



**THE ROLE OF HEAD OF SUPPLY CHAIN IN THE FINANCIAL PERFORMANCE OF BANKS IN KENYA**

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THE ROLE OF HEAD OF SUPPLY CHAIN IN THE FINANCIAL PERFORMANCE OF BANKS IN KENYA

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**ABSTRACT**

*The force of globalisation has increased, with competition becoming more intensive and resulting in the limited growth of sales and therefore profitability. This has forced organisations to look inwards on cost management measures. While strict control of staff costs has taken significant board-room attention, firms are only now realising the benefits that can accrue from more value-for-money supply chain management (SCM) especially through strategic leadership from the head of SCM. The main objective of this study therefore was to determine the role of head of supply chain in bank's financial performance through policy formulation, procurement management, quality management and strategic cost management. Descriptive survey design was engaged to accomplish the study through the use of questionnaires as a tool for primary data collection. The census approach was adopted for this study and the questionnaires were administered to the head of supply chain and the deputy for all the 44 banks operating in Kenya. Secondary data on the financial performance of sampled banks was obtained from the Central Bank of Kenya (CBK) and the Nairobi Securities Exchange (NSE). Qualitative data from open-ended questions was analysed using content analysis and presented through narratives. For quantitative data, the study employed regression analysis to estimate the causal relationships between factors under study for presentation through tables and charts. The study found that bank financial performance is impacted by the head of SCM through strategic cost management, formulation of comprehensive SCM policies as well as streamlined procurement management activities and quality management. The study recommends that the head of SCM should focus on strategic cost management, procurement management, policy formulation and quality management as channels to impact on bank financial performance. Strategic cost management is the most impactful tool through which the head of SCM influences financial performance.*

**Key Words:** Policy Formulation, Procurement Management, Quality Management, Strategic Cost Management, Head of Supply Chain, Bank Performance

## Background of the Study

Since the mid-eighties, the supply chain profession has gained increased professional respect attributable to the recognition by senior executives of the enormous contribution supply chain management (SCM) can make to the company's bottom line (Wincel, 2004). SCM was traditionally viewed as a day-to-day purchasing and procurement task of clerical and reactive nature as a support function (Thawiwinyu and Laptaned, 2009) but has now positioned itself among the core organisational functions requiring boardroom attention (Schiavo-Campo & Sundaram, 2000).

Combining the high value of procurement costs with a recent increasing trend for outsourcing entire processes, the supply chain profession has inevitably become more strategic as opposed to functional (Lysons and Farrington, 2006). Fitzgerald (2009) regards it as a shift from a tactical to a strategic role. In many companies, strategic SCM as directed from high up the corporate ladder is now seen as key to competitiveness (Ryals and Rogers, 2006) and has a positive effect on the firm's financial performance (Carr & Pearson, 2002) as well as enhancing profitability in a competitive global race (Tan, Lyman & Wisner, 2002). SCM is key to building a sustainable competitive edge for products and services in an increasingly crowded marketplace (Croom, Romano and Giannakis, 2000). Strategic SCM organisations have realised that it is not enough to improve efficiencies within an organisation, but that the whole supply chain has to be made competitive (Carr & Pearson, 2002).

Tan (2001) defines SCM as a holistic and strategic approach to operations, materials and logistics management. SCM is the implementation of a management philosophy from the highest

organisational hierarchies regarding the transport and storage of materials on their journey from the original suppliers via intermediate operations to the final customers (Waters, 2007). It has also been described by the Council of Logistics Management (2000) as the systemic, strategic coordination of business functions and tactics within an organisation and across businesses within the supply chain for the purposes of improving the long-term performance of the individual organisations and the supply chain as a whole. The goal of SCM is to integrate both information and material flows seamlessly across the supply chain as an effective competitive weapon (Suhong, Bhanu, Ragu-Nathan & Subba, 2004) that demands top management's prioritisation. Effective SCM requires the utilization of sound business practices that maximize value to the organisation through the acquisition of goods and services (Sollish and Semanik, 2012).

SCM performance is the backbone of an organization's success since it contributes to competitive purchase and acquisition of quality goods that puts the organization products or services in the competitive edge in the market (Carr & Pearson, 2002). However, on several occasions, poor SCM performance has caused the private sector financial loss due to delivery of poor quality work materials, loss of value for money and inflated prices (Sollish and Semanik, 2012). Poor SCM performance is a major hindrance to private sector organizations' performance since it causes the delay of deliveries (Migai, 2010), increased defects and delivery of low quality goods or non-delivery at all (Juma, 2010). SCM therefore involves pursuing strategic responsibilities led by top management that have a major impact on long-term performance of the organisation (Handfield, Monczka, Giunipero & Patterson, 2009).

Cost management and cost reduction for enhanced profitability are the most prevalent priorities in SCM (Zsidisin, Ellram & Ogden, 2003). Progressive organisations also utilise SCM to work directly with suppliers to develop proper quality management mechanisms as companies increasingly outsource (Handfield et al, 2009). The SCM function also needs to respond to external forces through influencing corporate strategy in the boardroom. (Feinberg, Umbenhauer, Renner & Sopher, 2013). An effective SCM function assists the firm negotiate better contracts and manage total costs through aligning procurement management and the SCM organisational model to meet business needs (Smith, Goel and Gulhane, 2007).

Organisation structure is seldom considered a strategic initiative, but in SCM the strategic organisation structure provides ability to enhance the capability and efficiency of the supply chain by developing lean-based improvement strategies within the supply chain, supplier development and materials management (Johnson, 2008). However, there is no clear standard on the SCM function's reporting structure and the answer varies by industry and business model as influenced by factors such as corporate strategy, culture, organisational model, leadership preferences, maturity of the firm and the immediate challenges facing the company.

At the beginning of the 2000s, it was unique if not very rare for a head of supply chain to report to the CEO. However, from year 2010 it has been observed that one in five heads of supply chain report to the CEO (19 percent). Another 28 percent report to the Director Finance, while 21 percent report to the Director Operations. While studying the top 20 percent of Fortune 500 companies in their respective industries, Khushalani and Tatsumi, 2011 noted that 78 percent of heads of supply chain report to a C-level executive. Ogden, Zsidisin and Hendrick

(2002) observed similarly in Fortune 500 companies that among the large, North American private sector companies, 86 percent of heads of supply chain report to a director or higher, with 32 percent reporting directly to the CEO/President or to the Vice-President. The same is held true for government groups in North America where approximately 89 percent of heads of supply chain report to a director or higher, with 33 percent reporting directly to the CEO or the deputy CEO. In both government and private sectors, only 11-12 percent of heads of SCM function report to other less senior positions (Johnson, Leenders and McCue, 2003).

SCM professionalism is relatively new in Kenya, following enactment of the Supply Practitioners Management Act in year 2007 that established the Kenya Institute of Supplies Management (KISM) as a national body for professionals in the practice of SCM (GoK, 2007). However, the public sector in Kenya has already recognised the importance of the SCM function in top leadership. Management of SCM in the public sector is vested in the accounting officer which in the case of parastatals is the CEO while in ministries it is the Principal Secretary. The accounting officer is primarily responsible for the SCM activities of the firm through the SCM function as well as various committees through which control is exercised (GoK, 2005). For example the head of supply chain in Kengen leads a division (Kengen, 2014) while at Kenya Power the head is a general manager (Kenya Power, 2014), both of whom report to the CEO.

