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# EFFECTIVENESS OF LOAN DEFAULT MANAGEMENT STRATEGIES AMONG COMMERCIAL BANKS IN KENYA: A SURVEY OF SELECTED COMMERCIAL BANKS IN NAIROBI CITY

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## Abstract:

This study explored the effectiveness of control strategies adopted by Kenyan commercial banks to manage loan defaults. Major objective of the study was to establish the level of effectiveness of loan default management strategies among Commercial Banks in Kenya: A survey of selected Commercial Banks in Nairobi City. The study used a descriptive survey design to obtain information on the level of effectiveness of loan default management strategies among commercial banks in Kenya. The population of the study mainly constituted the credit officers from the selected banks in the city of Nairobi. The population of this study consisted of Forty three (43) banks while the sample consisted of forty (40) credit officers from the commercial banks in Kenya (as at the end of year 2012) who were selected using the stratified random sampling technique. Primary data was collected from the senior credit officers while secondary was collected from the relevant secondary sources such as the Central Bank of Kenya website, and commercial bank publications as well as from the generally known information. The data was analyzed using descriptive statistics and Correlation analysis. The study findings indicate that, most commercial banks have an effective system for controlling loan default and thus

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seldom do they require the services of CRB and therefore some banks (3.6 out of five) use CRB to recover defaulted loans. The study recommends that proper management of commercial banks should be instilled particularly in credit risk management as this will steer banks to high levels of profitability.

**Keywords:** loan default, loan delinquency, credit management, commercial banks, Non-performing loans

## 1.0 Introduction

When a firm's environment moves to a new turbulence level, the responsiveness of the firm's capability to the environment stimuli must also move to a different level. If the capability fails to keep pace with the environment, the firm is in danger of losing its competitive position and becoming unprofitable (Ansoff & McDonnell, 1990). Thwaites and Glaister (1992) point out that different response despite perception of the same challenges may be due to differences in a firm's resources or capacities. Another possible reason for the difference in control strategies that are found is the level of organizational slack. Slack is defined as the differences between the resources available to the organization and the total requirements of the members of the organizational coalition.

A default on a loan occurs when the borrower does not make the required payments or in some other way the borrower does not comply with the terms of a loan (Al-Tamimi & Al-Mazrooei, 2007). It arises when the borrower does not honour the agreement to meet the loan repayment terms which details when money ought to be paid back to the lender. The quality of credit appraisal processes depends on two factors namely, a transparent and comprehensive presentation of the risks when granting the loan on the one hand, and an adequate assessment of these risks on the other hand (Strutt, 2000).

However, Khan and Ahmed (2001) argued that some banks factors that are related to risk management structures put in place by banks were to blame for loan defaults. These banks factors include lax procedures used in credit risk assessment, negligence in monitoring loan defaults, insider loans, lack of trained personnel and unaggressive credit collection methods. Ndung'u (2007) argued that when loans are not performing the quality of assets declines and can affect the asset base of a bank and affects the bank's ability to lend further. These loan default scenarios would reduce the banks interest income. On the customer's liability side a bank is under pressure to honour contractual obligations to pay depositors, the promised interest in time as they fall due. In response to the challenges of non-performance of loans, banks have been forced to become innovative in their efforts to remain in business.

According to Beck, Demirguc-Kunt and Peria (2007) awarding credit is a journey, the success of which depends on the methodology applied to evaluate and award the credit. This journey starts from the application for credit through to acquisition of credit sales and ends at the time the debt is fully paid. Many lending decisions by the financial institutions are based on the decision makers' subjective feelings about the risk in relation to the expected repayments of the borrower. Lending institutions commonly use this approach in decision making because it is both simple and inexpensive (Payner and Redman, 2002).

A number of studies have shown that financing is a greater obstacle for SMEs than it is for large firms, particularly in the developing world, and that access to finance adversely affects the growth of the SME sector more than that of large companies (Beck *et al*, 2007). It is, therefore, unsurprising that the international development community has listed SME access to finance as an important policy priority.

