent variable (customer satisfaction) and give values for the predictor variables.
In addition, t-test and p-values were used to determine individual significance of the results of the analysis. Assessment of the overall robustness and significance of the regression models was done using the F-test and p-values. Pearson correlation coefficient, R^2, beta coefficients, and p values were computed.

Table 3: Correlation Analysis of the Study Variables

		Performance Measurement	Customer Satisfaction	Global Competitiveness	Political Stability
Performance Measurement	Pearson Correlation	1			
	Sig. (2-tailed)				
Customer Satisfaction	Pearson Correlation	.858**	1		
	Sig. (2-tailed)	.000			
Global Competitiveness	Pearson Correlation	.086	.159	1	
	Sig. (2-tailed)	.760	.571		
Political Stability	Pearson Correlation	.099	-.134	-.468	1
	Sig. (2-tailed)	.724	.633	.079	

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis of the study variables (Table 3) indicates that all the four study's variables were related but not perfectly. Performance measurement was highly correlated with customer satisfaction (R = 0.858) and the relationship was significant at 99 percent confidence level. This high relationship, indicating that performance improvement (the product of performance measurement) and customer satisfaction share 0.858^2or about 73.6 per cent of their variation, brings out the importance of having a performance measurement system to establish performance levels and to monitor how customers are served in the public sector. Global competitiveness was found to be negatively related with political stability (R = -0.468) and the relationship was not significant. This indicates that social-political chaos and turmoil may not have a significant impact on the attractiveness of a country in the global arena.

The results of analysis carried out to establish the moderating effect of global competitiveness on the relationship between performance measurement and customer satisfaction are shown in Table 4. The results show that global competitiveness explained an additional 0.7 percent ($\Delta R^2 = 0.007$) on the direct effect of performance measurement on customer satisfaction. The change in the F-value caused by the moderating effect was 0.343 and was not significant since the derived p-value of 0.569 was greater than 0.05. Since the derived p-value was greater than 0.05, the hypothesis was supported and therefore failed to be rejected. The performance measurement variable had a t-value of 5.789 and was statistically significant while the effect of global competitiveness was positive although not statistically significant.

Tale 4: Moderating Effects of Global Competitiveness

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.858[a]	.736	.715	.06599	.736	36.176	1	13	.000
2	.862[b]	.743	.700	.06772	.007	.343	1	12	.569

a. Predictors: (Constant), Performance Measurement

b. Predictors: (Constant), Performance Measurement, Global Competitiveness

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.158	1	.158	36.176	.000[b]
	Residual	.057	13	.004		
	Total	.214	14			
2	Regression	.159	2	.080	17.346	.000[c]
	Residual	.055	12	.005		
	Total	.214	14			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Performance Measurement

c. Predictors: (Constant), Performance Measurement, Global Competitiveness

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.755	.173		-4.376	.001
	Performance Measurement	.389	.065	.858	6.015	.000
2	(Constant)	-1.178	.743		-1.585	.139
	Performance Measurement	.386	.067	.850	5.789	.000
	Global Competitiveness	.117	.199	.086	.586	.569

A model equation of the moderating effect of global competitiveness on the relationship between performance measurement and customer satisfaction, impelled by performance measurement, is described in equation 4.3.

Customer Satisfaction = -1.178 + 0.386 Performance Improvement + 0.117 Global Competitiveness …….……..……. Equation 4.3

This shows that a unit change in performance improvement will result in customer satisfaction changing by a factor of 0.386. The unit change in global Competitiveness will result in a change in customer satisfaction by 0.117, though not statistically significant. In the absence of performance measurement and global Competitiveness customer satisfaction will change by negative 1.178 (that is, customer satisfaction would decrease by 1.178 units)

DISCUSSION AND CONCLUSION

As observed earlier in this paper, global competitiveness is grounded on competitive advantage which is in turn, created by an efficient and effective public service. At the outset therefore, it would be logical to expect that improvement in global competitiveness would step in to moderate performance when all other factors are complicit in the decline of performance. It turned out however that the impact of improvement in global competitiveness had only an impact that was not statistically significant.

The decision to focus on global competitiveness was a deliberate attempt to address knowledge gaps and addition to the existing stock of knowledge in the field. The customer satisfaction was found to have weak positive correlation, which was not statistically significant. This could be an indication that relatively larger samples need to be taken in future studies. In

addition the impact could be analyzed with the inclusion of institutions in the private and other sectors. The inference from the research study should however not be interpreted to degrade the significance of global competitiveness in the economic development of a nation. It should however, be used by governments and other sectors in the determination and prioritization of critical areas of focus in resource allocation.

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