### **Statement of the Problem**

The position of a business function in a company's organisation structure indicates the level of influence in the decision making processes that affect company goals, objectives, strategies and policies (Monczka, 2005). Generally if the business function is higher in the organisational structure,

it is more likely to impact significantly on corporate strategy and objectives (Hoejmoose and Brammer, 2012). Raising the profile of the business function in the organisation structure therefore enhances its influence on financial performance as observed in the public sector in Kenya (Chebichii, Sakwa, Biraori and Wamalwa (2014). Through representation in top management, the human resources management function has exerted more influence in corporate strategy, formulation of policy and impact on the quality of staff in terms of professional competence (Armstrong, 2001), The same has been observed in finance (Pikulik, 2005) as well as operations (Juma, 2010) and this can only be presumed to be the case with SCM.

TQM embodies the entire organization with the leadership of top level management required to facilitate stringent quality management emphasis across the enterprise (Zeithaml, 2000). TQM achieves better results through boardroom engagement to build effective relationships between the organization and its people as observed in supermarkets in Kenya (Awinja, Kisavi, Omondi, Obura and Thairu, 2012). Cascading the vision and direction of the organization and the narrower business function through top management involvement down to the shop-floor is one of the strongest levers for generating improved financial performance (Berger & Humphrey, 2007) and this has been confirmed in Kenya as well (Kioko & Were (2014). Raising the profile of the SCM function therefore enhances procurement management through negotiation of better contracts and management of total costs (Smith et al, 2007).

For most of organizations, SCM is viewed as an add-on rather than core to business operations (Dale (2010). Private sectors in Africa are grappling with setting up the operational framework of SCM structures and processes (Banda, 2009). The strategic role of SCM affects

the place of the supply chain unit in the organisational chart and affects the reporting structure for the purchasing organisation (Nolan, 2009). Supply chain reporting alignment in top management reflects how the function is perceived within the organisation and if it is well positioned to become a competitive differentiator that delivers greater value to customers and shareholders (Khushalani and Tatsumi, 2011). This study seeks to determine the role of head of SCM as a significant factor in banks' financial performance.

Strategic SCM is a peripheral segment of business focus in the service sectors yet is an area of rich rewards, where impact on profitability is relatively painless and immediate and where both top-line growth and cost reduction are mutually inclusive (Booth, 2010). The situation in Kenya signifies appreciation of the important function of the head of SCM in the public sector (GoK, 2005) as well as the manufacturing sector (Tullow, 2015). However, it is not confirmed whether banks, being in the service sector acknowledge the significance of SCM and especially the role played by the head of SCM to influence financial performance through strategic cost management, policy formulation, procurement management and quality management. This study seeks to address this gap by focussing on the role of head of supply chain in the financial performance of banks in Kenya.

### **General Objective**

The general objective of the study was to establish the role of head of supply chain in the financial performance of banks in Kenya.

### **Specific Objectives**

The specific objectives of the study are:

- To establish the effect of strategic cost management by the head of supply chain on financial performance of banks in Kenya.

- To examine the impact of procurement management by the head of supply chain on financial performance of banks in Kenya.
- To determine the effect of quality management by the head of supply chain on financial performance of banks in Kenya.
- To verify the influence of policy formulation by the head of supply chain on financial performance of banks in Kenya.

## LITERATURE REVIEW

This chapter focused on theoretical literature as well as empirical review of the role of head of SCM towards financial performance.

### Theoretical Review

This section presents theoretical foundations that underlie the importance of SCM and how SCM affects financial performance.

### Contingency theory

The contingency theory of organisational structure provides a major framework for the study of organisational design (Donaldson, 2001). The contingency hypothesis postulates that effective organisations shape their design parameters in accordance with the characteristics of their environment (Kamann, 2007). Good performance is "contingent" on congruence between structural properties and contingency variables (Chow, Henriksson & Heaver, 2005), where the better the match the higher the performance (Miller, 1982). The most effective organisational structural design is where the structure fits the contingencies, with structural designs which are efficient, effective and viable under conditions of changing environments (Burton and Obel, 2004). As well as compatibility with their situational factors, effective organisations achieve an internal consistency among their design parameters, a complementary

alignment among the internal interdependent structural elements appropriately to maximise financial performance (Rozemeijer, Weele & Weggeman, 2003). Most combinations should not and do not occur because they will hurt performance (Miller, 1982).

Structural contingency theory, is often considered as being an equilibrium theory, in that organisations are depicted as attaining fit and then being in equilibrium and so remaining static (Donaldson, 2001). Organisations are overwhelmingly continuing to use traditional macro-structures such as the divisional type, with innovations such as information technology or teams being incremental, not radical changes within this broader traditional framework (Palmer and Dunford, 2002). Similarly, a study of organisations from many European countries found that organisations are not radically flattening their structures. In recent developments relating to contingency theory, there is a clear concern for dynamic disequilibrium.

Contingency theory is important in this study to determine the ideal SCM organisation structure and especially the ideal position relative to top management. The theory shall also be used to identify the most efficient, effective and viable structural design for SCM to facilitate timely and relevant adjustments as the operating environment rapidly changes due to the increasing power of globalisation. The theory will also be used to determine whether SCM organisation structures should identify with a static equilibrium having only incremental changes or should have a dynamic equilibrium and continuous radical changes. This includes the question of how often SCM strategies and policies should be reviewed. The theory is also key in ensuring consistency within the organisation by facilitating SCM's interdependency with other functional units and enhancing complementarity

for enhanced financial performance. This is instrumental in the success of quality management through TQM. Primarily, the theory shall assist in studying the best SCM organisational structural designs applicable for SCM to make significant impact on financial performance.

### **Systems Theory**

Systems theory is an interdisciplinary theory about every system in nature, in society and in many scientific domains as well as a framework with which to investigate phenomena from a holistic approach (Capra, 2007). Systems thinking arises from the shift in attention from the part to the whole (Jackson, 2003), considering the observed reality as an integrated and interacting unicum of phenomena where the individual properties of the single parts become indistinct. In contrast, the relationships between the parts themselves and the events they produce through their interaction become much more important, with the result that system elements are rationally connected (Luhmann, 2000) towards a shared purpose (Golinelli, 2009).

The systemic perspective argues that it is not possible to fully comprehend a phenomenon simply by breaking it up into elementary parts and then reforming it. Instead, what is required is application of a global vision to underline its functioning. Although a study can start from the analysis of the elementary components of a phenomenon, in order to fully comprehend the phenomenon in its entirety one has to observe it also from the higher level of a holistic perspective (von Bertalanffy, 1968).

Systems theory encompasses a wide field of research with different conceptualizations and areas of focus (Senge, 2000). Specifically, within this study, the theory has been adopted in observing SCM as part of the broader organisation with a common goal of enhanced performance

derived from synergies across functional areas. This view involves collaboration across the organisation for quality management, enforcement of procurement management rules, enforcement of SCM policies and adoption of SCM strategies that are aligned to the organisation strategies. Further is to determine how the head of SCM's placement in top management impacts on the adoption of SCM strategies, policies and practices that are beneficial to the organisation as a whole through the wider spectrum a boardroom seat provides.

Systems theory also analyses the relationship between organizations and their environment (Aldrich, 1979). In this study the theory is used to place the organisation as part of a larger supply chain with shared objectives of quality management as well as lower costs of goods and services through procurement management, relevant SCM strategies as well as policies with regard to supplier collaboration. The theory is also used to investigate the appropriate SCM strategies and policies with regard to the use of technology for electronic data interchange as part of collaboration along the supply chain.