Although much research has been done on bank performance, very few studies relate to challenges facing commercial banks on Non-Performance of Loans in developing countries and in Africa (Carlin and Mayer, 2003; Mishkin 2007). The Kenyan banking sector was in the 80's and 90's saddled with a momentous non-performing loans portfolio. This invariably led to the collapse of some banks. One of the catalysts in this scenario was serial defaulters who borrowed from various banks with no intention of repaying the loans. Undoubtedly these defaulters thrived in the information asymmetry environment that prevailed due to lack of a credit information sharing mechanism. The Government of Kenya had to write-off debts for coffee farmers in 2006 which was disbursed to farmers through Co-operative Bank.

Various studies have been carried out on commercial banks in Kenya. Njiru (2003) did a study on credit risk management by coffee cooperatives in Embu District. Nyaoke (2007) did a study on the responses of commercial banks in Kenya to the challenge of loan defaulting and more recently, Wambugu (2008) carried out a survey of credit risk management practices by micro-finance institutions in Kenya. Other relevant studies included the effects of the nature & design of micro finance programs on repayment patterns in the Krep Bank by Mwenda (2005), the assessment of the relationship between Biashara Plus Loan Coop Bank of Kenya & Performance of Funded Micro Enterprises by Malla (2006), Credit scoring practices & non-performing loans in the Kenyan commercial banks by Christopher (2006) as well as the relationship between the type of mortgages & the level of non-performing loan portfolio in the mortgage companies in Kenya by Mbote (2006). These studies concluded that, the type of non-performing loan is highly determined by policies and procedures put in place by a particular bank. Despite the numerous studies done on loan delinquency, commercial banks are still registering intolerable loan defaults and thus came up with control strategies to curb the situation. Therefore, the study sought to establish the effectiveness of some of the strategies that these banks have put in place to manage loan defaults.

## 2.0 Literature Review

Empirical evidence has shown that in most developing economies, commercial banks have brought millions of citizens into cohesive financial institutions which are succeeding very well in providing financial services to its members for improving their standard of living (Temu, 2009). Nevertheless, the existing literature has also indicated that farmers' associations in rural areas have been experiencing problems including diseconomies of scale of credit, high interest rate on loan, and very short-term loans (Chirwa, 2007). Such problems have caused high rate of default in most developed economies. Likewise previous studies have established that social-economic and demographic factors such as age, income, marital status, gender, family size, occupation, etc. have bearing on households' credit worthiness and repayment behaviour of the borrowers on credit market.

Arene (2002) used a regression analysis to identify the variables that had a significant bearing on credit repayment performance by farmers associations in Anambra state in Nigeria. Variables such as size of loan, income, education level and number of years of farming experience were found to be statistically significant while distance and size of the households were not significant. Nguyen (2007) hypothesised that credit repayment performance from external source depends on duration of loan servicing, size or amount of credit obtained and income generated from the capital, while credit repayment performance from internal sources (member capital) depends on duration of membership, size of the household, amount of credit available, income generated from sales, gender of the household, income transfers received, the type of information and the extent of business diversification. Using standard probability model, the results revealed that gender, amount of loan, member experience and household size were not statistically significant in various specifications while crop sales, the size of enterprise, the degree of diversification, income transfers and quality of information were statistically significant.

Nikhade *et al.* (1994) studied crop loan repayment behaviour in cotton growers with the aim of analysing behaviours and characteristics of borrowers along with the causes of non-repayment in crop loans. Relational analysis revealed that the social personal characteristics such as education, annual income, land holding and irrigation influenced positively the borrowing pattern and repayment behaviour of the borrowers. Rambabu *et al.* (2006) studied factors influencing attitudes of the farmers towards farm credit with the aim of understanding the attitudes of the borrowers and non-borrowers towards farm credit. It was found that there was negative and significant relationship between age and attitudes of both borrowers and non-borrowers. it was further noted that education exposure to mass media and extension contact were found to be positively related with attitude of borrowers and non-borrowers.

Harikumar (2007) made an attempt to analyze the utilization of loans, over-dues and factors affecting proper repayment. Contrary to Nikhade *et al.* (1994) and Rambabu *et al.* (1994), it was found that socio economic factors do not influence loan repayment. The crop failure and fall in prices were identified as major factors influencing loan defaulting. Njoku (2008) posited that socioeconomic characteristics of credit beneficiaries had a significant influence in farmers' association performance and loan repayment under the special emergency loan scheme in Nigeria. The results from Cobb-Douglas model indicated that loan volume (size), years of member experience, formal education, household size, loan period, farm size, farm output, value of assets and interest paid on loan were all highly significant determinants of farmer's credit societies on performance and loan repayment default.