### **Resource-Based View theory (RBV)**

The RBV deals with competitive advantages related to the firm's possession of a heterogeneous combination of resources and capabilities such as financial, physical, human, technological, organisational and reputational (Kovacs and Tatham, 2009) that constitute the core competence of a firm (Winter, 2000) and source of competitive advantage (Grant, 2001). The theory suggests that competitive advantage may be sustained by harnessing resources that are valuable, rare, imperfectly imitable (Grant, 2005) and non-substitutable (Barney, 2001). A firm's resources have been defined as all assets, capabilities, organisational processes, firm attributes, information, and knowledge controlled by an enterprise that enable the firm to conceive

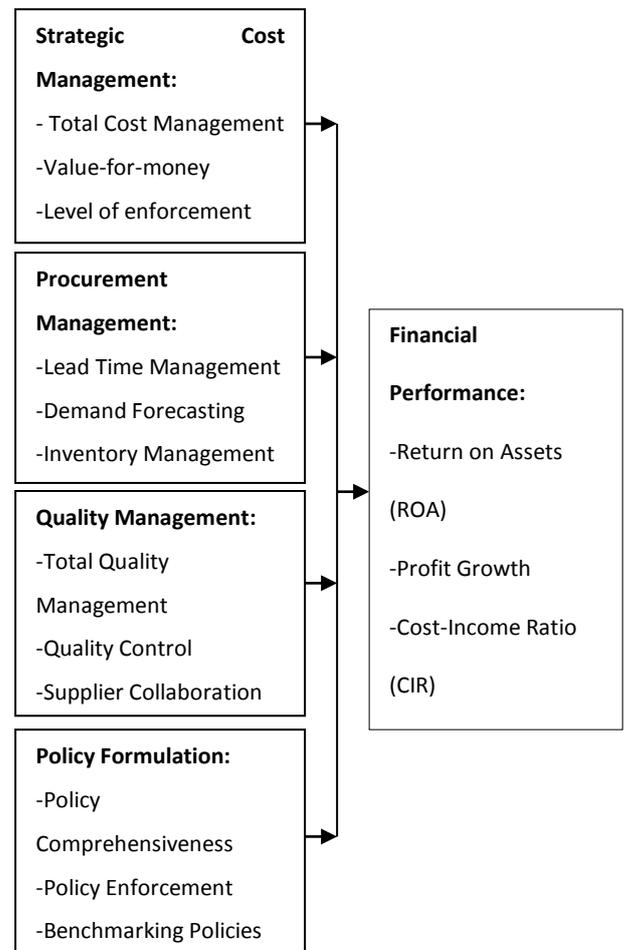
of and implement strategies with the goal to improve its efficiency and effectiveness which is competitiveness (Parnell and Hershey, 2005). Four barriers may prevent competitors from imitating a firm's resources and capabilities: durability, transparency, transferability and replicability (Prahalad and Hamel, 2000). These attributes may also apply to inter-organisational arrangements (Jap, 2001).

The more dynamic aspects of the RBV consider a firm's core competence to be its ability to react quickly to situational changes and build further competencies (Prahalad and Hamel, 2000) or dynamic capabilities (Eisenhardt and Martin, 2000). Relationships are not only output-oriented but also learning oriented. Efficiency may not only be explained in terms of productivity or operational measures, but also in terms of the opportunity to access another firm's core competencies (Min, Roath, Daugherty, Genchev, Chen, Arndt and Richey, 2005) through cooperative arrangements as an alternative to building such competencies in-house (Haakansson, Havila and Pedersen, 2009).

The resource-based view has been found to have strong explanatory power in value supply chains (Miles and Snow 2007). The resource-based view is adopted in this study because it explains how internal SCM organizational capabilities, strategies and policies influenced through top management in aspects of areas such as quality and procurement management can be utilised to enhance financial performance. Best value supply chains reflect the assumption that unique resources exist at the supply chain level, and that supply chains can be incomparable competitive weapons (Ketchen and Hult, 2007). The theory is therefore important in the study as it outlines the mutual complementation of the resources and capabilities in the supply chain network for better financial performance through adopting SCM strategies and policies that facilitate supplier

collaboration in quality and procurement management.

### Conceptual Framework



**Independent Variables**                      **Dependent Variable**  
**Figure 1: Conceptual Framework**

### Strategic Cost Management

Goods and services should be delivered at the best value or lowest total cost of ownership (TCO). Best value is affiliated with the best possible value a company can achieve for money; goods and services purchased at a fair price. Fair price is the lowest price that secures the constant supply of ordered items (Johnson, Leenders & Flynn, 2011). TCO is the direct and indirect costs (logistics, materials handling, maintenance) of the procured goods and services from purchase to

disposal. Indirect costs can be decreased by getting rid of the unnecessary buffers or waste in the supply chain such as quality inspections, safety stocks and field expediting (Weele, 2010). Strategies to reduce costs include reduction in the number of suppliers used, standardization of products, outsourcing and global sourcing to exploit global efficiencies.

The buyer's role in SCM actions has evolved from not only attaining reduction in costs but also managing risks and improving value. The interaction focuses more on establishing revenue and growth rather than achieving the lowest possible price. Every SCM decision requires deliberate balancing of costs, risks and value (Weele, 2010). SCM should constantly pursue enhancement of the price/value ratio with suppliers (Benton, 2010). The most important determinant for success is to produce value to the end customers through suppliers participating actively in product development and supporting their market strategies with a goal to create the most effective and efficient value chain that serves the end user. (Weele, 2010).

### **Procurement Management**

Procurement management is the process by which a company contracts with third parties to obtain the goods and services required to fulfill its business objectives in the most timely and cost-effective manner (Court & Steele, 2007). Procurement management includes planning and policy procedures such as research and development as required for the proper selection of materials and sources, ascertainment of quantity and quality compliance, development of procedures to implement procurement policies and the coordination of procurement activities with other internal divisions. Further, procurement management develops an effective communication with top management to ensure a complete appraisal of performance of the procurement function. Procurement management

has become more strategic, concentrating more on activities such as negotiating long-term relationships, supplier development, and total cost reduction rather than ordering and replenishing routines (Farmer, David & Peter, 2004).

Procurement management directs all procurement activities towards opportunities consistent with the firm's capabilities to achieve its long-term goals through a proactive role in persuading suppliers to meet their needs or reverse marketing (Tzokas and Pressey, 2007). Procurement management strategy is concerned with identifying, selecting and implementing an overall change program designed to place the procurement process at the heart of a business so enabling it to make the maximum contribution to corporate profitability while gaining a commercial competitive edge (Court & Steele, 2007).

### **Quality Management**

Quality is the ability of a product or service to meet customer/user needs. Quality can mean excellence, meeting customer requirement, quality as value, customer perception and adoption to expectation (Thai, Araujo, Cartre, Callender, Drabkin, 2004). Quality is about ensuring the user is content with the good or service in terms of physical description, dimensional measurements, chemical composition, performance specifications, and standards to conform to, or even the brand name of the product. Quality management has four main components: quality planning, quality control, quality assurance and quality improvement (Zheng, Knight, Harland, 2007). Quality management is focused not only on product/service quality, but also the means to achieve it. Quality management theory focuses on continuous improvement therefore uses quality assurance and control of processes as well as products to achieve more consistent quality (Ramsay & Croom, 2008).

Quality management has become such an influential element of doing business that companies have adopted the cost of quality (COQ) model to predict the possible financial burdens of selling a product that is flawed (Baker, Walker, Harland, 2007). The COQ recognizes prevention costs, appraisal costs, internal failure, and external costs as foreseeable quality management issues that could not fulfil the needs of the customer (Driedonks, Gevers, & Van Weele, 2009). Quality management cannot rely only on the SCM function to be successful but requires implementation of total quality management (TQM) which embodies the entire organization, from supplier to consumer, to follow a stringent quality management emphasis (Ngwili & Were, 2014).

The Total Quality Management (TQM) series standards of ISO9000 are under implementation in across diverse manufacturing and service industries. In the Quality Management System of ISO9000:2000, eight principles of TQM are proposed, namely customer focus, leadership, involvement of people, process management, system management, continual improvement, factual approach to decision making, and mutually beneficial supplier relationship (Deming, 1986). In the current buyer's market with intense global competition, enterprises cannot respond rapidly to the customers' demand through traditional operation mechanism and must adopt SCM (Ishikawa, 1985).

The majority of enterprises are increasingly relying on their suppliers more and more heavily and the product quality and manufacturing process of suppliers has great effect on the quality of final product of the core enterprise (Chang, 2009). SCM has a major impact on product and service quality as companies are seeking to increase the proportion of parts, components, and services they outsource in order to

concentrate on their own areas of specialization and competence. This further increases the importance of the relationships between purchasing, external suppliers, and quality through SCM (Handfield, Monczka, Giunipero & Patterson, 2009).

### **Policy Formulation**

Policies and processes embody the basic principles that govern the way an organisation performs a function (Procurement Policy Unit, 2001). SCM policies clearly define the roles and responsibilities of staff, empower people across the institution to work together effectively to procure desired goods and services and establish expectations for stakeholders to strategically plan SCM activities and manage that process (Golembiewski, 1979). To be effective, the SCM policies must be accompanied by controls and incentives to ensure they are translated into practice (Gilbert, 1984). Failed policies contribute to missed opportunities to achieve savings, reduce administration burdens and improve acquisition outcomes (Nagel, 2004).

A section of organisations develop SCM policy to address only the relatively narrow agenda of transparency, value or process efficiency. A broader, more strategic policy suite is adopted by those that have recognised that policy can be developed to harmonise more effectively the elements of SCM with other policies such as employee training, environmental protection and ethical concerns (Khi, 2009). SCM policy formulation and implementation employs a multi-disciplinary approach requiring engagement of all stakeholders including contracting, finance and legal to identify needs, assess alternatives, develop cost-effective SCM approaches and help ensure financial accountability (Golembiewski, 2000).

Successful SCM policies require sufficient attention for analysing company-wide needs. SCM

policy formulation should include research to identify appropriate products and services, extent of market composition and assessment of core competencies and opportunities to compete in commercial-type activities and identification of contract approaches that best meet end-users needs. Additionally, past acquisitions should be reviewed to identify trends and opportunities for consolidating similar acquisitions to leverage buying power and reduce administrative burdens (Lynch and Cruise, 2005).

### **Role of Head of SCM**

Top management support, leadership, and commitment to change are important antecedents to the implementation of SCM (Lambert, Stock, and Ellram, 2008). In the same context, Loforte (2001) contends lack of top management support is a barrier to SCM. The board of directors are a body of elected people that oversee the day-to-day activities of the company. The board of directors constitutes the top management of an organisation and the major responsibilities include formulating organisation strategies and policies (Linck, Netter & Yang, 2008). Most boards are actively involved in strategic supply chain planning and implementation processes (Chow, Henriksson & Heaver, 2005).

After the 2000's well over half of the companies now have the most senior supply chain person sitting on the Board and this trend is accelerating. This in turn is driving much greater integration across the entire value chain as a majority of boards are equipped with capacity to discuss end-to-end supply chain strategies (Wilding, Waller, Geldard & Mayhew, 2013). There is a strong positive correlation between the extent of Board involvement and subsequent success in implementing the supply chain strategy. Leading the strategy from a senior level is therefore an important success factor (Groysberg, Kelly & MacDonald, 2011). However, where the strategy

is being driven by the CEO or MD in isolation, implementation seems to be less likely to succeed due to the problem of the CEO having many other urgent priorities as well as in situations where the strategy has been handed down from the Group or Holding Company level, or as the result of Merger & Acquisition activity (Ketchen & Hult, 2007).

It is observed that cost focus is the primary overall driver of supply chain strategy, followed by customer lead-times and customer quality. Working capital considerations are also of increased importance (Wilding, et al, 2013). Strategic planning horizons have also shortened dramatically with reviews on at least an annual basis or adoption of a continuous strategy review policy. In a volatile economic climate this is the abandonment of strategy in favour of tactical responses (Lipton & Lorsch, 2002). While firms continue to set out and implement a long-term vision of the supply chain, there is enhancement of capabilities to adapt and evolve the implementation of the vision in response to shorter-cycle marketplace changes and the increased difficulty of longer-term forecasting due to a greater speed of change and the impact of e-commerce channels (Eisenhardt & Martin, 2000).

Planning and implementing a successful supply chain strategy requires the active involvement of the whole Board. Nonetheless, the process will necessarily be led by the senior supply chain representative on the Board (Croom, Romano & Giannakis, 2000). To succeed in this environment, supply chain leaders now consider or challenge forward-looking commercial plans and are actively involved in business and commercial strategies (Miles & Snow, 2007). The profile required of a supply chain director is a strong communicator inclined to identifying and creating collaborative advantage. The head of SCM must be multi-disciplinary, understanding and prompt in informing corporate and customer-centric

strategies as led by a clear vision, but able to make practical and pragmatic decisions.

### **Financial Performance**

Organisational performance refers to how well an organisation achieves its market-oriented goals as well as its financial goals (Yamin, Gunasekruan and Mavondo, 2009). The short-term objectives of SCM are primarily to increase productivity and reduce inventory and cycle time, while long-term objectives are to increase market share and profits for all members of the supply chain (Tan et al). Financial metrics have served as a tool for comparing organisations and evaluating an organisation's behaviour over time (Holmberg, 2000). Any organisational initiative, including SCM, should ultimately lead to enhanced financial performance.

A number of prior studies have measured financial performance using both financial and market criteria, including return on investment (ROI), market share, profit margin on sales, the growth of ROI, the growth of sales, the growth of market share, and overall competitive position (Stock, Greis and Kasarda, 2000). Profitability is the most common measure of financial performance. The measures of profitability are used to assess how well management is investing the firms' total capital and raising funds. Profitability is generally the most important to the firm's total shareholders. Profits serve as cushion against adverse conditions such as losses on loans, or losses caused by unexpected changes in interest rates.

Consequently, creditors and regulators concerned about failure also look to profits to protect their interests although the measures ignore firm's risk. Profits depend on three primary structural aspects of financial institutions: Financial leverage, net interest margin and non-portfolio income sources. Return on Equity, (ROE) and Return on Assets (ROA) are the most commonly applied profitability

ratios used to assess financial performance. This study shall apply Return on Assets (ROA) and Cost-Income Ratio (CIR) to measure financial performance.

### **Literature Review**

Empirical literature reviews studies previously carried out on the dependent variables as well as the independent variable (Kumar, 2005). In this study, empirical literature will cover financial performance, strategic cost management, procurement management, quality management and policy formulation.