## 2.1 Loan Default Rates in Kenya

According to Waweru & Kalani (2009), commercial banks expose themselves to the risks of default from borrowers due to the nature of their business. Prudent credit risk assessment and creation of adequate provisions for bad and doubtful debts can cushion the banks risk. According to the CBK (1999) the level of Non-Performing Loans (NPLs) in 1998 was estimated at Kshs. 80 billion or 30% of advances, up from 27% in 1997 as compared to Kshs.81.3 billion or 33.4% of total loans in November 2001. This is far much higher compared with levels of NPLs of other countries. According to Taiwan News (2002), the NPL ratio among Taiwanese banks was estimated at 7.7 percent by the end of 2001, while the ratio among grassroots financial institutions was 16.37 percent. In the Philippines non-performing loans ratio as at July 15, 2001 stood at 16.81 percent of the total loan portfolio, up from 16.76 percent a month before, (Batino, 2001). Comparing, the ratio of non-performing loans in Kenya of 33% to similar African economies as at the end of 2000, the ratio is much lower in Zimbabwe (24%), Nigeria (11%) and South Africa (3%) (CBK, 2001). Net loans at the level of Kshs. 215 billion as at December 31st, 2001 accounted for 51% of total net assets of the Kenyan's banking sector. As this date, the proportion of non-performing loans to total loans was 30% (CBK 2004). The trend of non-performing loans in Kenya over the period 1995-2013 is shown in Table below.

**Table 1: Non-Performing Loans 1995-2013**

| Year | Non-performing loans (in Kshs. billion) | Total Loans (in KShs. billion) | Percentage (%) |
|---|---|---|---|
| 1995 | 31.8 | 180.2 | 17.6 |
| 1996 | 37.9 | 213.7 | 17.7 |
| 1997 | 69.0 | 248.2 | 27.8 |
| 1998 | 83.5 | 268.6 | 31.1 |
| 1999 | 97.3 | 284.2 | 34.2 |
| 2000 | 90.2 | 272.9 | 33.1 |
| 2001 | 73.6 | 245.0 | 30.0 |
| 2002 | 76.1 | 255.0 | 29.8 |

| | | | |
|---|---|---|---|
| 2003 | 74.6 | 270.1 | 27.6 |
| 2004 | 70.8 | 382.3 | 20.3 |
| 2005 | 106.5 | 417.3 | 25.52 |
| 2006 | 100.7 | 473.1 | 21.29 |
| 2007 | 56.8 | 533.8 | 10.64 |
| 2008 | 61.9 | 670.4 | 9.23 |
| 2009 | 66.8 | 710.6 | 9.4 |
| 2010 | 61.5 | 831.1 | 7.4 |
| 2011 | 58.3 | 1079.6 | 5.4 |
| 2012 | 61.6 | 1368.9 | 4.5 |
| 2013 | 70.3 | 1406.0 | 5.0 |

Source: CBK, 2012

The decrease of non-performing loans during the period 2001-2003 is mainly attributed to the collapse of some financial institutions (e.g. Trust bank in 2001) and the write-offs made by some banks so as to clean their balance sheets (CBK, 2003).

## 3.0 Findings

### 3.1 Descriptive analysis

In regard to whether the credit managers experienced any losses from errors, fraud or improper documentation, 51% of the managers interviewed indicated that they had experienced losses from errors, fraud or improper documentation. This implies that proper documentation and well-functioning management information systems were significant in loan management to avoid errors and frauds. This is in agreement with Seppala *et al*,(2001), who argued that management information systems are very important for commercial banks and inability to integrate new technological innovations holds them back, making them less rather than more efficient.

### 3.2 Extent to which control strategies supported delinquency management in respondent's organization

Regarding the extent to which control strategies supported delinquency management in respondent's organization, 59.5% of the respondents indicated that control strategies support delinquency management to a very large extent with only 2.7% indicating that there were no control strategies that supported delinquency management in their respective organizations as shown in table 2 below. As argued by Lee and Grewal, (2004) control strategies represent the sustained pattern of resource allocation by which firms align themselves effectively to their external environment.