SCM executives face the challenge of delivering increased returns to the enterprise while containing their own function's operating costs and a common approach to achieve these often conflicting goals is to revisit the SCM organisation structure (Johnson, 2008) even while adopting lean strategies (Wincel, 2004). By restructuring staffing models, reporting relationships, productivity measures, and even the scope of the function, SCM heads aim to achieve higher levels of performance from their function without increasing resource commitment (Chow, Henriksson & Heaver, 2005).

An analysis of SCM financial performance by the Procurement Strategy Council, (2009) yielded that there is no meaningful correlation between the type of SCM organisation structure and performance, as measured by savings per full-time equivalent, function costs, spend coverage and compliance rates. Indeed, the study found that while reporting relationships are perceived as critical to improving SCM financial performance, factors such as head of SCM's face time with senior executives (CEO, CFO, or COO) to gain feedback and buy-in for strategies have a greater impact on financial performance than structural elements.

McGinnis and Vallopra, (2009) describe competitive advantage as the extent to which an organisation is able to create a defensible position over its competitors. Tracey, Vonderembse & Lim, (2009) suggest that it comprises capabilities that allow an organisation to differentiate itself from its competitors and is an outcome of critical management decisions. The empirical literature has been quite consistent in identifying price/cost, quality, delivery, and flexibility as important competitive capabilities (Skinner, 1985). In addition, recent studies have included time-based competition as an important competitive priority. Research by Zhang (2001) identifies time as the next source of competitive advantage.

Competitive capabilities have been identified by Koufteros and Vonderembse (2007) along the dimensions of competitive pricing, premium pricing, value-to-customer quality, dependable delivery, and production innovation. Johnson, Leenders and McCue, (2003) find that organisations can use their supply chain to create competitive advantage, but this has not been utilised fully thus opportunities exist to involve the supply function in organisational strategy. Koontz, (2010) concludes that strategic supply symbolizes the importance of enterprise wide thinking where functional units inside the firm and key suppliers from the firm's supply chain all work in concert to bring value to the marketplace.

SCM professionals should therefore be responsible for activities which contribute effectively to the performance metrics of an organisation. Monczka, Trent and Handfield, (2002) determine that modern SCM managers must emphasize cross-functional interaction with groups outside SCM. The need to be flexible, adaptive and boundary spanning are therefore important traits for both organisations and individuals in pursuit of competitive advantage.

Wincel, (2004) observes that since the mid-eighties, the SCM profession has gained increased professional respect attributable to the recognition by senior executives of the enormous contribution the SCM can make to the company's bottom line. Humphreys, (2001) highlights that SCM professionals require strategic skills to manage strategic activities like strategic supplier relationships, developing company-wide electronic systems, developing and managing alliances and partnerships as well as managing critical commodities. Khushalani & Tatsumi (2011) found that SCM reporting alignment reflects how the function is perceived within the organisation and if it is positioned to become a competitive differentiator that delivers greater value to customers and shareholders.

There is no clear standard as to whom the SCM leaders report within companies and the answer varies by industry and business model, influenced by factors such as corporate strategy, culture, organisational model, and leadership preferences. The study of Fortune 500 companies found that to whom the head of SCM reports to by itself is not a major driver of overall company success; however, the research suggests that it is a key enabler to set the right conditions for success. If the SCM function has a significant impact with the financial top and bottom line, the more likely it should report directly to the CEO. McClelland, (2011) contends that the optimum reporting line for the Head of SCM is directly to the CEO but at a minimum should report to an Officer or Executive who reports to the CEO. The supply chain function should not have a less senior reporting line than this minimum.

Khushalani & Tatsumi (2011) further indicate that the optimal SCM function reporting alignment should be determined by considerations of enterprise focus, customer proximity, demonstrable value, and business partner. It further concludes that the decision about the SCM

function's alignment is about collaboration versus control. Collaboration is about how the SCM function can best understand and serve its internal customers. Control deals with how the SCM function can best control and manage its third-party spend across the organisation. Johnson, Leenders and McCue (2003) in a comparative study of North American private companies against public institutions found that where the SCM function should reside is a function of the maturity of the group and the immediate challenges facing the company. There is no one right reporting structure as this is an ongoing and evolving process and the answer that is right for the long-term may not necessarily be right in the short-term.

There are benefits that accrue to the SCM function reporting to the CEO according to research by Khushalani and Tatsumi (2011). These include enabling the function have greater visibility of the enterprise-wide situation for enhanced strategic impact. It also improved the ability to influence corporate strategies and policies as well as focus on overall company value rather than smaller specific areas. There was also greater opportunity for different functions to collaborate closely on SCM activities. Further, the study found that the SCM function reporting to the CFO results in authoritative validation of its impact on profitability and facilitates healthy division with the business to avoid conflict of interest. Reporting to the CFO improves enforcement of policies and procedures as well as enables end-to-end efficiencies.

However, there is the risk that under the CFO, the SCM function will operate as a corporate function rather than a strategic business partner. There is also the risk of driving a narrow focus on cost instead of a more holistic value covering risk, service and quality thereby reducing the impact on the wider organisation including operations and its level of responsiveness. Soheila (2013) in a

study finds that CPOs frequently report to CFOs and this reporting line is complicated by the fact that the CPO reports to an executive with three or four secondary functions to manage. As a result, developing a close working relationship with the CFO/executive so as to prove the strategic value of SCM is a challenge for a large number of CPOs.

In a study of Fortune 500 companies, Ogden, Zsidisin & Hendrick (2002) found that industry type affects compensation of heads of SCM function in private industry. Heads of SCM function in service industries are likely to make less money while those in manufacturing industries are likely to make more money. Ogden et al. (2002) also found that the fewer levels of hierarchy between the Head of Supply Chain and the CEO, the higher the salary. The level of compensation is an indicator of the view of the SCM function by top management as well as the level of influence the function wields in the organisation's decision-making process. This pay discrepancy among the different fields persists despite research that affirms that the tasks performed by SCM managers in different industries do not vary tremendously (Muller, 2001).

## **RESEARCH METHODOLOGY**

This chapter presents the methodology to be used in conducting the study.

### **Research Design**

Research design is the conceptual structure within which research was conducted to ensure optimal efficiency while yielding maximal information on the research problem based on objectives of the research (Kumar, 2005). Descriptive survey design was employed to accomplish the study.

### **Population**

The population of the study comprises the head of supply chain and the deputy in all banks in Kenya. The number of banks licensed by the CBK as at 31 December 2013 stood at 44 (Appendix III).

### **Sampling Frame**

For this study, these were the head of supply chain and the deputy for all the 44 banks operating in Kenya.

### **Instruments of Research**

The research used questionnaires as a tool for data collection. A questionnaire was selected because it facilitated a pilot study to test its effectiveness and reveal inherent weaknesses.

### **Data Processing and Analysis**

All questionnaires from the respondents were verified and checked for reliability and completeness. Qualitative data from open-ended questions were analysed using content analysis and presented through narratives. The study ran regressions using two different performance measures, namely: Return on Assets (ROA) and Cost-Income Ratio (CIR).

## **DATA ANALYSIS, RESULTS AND INTERPRETATIONS**

This chapter is a presentation of results and findings obtained from field responses and data broken into two parts. The chapter first applied descriptive statistics using statistical measures such as mean, standard deviation, graphs and charts to explore the nature of the results of the variables under study.

### **Response Rate**

From the data collected, out of the 88 questionnaires administered, 65 were fully

completed and returned resulting in a response percent of 73%.

### **Pilot Test Results**

A pilot test was conducted to confirm validity of the measurement instrument before collection of data. Reliability of the questionnaire was also evaluated through the use of Cronbach's Alpha.

### **Age of Respondents**

Demographic results with regards to age reveal that 38% of respondents were aged below 40 years, with 62% above 40 years. This indicates that majority of respondents have a high level of responsibility and leadership potential which enhances the reliability and relevance of information collected.

### **Job title of Respondents**

Results with regard to the job title revealed that 6% of respondents were directors, 59% were in middle management as heads of department, managers and supervisors while 35% were officers. Majority of respondents were in mid-level management and therefore had a broad understanding of the role of head of SCM in impacting the bank for enhanced performance.

### **Direct Reporting Authority's Title**

The study revealed that 9% of respondents reported to the CEO while 50% reported to a director. With majority of respondents reporting to top management, there was a broad understanding of the role of head of SCM in impacting the bank's enhanced financial performance.

### **Years of Experience in banking institutions**

The study revealed that 56% of respondents had an experience in the banking sector of over 10 years. This signifies a good understanding of the banking sector as well as considerable

appreciation of the role of SCM in financial performance as well as the challenges that the SCM function has experienced over time in implementing this responsibility.

#### **Level of Education**

Findings on the level of education showed that 6% of respondents held a Diploma qualification with 94% holding a Bachelors degree or higher qualification.

#### **Divisional Alignment**

Findings on the division under which the head of SCM is placed revealed that 72% were under Operations Division while 25% were under Finance Division. This indicates a good mix for diversity of opinions and multiplicity of views with regard to the role of head of SCM in bank's financial performance.

#### **Descriptive Statistics of Independent Variables**

This section shall discuss the extent to which each of the independent variables is impactful with regard to the head of SCM influencing financial performance.

#### **Strategic Cost Management in Supply Chain Management**

The researcher sought to find out the extent to which strategic cost management factors are affected by the head of SCM. Findings of the study indicated that respondents strongly agreed that the head of SCM is very important in ensuring the comprehensiveness of strategic cost initiatives in breadth and depth as well as benchmarking of strategic cost initiatives. The study found that the head of SCM would least impact on the level of management that sets strategic cost initiatives.

Therefore, a cost leadership strategy, where the focus is on decreasing the unit prices of purchased items, reducing total cost of ownership, improving efficiency, and increasing asset utilization is

considered a key SCM strategy. This is in agreement with the finding that SCM requires pursuing strategic responsibilities that have a major impact on long-term performance of the organisation and are aligned with the overall mission and strategies of the organisation (Handfield, Monczka, Giunipero & Patterson, 2009). Further, an organization's procurement management strategy has significant performance benefits including consolidation of purchases to obtain quantity discount, development of long-term purchasing agreements in return for large discount, negotiation of price reduction, controlling and resisting of price increases and promotion of profitable purchasing opportunities by expansion of possible supply sources (Court & Steele, 2007).

#### **Strategic Cost Management and Head of SCM**

The research sought to find out if the head of SCM had enhanced strategic cost management. Majority (90.8%) of respondents indicated that the head of SCM had enhanced strategic cost management. However 9.2% of the respondents disagreed with the statement. Top management establishes the development strategy and operation targets of the supply chain that applies to the cost containment effort. This is in line with the observation that top management must provide leadership to establish a clear, realizable, holistic target and subsequently lead as well as inspire the organisation to strive jointly for the target (Noori, 2004).

#### **Procurement Management in Supply Chain Management**

The study sought to find out to what extent the head of SCM affects procurement management practices for enhanced financial performance. Respondents indicated that the head of SCM is instrumental in ensuring shorter lead time with few of the respondents indicating that the head of SCM influences technology implementation such

as Purchase-to-pay (P2P) and EDI with suppliers for efficiency and collaboration. Few also indicated that the head of SCM facilitates effective contract management. This indicates the importance of shorter lead times, with an observation that stock outs or late deliveries of materials components and services can be extremely costly in terms of lost production, lower revenues and profits as well as diminished customer goodwill. This concurs with Leenders, Jean and Lisa, (2002) that procurement management activities aim at anticipating requirements, sourcing and obtaining supplies, moving supplies into the organisation, and monitoring the status of supplies as a current asset.

#### **Procurement Management and Head of SCM**

The researcher determined to find out if the head of SCM had enhanced procurement management. Findings of the study show that majority (93.8%) of respondents agreed that the head of SCM had enhanced procurement management for better financial performance. However 6.2% of the respondents did not agree. This indicates the importance of procurement management as a top management agenda impacting on financial performance. This is consistent with the findings of Court & Steele (2007) that procurement management strategy is concerned with identifying, selecting and implementing an overall change program designed to place the procurement process at the heart of a business so enabling it to make the maximum contribution to corporate profitability while gaining a commercial competitive edge.

#### **Quality Management in Supply Chain Management**

##### **Quality Management and Head of SCM**

Further, the researcher sought to determine if the head of SCM had enhanced quality management for better financial performance. The study

indicated that 85% of respondents agreed that the head of SCM had enhanced quality management while 15% of the respondents disagreed. This indicates that top management support is crucial in achievement of quality and especially a culture of Total Quality Management. The finding affirms that strategic procurement management includes planning and policy procedures such as research and development as required for the proper selection of materials and sources, ascertainment of quantity and quality compliance (Court & Steele, 2007).

#### **Policy Formulation in Supply Chain Management**

The study sought to find out to what extent the head of SCM affects policy formulation in supply chain management. Majority of respondents asserted that the head of SCM significantly impacts on formulation of innovative SCM policies. Respondents indicated that the head of SCM had least impact on enforcement of SCM policies across the organisation. The conclusion is that strategic SCM involves policy initiatives such as research and development as required for the proper selection of materials and sources, ascertainment of quantity and quality compliance, development of procedures and the co-ordination of SCM activities with other internal divisions as well as external suppliers. This agrees with findings that supply chain strategies and policies should not be based on cost alone, but rather on the issues of quality, flexibility, innovation, speed, time, and dependability (Santos, 2000). Further, to be effective, SCM policies must be accompanied by controls and incentives to ensure they are translated into practice (Gilbert, 1984). Failed policies contribute to missed opportunities to achieve savings, reduce administration burdens and improve acquisition outcomes (Nagel, 2004).

##### **Policy Formulation and Head of SCM**

Further, the researcher sought to determine if the head of SCM had enhanced policy formulation. The findings indicated that 89% of respondents

agreed that the head of SCM had enhanced policy formulation while 11% of the respondents disagreed. The conclusion is that strategic SCM involves policy initiatives such as research and development, supplier appraisal, selection of materials, ascertainment of quantity and quality compliance, development of procedures and the co-ordination of SCM activities with other internal divisions as well as supplier collaboration. This is in line with Golembiewski (2000) that SCM policy formulation and implementation employs a multi-disciplinary approach requiring engagement of all stakeholders including contracting, finance and legal to identify needs, assess alternatives, develop cost-effective SCM approaches and help ensure financial accountability.