**Table 2: Extent to which control strategies supported delinquency management in respondent's organization**

| | Frequency | Percent |
|---|---|---|
| Not at all | 1 | 2.7 |
| Less extent | 3 | 8.1 |
| Moderate extent | 3 | 8.1 |
| Large extent | 8 | 21.6 |
| Very large extent | 22 | 59.5 |
| **Total** | **37** | **100.0** |

**Source:** researcher, 2013

### 3.3 Credit Reference Bureau reports

The study sought to find whether respondent's respective banks often use credit reference bureaus to recover defaulted loans; the respondent's feeling on whether credit reference bureaus are the most effective control strategy for loan default management as well as whether the bank has an effective system for controlling loan default and thus seldom do we require the services of credit reference bureaus. Findings indicates that 32% of the respondents strongly agreed that most commercial banks have an effective system for controlling loan default and thus seldom do they require the services of credit reference bureaus, 30% did agree, 27% felt satisfaction, 8% indicated that there was room for improvement and only 3% strongly disagreed.

On CRB control strategy, the study indicates that 46 % of the respondents agreed that credit reference bureaus is the most effective control strategy for loan default management, 14 % did strongly agree, 27% felt satisfaction, 8% indicated that there was room for improvement. Only 5% strongly disagreed.

Further the study sought to determine if banks have an effective system for controlling loan default. The study indicates that 41 % of the respondents strongly agreed that the banks have an effective system for controlling loan default and thus seldom do they require the services of credit reference bureaus, 24 % did agree, 16 % felt satisfied, 16% indicated that there was room for improvement and only 3% strongly disagreed. This implies that, although credit reference bureaus collect and assemble personal and financial information on individuals and businesses their report itself does not say whether you are a good or bad credit risk it provides lenders with the data, which allows them to take the decision themselves. Thus with a strong system of loan control, banks do not need CRB reports.

### 3.4 Management Structure

The study sought to establish whether loan application, appraisal, approval and disbursement was done at different stages and by different personnel for thorough scrutiny in respondents' respective banks; whether they had credit recovery department (CRD) that was concerned with designing strategies on management of loan default; all members of staff were aware of the reporting lines when it comes to loan appraisal and approval; the manager was able to handle the number of staff under him; the decisions to award credit are cascaded from the senior credit management to bottom and whether every credit officer deliberate on issues and cascade them to senior credit management.

The study further indicates that 43 % of the respondents interviewed strongly agreed that loan application, appraisal, approval and disbursement were done at different stages and by different personnel for thorough scrutiny. 24% did agree, 19 % indicated satisfactory, 14% said there was room for improvement. The study also indicates that 35% of the respondent strongly agreed that their bank had CRD that was concerned with designing strategies on managing loan default. Further 30% agreed, 22% rated satisfactory, 11 % rated the need for improvement and only 3% strongly disagreed.

### 3.5 Legal Procedures/Proper Documentation

This section sought to establish whether 1) there were formal procedures and documents that were used for loan processing procedures; 2) the bank has uniform credit procedures that are applied to every loan applicants; 3) the respondents believe there is proper documentation on loan applied, approved and disbursed.

On the formal procedures,the findings indicate that 78 % of the respondents interviewed strongly agreed that there were formal procedures and documents that were used for loan processing procedures. 14% did agree, 3 % indicated satisfactory, 5% said disagreed strongly. On credit procedures, 60 % of the respondents interviewed strongly agreed that they had uniform credit procedures that applied to every loan applicants. 16% did agree, 8% indicated satisfactory, 8% said disagreed strongly. Also 8% strongly disagreed. Of those who were surveyed, 81 % of the respondents strongly agreed that they believed there was proper documentation on loan applied, approved and disbursed. 11% did agree, 8% indicated satisfactory.

### 3.6 Monitoring of MIS Reports

On monitoring of MIS Reports, the study sought to determine whether respondents' respective bank has the requisite technology expertise for controlling loan transactions; there is a centralized customer data repository to establish a system of record particularly on credit reports; the bank is able to create and share MIS reports within the organization as well as maintaining good accounting systems, to ensure accountability and timely reporting all geared towards loan management to minimize default rate.