#### **Financial Performance Measure**

The researcher sought to determine the most effective measure of bank financial performance. Majority of respondents pointed that the most effective measure of banks' financial performance was Return-on-Assets (ROA) as indicated by 47.7%. 13.8% of the respondents indicated that Cost-Income-Ratio (CIR) was the most effective measure of banks' financial performance followed by Growth in profit (12.3%), Return-on-Capital Employed (10.8%) and lastly growth in sales (7.7%). This indicates that every item existing as an asset must efficiently and effectively contribute towards profitability and that any organisational initiative including SCM should ultimately lead to enhanced banks' financial performance. This agrees with a number of prior studies that have measured bank performance using both financial and market criteria, including return on investment (ROI), market share, profit margin on sales, the growth of ROI, the growth of sales, the growth of market share, and overall competitive position (Stock, Greis and Kasarda, 2000).

#### **Impact of Head of SCM on Financial Performance**

The research sought to find out if the head of SCM has a significant impact on the bank's financial performance. Majority (80%) of respondents agreed that the head of SCM has a significant impact on bank performance. Only 8% of the respondents neither agreed nor disagreed with the statement while another 12% disagreed with the statement that the head of SCM would have a significant impact on bank performance. This indicates that the financial performance of a bank is enhanced through strategic SCM by its head. The findings concur with Groysberg, Kelly & MacDonald (2011) that there is a strong positive correlation between the extent of board involvement and subsequent success in implementing supply chain strategy. Leading the strategy from a senior level is therefore an important success factor.

#### **Head of SCM's Position in Organisation Structure**

The research sought to determine which office the head of SCM should report to in the bank to maximise on influencing financial performance. All respondents indicated that the head of SCM should report to the Director level or higher. 39% of respondents indicated that the head of SCM should report to the MD/CEO, 22% indicated that the position should report to the board of directors while the remainder indicated various directors' positions. This implies overwhelming consensus on the strategic importance of SCM and its impact on bank performance which necessitates leadership from the top. This concurs with Linck, Netter & Yang, (2008) that the board of directors constitutes the top management of an organisation and the major responsibilities include formulating SCM strategies and policies.

#### **Inferential Analysis**

After the descriptive analysis, inferential analysis was conducted using correlation and multiple

regressions to determine the extent and direction of relationship between policy formulation, quality management, procurement management, strategic cost management and bank financial performance.

### ANOVA Test

Significance tests were conducted at 0.05 level of confidence. The significance value is 0.0179 thus the model indicates statistical significance in predicting how policy formulation, quality management, procurement management and strategic cost management influence the performance of banks in Kenya. The F critical at 5% level of significance was 3.23. Since F calculated is greater than the F critical (value =

9.475), this shows that the overall model was significant. This is consistent with the finding that a major aim of SCM is to improve the introduction rates and timing of new products and services as well as achieve improvements in quality, specifications and functionality without significant increase in cost (Primo and Amundson, 2002). The head of SCM function helps the firm negotiate better contracts and manage total costs through aligning the sourcing and SCM organisational model to meet business needs, strategically managing spend and suppliers, acquisition and advancement of SCM professionals and implementing cutting-edge technology (Smith, Goel & Gulhane, 2007).

**Table 1: ANOVA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2.534	2	1.267	9.475	.0179
Residual	9.307	62	2.327		
Total	3.465	64			

**NB:** F-critical Value 88.33 (statistically significant if the F-value is less than 88.33: from table of F-values).

### Correlation Analysis

Correlation analysis by means of Pearson Product Moment Correlation Coefficient technique was used to determine the direction of relationship between policy formulation, quality management, procurement management and strategic cost management and performance of banks in Kenya. Pearson Product Moment Correlation is a non-parametric measure of the strength and direction of association that exists between two variables and Pearson correlation coefficients range from -1 to +1. Negative values indicates negative correlation and positive values indicates positive correlation where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient >0.3<0.5 indicates moderate correlation and Pearson coefficient >0.5 indicates strong correlation (Nunally, 1977).

Strategic cost management had the strongest positive influence on performance (Pearson correlation coefficient =.713; P value 0.0001). The correlation between strategic cost management and policy formulation, quality management and procurement management is positive at (Pearson correlation coefficient =.713, .691 and .711 respectively). This indicates that strategic cost management is influenced by SCM policies, quality management and procurement management.

Policy formulation had the weakest positive influence on performance (Pearson correlation coefficient =.611; P value 0.0001). The correlation between policy formulation and strategic cost management, quality management and procurement management is positive at (Pearson correlation coefficient =.713, .672 and .579

respectively). This indicates that SCM policies have an impact on strategic cost management, quality management and procurement management. This is in agreement with Santos (2000), that supply chain strategy and policies should not be based on cost alone, but rather on the issues of quality, flexibility, innovation, speed, time, and dependability.

Quality management had positive influence on performance (Pearson correlation coefficient =.624; P value 0.0001). The correlation between quality management and strategic cost management, policy formulation and procurement management is positive at (Pearson correlation coefficient =.691, .672 and .551 respectively). This indicates that quality management has an impact on strategic cost management, SCM policies and procurement management.

Procurement management had positive influence on performance (Pearson correlation coefficient =.614; P value 0.0001). The correlation between procurement management and strategic cost management, policy formulation and quality management is positive at (Pearson correlation coefficient =.711, .579 and .551 respectively). This indicates that procurement management has an

**Table 2 Correlation Coefficients**

	Policy formulation	Quality management	Procurement management	Strategic cost management	Performance
Policy formulation	1				
Quality management	0.672	1			
Procurement management	0.579	0.551	1		
Strategic cost management	0.713	0.691	0.711	1	
Performance	0.611	0.624	0.614	0.713	1

\*. Correlation is significant at the 0.05 level (2-tailed).

impact on strategic cost management, SCM policies and quality management. This is in line with the findings of Court & Steele (2007) that procurement management includes planning and policy procedures such as research and development as required for the proper selection of materials and sources, ascertainment of quantity and quality compliance, development of procedures to implement procurement policies, and the coordination of procurement activities with other internal divisions. Further, it has been found that procurement management has become more strategic, concentrating more on activities such as negotiating long-term relationships, supplier development, and total cost reduction rather than ordering and replenishing routines (Farmer, David & Peter, 2004).

The correlation matrix implies that the independent variables are very crucial determinants of performance of banks as shown by their strong and positive correlation coefficients. A two-tailed test uses a hypothesis that states  $H_1: \mu > \mu_0$  OR  $H_1: \mu < \mu_0$ , and the relevant results are as indicated in Table 2.

### Regression Analysis

Regression analysis was used to determine the extent of relationship between policy formulation, quality management, procurement management as well as strategic cost management and financial performance of banks in Kenya. The study ran the procedure of obtaining the coefficients and the results were as shown on the table below. Multiple regression analysis was conducted to determine the relationship between performance of banks in Kenya and the four variables.

According to the regression equation established, taking all factors (policy formulation, quality management, procurement management and strategic cost management) at zero, the constant

was 1.147. Policy formulation is statistically significant at the 0.0192 level and has a beta value of 0.487. Quality management is statistically significant at the 0.0269 level and has a beta value of 0.545. Procurement management is statistically significant at the 0.0251 level and has a beta value of 0.439. Strategic cost management is statistically significant at the 0.0454 level and has a beta value of 0.752. The data findings show that taking all other independent variables at zero, a unit increase in policy formulation will lead to a 0.487 increase in performance of banks; a unit increase in quality management will lead to a 0.545 increase in performance, a unit increase in procurement management will lead to a 0.439 increase in performance and a unit increase in strategic cost management will lead to a 0.752 increase in performance.