Of those who were surveyed, 60% agreed that their organisation had requisite technology expertise for controlling loan transactions, 18% strongly agreed, 16% felt satisfied, 4% of the respondents said there was room for improvement, and 3% strongly disagreed. The study findings indicate that the response rate on the organization ability to create and share MIS reports within the organization. Most of the respondents (77%) agreed, 5% strongly agreed, 7% said there was room for improvement, 8% were satisfied. Only 3% strongly disagreed. The findings agree with Temu (2009) who maintains that, a good information system is a tool that transforms raw data into necessary information needed for making management decisions since the system has a very great impact on loan default management in a microfinance institution and thus the use of an M.I.S improves efficiency as far as loan recovery is concerned. However, Rambabu and Eswaran (2006) warn that commercial banks that have adopted such systems without assessment of their core MIS are struggling to integrate these.

### 3.7 Relationship between loan default Management and the effectiveness of control strategies

The highest correlation between variables was found between effectiveness of control strategies and legal documentation indicating that the two variables influence each other by 59% (r=0.59, p=0.00). Other correlations were noted to exist between effectiveness of control strategies on loan default and monitoring of MIS reports 51% (r=0.51, p=0.00). On the other hand, there was little correlation between management structures and loan default at 44 % ( r=0.44, p=0.03) and loan default and credit reference bureau at 37% (r=0.37, p=0.01). The findings therefore indicate that all the control strategies have a direct relationship with loan default as shown below.

| **Correlation** | **Effectiveness of control strategies on loan default** | **Credit reference bureau** | **Management structures** | **procedures\proper documentation** | **Monitoring of MIS reports** |
|---|---|---|---|---|---|
| Effectiveness on loan default | 1.00 | 0.37 | 0.44 | 0.59 | 0.51 |
| Credit reference bureau | 0.37 | 1.00 | 0.18 | 0.23 | 0.20 |
| Management structures | 0.44 | 0.18 | 1.00 | 0.43 | 0.33 |
| Legal procedures\proper documentation | 0.59 | 0.23 | 0.43 | 1.00 | 0.40 |
| Monitoring of MIS reports | 0.51 | 0.20 | 0.33 | 0.40 | 1.00 |
| **Significant Value (Sig. Level)** | | | | | |
| Effectiveness of control strategies | 0.00 | 0.01 | 0.03 | 0.00 | 0.00 |
| Credit reference bureau | 0.01 | 0.00 | 0.07 | 0.06 | 0.06 |
| Management structures | 0.03 | 0.07 | 0.00 | 0.02 | 0.03 |
| Legal procedures\proper documentation | 0.00 | 0.06 | 0.02 | 0.00 | 0.03 |
| Monitoring of MIS reports | 0.00 | 0.06 | 0.03 | 0.03 | 0.00 |

**Source:** Researcher, 2013

## 4.0 Conclusions

From the study it can be concluded that, most commercial banks have an effective system for controlling loan default and thus seldom do they require the services of credit reference bureaus and therefore only a few banks use credit reference bureaus to recover defaulted loans. Thus with a strong system of loan control, banks do not need credit reference reports. It is also notable that, every credit officer in commercial banks is allowed to deliberate on issues and cascade them to senior credit management and all members of staff are aware of the reporting lines when it comes to loan appraisal and approval. For this to be practical, bank managers should be able to handle the number of staff under him while awarding credit which are cascaded from the senior credit management to bottom and therefore sound credit management structure would help in governing the process of giving credit to bank customers. Therefore a good credit management structure is highly effective in loan management.

It is also remarkable that legal procedures and proper documentation are critical in managing loan default through guarded loan application, approval and disbursement. The process is however more effective if loan appraisal indices are applied. This study also indicates that centralized customer data repository is very crucial for commercial banks. Thus, commercial banks should have the requisite technology expertise for controlling loan transactions.

From the study, we recommend that the lending policy should be in line with the overall bank credit management structure and the factors considered in designing a lending structure should include; the existing credit structure, industry norms, general economic condition in the country and the prevailing economic climate. Moreover, the credit structure should set out the bank's lending philosophy and specific procedures and means of monitoring the lending activity. Commercial banks should also integrate proper management information system that would generate the appropriate report enough to appraise a client for them to qualify for loan. A study on effectiveness of loan default management strategies should be carried out on other financial institutions like micro-finance institutions for comparative purpose.

**References**

[1] Al-Tamimi, H. and Al-Mazrooei M., (2007), Banks' Risk Management: A Comparison Study of UAE National and Foreign Banks, *the Journal of Risk Finance*, 8 (4), 394-409.

[2] Thwaites, D and Glaister, K. (1992) Strategic responses to environmental turbulence. International *Journal of Bank Marketing*, 10 (3) 33 – 40.

[3] Ansoff, I. and McDonnell E. (1990), *Implanting Strategic Management 2nd Edition.* Prentice Hall, New York.

[4] Strutt, J. (2000), *Risk assessment and management:* the engineering approach, Centre for Industrial Safety and Reliability, Cranfield University., Unpublished Paper.

[5] Khan, T., and Ahmed, H. (2001), Risk Management: an analysis of issues in financial industry IRTI/IDB Occasional Paper, No. 5.

[6] Ndung'u, N. (2008). Official launch of the microfinance Act (2006) and regulations (2008). Retrieved from http://www.centralbank.go.ke

[7] Beck, T; Demirguc – Kunt A. and Peria, M. S. M (2007).Reaching out: access to and use of banking services across countries. *Journal of Financial Economics*, 85 (1), 234 – 266.

[8] Payner, T.H., Redman, A.L. (2002), "The pitfalls of property valuation for commercial real estate lenders: using a comparative income approach to improve accuracy", *Briefings in Real Estate Finance*, 3 (1), 50-59.

[9] Carlin, W. and Mayer, C. (2003).Finance, Investment and Growth. *Journal of Financial Economics*, 69 (1), 191 – 226.

[10] Mishkin, F.S. (2007), "Availability of credit to small businesses", Federal Reserve System Testimony, November, available at: www.federalreserve. gov/newsevents/.

[11] Njiru G.M. (2003) Credit Risk Management by Coffee Cooperatives in Embu District

[12] Nyaoke, S. (2007). Responses of Commercial Banks in Kenya to the Challenge of Loan Defaulting. Unpublished MBA thesis Nairobi: University of Nairobi.

[13] Temu, A.E. (2009), "The Kilimanjaro Cooperative Bank: a potentially sustainable rural financial institutional model for Sub- Saharan Africa", *Review of Money Finance and Banking, Supplement for the savings and development Journal*, Vol. 1 No.2, pp.45-77.

[14] Chirwa, E.W. (2007), "An econometric analysis of the determinants of agricultural credit repayment in Malawi", *African Review of Money Finance and Banking. Supplement of the Saving and Development Journal*, Vol. 1 No.2, pp.107-19

[15] Arene, C.J. (2002), "Loan repayment and technical assistance among smallholder maize farmers in Nigeria", *African Review of Money Finance and Banking. A supplement of Savings and Development Journal*, Vol. 1 pp.64-72.

[16] Nguyen, C.H. (2007), "Access to credit and borrowing behaviour of rural households in a transition", paper presented at International Conference on Rural Finance Research Moving Results into Policies and Practices, 19-21 March, Rome

[17] Nikhade, D.M., Shinde, P.S., Nighot, S.M. (2003), "Crop loan repayment behaviour in cotton growers", *Agricultural Banker*, October/December, pp.13-16

[18] Rambabu, P.D., Eswaran, Y.P. (2006), "Factors influencing attitude of the farmers towards farm credit", *Agricultural Banker*, October/December, pp.25

[19] Harikumar, S. (2007), "Utilization and repayment of agricultural loans of regional rural banks: a case study", *Agricultural Banker*, October/December, pp.13-16

[20] Njoku, J.E. (2008), "Determinants of loan repayment under the special emergency loan scheme (SEALS) in Niger: a case study in Imo state", *African Review of Money Finance and Banking*, Vol. 1 pp.39-51

[21] Waweru M. Nelson and Kalani M. Victor, (2009), Commercial Banking Crises in Kenya: Causes and Remedies, *Global Journal of Finance and Banking Issues Vol. 3. No. 3.*

[22] Central Bank of Kenya (1999) Website. Available from http: www.centralbank.go.ke

[23] Central Bank of Kenya, (2001), *Bank Supervision Report, Nairobi* http: www.centralbank.go.ke

[24] Central Bank of Kenya (2004) Website. Available from http: www.centralbank.go.ke

[25] Central Bank of Kenya, (2003), *Inflation*, Monthly Economic Review, Nairobi

[26] Seppala, H., Alkins, N., and Peter Zeltins G. (2001).*Management Information System standards* Special Edition, May 2004.Observer. 9 January.

[27] Lee, G. and Grewal J., (2004).Competitiveness, skills and technology. Edward Edgar, Cheltenham. Washington, D.C.: The World Bank.