**Table 3: Coefficient Results**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.147	1.2235		1.615	0.0367
Policy formulation	0.152	0.1032	0.487	4.223	0.0192
Quality management	0.054	0.3425	0.545	3.724	0.0269
Procurement management	0.116	0.2178	0.439	3.936	0.0251
Strategic cost management	0.263	0.1937	0.752	3.247	0.0454

Regression model is used in the study to describe how the mean of the dependent variable adjusts to changing conditions. Regression Analysis was carried out for policy formulation, quality management, procurement management, strategic cost management and performance of banks in Kenya. To test for the relationship that the independent variables have on supply chain performance, the study did the multiple regression analysis. The level of determination of

the model is 0.878. The four independent variables that were studied explain 87.8% of the performance of banks as represented by the  $R^2$ . This means that other factors not studied in this research contribute 12.2% of the performance of banks in Kenya. This implies that the variables studied are very significant and should be considered in any effort to boost the performance of banks in Kenya. The study therefore identifies the variables as critical determinants of performance of banks in Kenya.

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.937	0.878	0.789	0.5273

Multiple regression analysis to determine the

relationship between financial performance of banks in Kenya and the four variables derived the equation:

$(Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon)$  which becomes:

$$Y = 1.147 + 0.752X_1 + 0.487X_2 + 0.545X_3 + 0.439X_4$$

Where: Y= Bank performance as measured by ROA and CIR

$\alpha$  = Model's constant

$\beta_1, \dots, \beta_4$  = Model's co-efficients; the slope representing degree of change in independent variable by one unit variable.

$X_1$  = Policy Formulation

$X_2$  = Strategic Cost Management

$X_3$  = Procurement Management

$X_4$  = Quality Management

$\epsilon$  = error term.

## **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

This chapter is a synthesis of the entire study and contains a summary of findings, conclusions, recommendations and suggestions for further research.

### **Summary of the Findings**

This section summarizes research findings based on key objectives; to determine the role of the head of SCM on the financial performance of banks in Kenya through strategic cost management, procurement management, quality management and policy formulation.

#### **Strategic Cost Management in Supply Chain Management**

Majority (90.8%) of respondents indicated that the head of SCM had enhanced strategic cost management. Respondents strongly agreed that the head of SCM is significant in ensuring the

comprehensiveness of strategic cost initiatives in breadth and depth (4.69) as well as benchmarking of strategic cost initiatives (4.69). The study found that the head of SCM would least impact on the level of management that sets strategic cost initiatives (3.57). Correlation analysis showed that strategic cost management had the strongest positive influence on performance (Pearson correlation coefficient = .713; P value 0.0001). The correlation between strategic cost management and policy formulation, quality management and procurement management is positive at (Pearson correlation coefficient = .713, .691 and .711 respectively). According to the regression equation established, strategic cost management is statistically significant at the 0.0454 level and has a beta value of 0.752.

#### **Procurement Management in Supply Chain Management**

Majority (93.8%) of respondents agreed that the head of SCM had enhanced procurement management. Respondents indicated that the head of SCM is instrumental in ensuring shorter lead time (4.51) with few of the respondents indicating that it influences technology implementation such as Purchase-to-pay (P2P) and EDI with suppliers for efficiency and collaboration (4.03). Few also indicated that it facilitates effective contract management (4.03). Correlation analysis showed that procurement management had positive influence on performance (Pearson correlation coefficient = .614; P value 0.0001). The correlation between procurement management and strategic cost management, policy formulation and quality management is positive at (Pearson correlation coefficient = .711, .579 and .551 respectively). According to the regression equation established, procurement management is statistically significant at the 0.0251 level and has a beta value of 0.439.

## **Quality Management in Supply Chain Management**

The study indicated that 85% of respondents agreed that the head of SCM had enhanced quality management. Respondents strongly agreed that the extent of collaboration, partnerships and alliances with suppliers on quality mechanisms (4.61) was greatly enhanced by the head of SCM. Fewer agreed that the head of SCM is very important in implementing Total Quality Management (TQM) (4.03). Correlation analysis indicated that quality management had positive influence on performance (Pearson correlation coefficient = .624; P value 0.0001). The correlation between quality management and strategic cost management, policy formulation and procurement management is positive at (Pearson correlation coefficient = .691, .672 and .551 respectively). According to the regression equation established, quality management is statistically significant at the 0.0269 level and has a beta value of 0.545.

### **Policy formulation in Supply Chain Management**

The findings indicated that 89% of respondents agreed that the head of SCM had enhanced policy formulation. Majority of respondents asserted that this significantly impacts on formulation of innovative SCM policies (4.93). Respondents indicated that the head of SCM had least impact on enforcement of SCM policies across the organisation (3.92). Correlation analysis concluded that policy formulation had the weakest positive influence on performance (Pearson correlation coefficient = .611; P value 0.0001). The correlation between policy formulation and strategic cost management, quality management and procurement management is positive at (Pearson correlation coefficient = .713, .672 and .579 respectively). According to the regression equation established, policy formulation is statistically significant at the 0.0192 level and has a beta value of 0.487.

### **Financial performance Measure**

The study findings indicated that the most effective measure of financial performance was Return-on-Assets (ROA) followed by Cost-Income-Ratio (CIR), Growth in profit, Return-on-Capital Employed and lastly growth in sales. The implication of the findings is that any organisational initiative including SCM, should ultimately target to result in enhanced financial performance.

### **Head of SCM Organisation Structure and Impact on Financial Performance**

Majority (80%) of respondents agreed that the head of SCM would have a significant impact on bank performance. Only 8% of the respondents neither agreed nor disagreed with the statement while another 12% disagreed with the statement that the head of SCM would have a significant impact on bank performance. Further, all respondents indicated that the head of SCM should report to the Director level or higher to maximise impact on financial performance. 39% of respondents indicated that the head of SCM should report to the MD/CEO, 22% indicated that the position should report to the board of directors while the remainder indicated various directors' positions.

### **Conclusions of the study**

The study concludes that the head of SCM has a significant impact on banks' financial performance through strategic cost management, policy formulation, procurement management and quality management. Therefore, all the variables of strategic cost management, policy formulation, procurement management and quality management influence bank financial performance through the head SCM, with the most significant variable being strategic cost management. Through strategic cost

management, the head of SCM impacts on bank performance through formulation of effective and comprehensive strategic cost initiatives as well as ensuring their enforcement and consistent application leading to lower costs including lower warehouse, transport and logistics costs. Through procurement management, the head of SCM impacts on bank performance through implementation of Total Cost Management practises, effective supplier performance measurement, supplier relationship management, effective contract management and supplier development initiatives. This leads to shorter lead time, reduced value of capital held in inventory, accurate demand forecasting, efficient warehouse operations and efficient transport and logistics operations.

Through quality management, the head of SCM impacts on bank performance through implementing Total Quality Management (TQM), setting relevant quality objectives, setting effective quality policies and in implementing effective quality assurance mechanisms that facilitate enforcement of quality management systems, increased supplier collaboration in quality management mechanisms and benchmarking quality standards with best-practise. Through policy formulation, the head of SCM impacts on bank performance through SCM policy formulation, determination of the content of SCM policies, speed of formulation of innovative and comprehensive of SCM policies, enforcement and consistent application of SCM policies as well as benchmarking of SCM policies against global and industry best practice.

Lastly the study concludes that the most effective measure of financial performance is Return-on-

Assets (ROA) followed by Cost-Income-Ratio (CIR), Growth in Profit, Return-on-Capital Employed and lastly Growth in Sales. Further, the study finds that the head of SCM should report to the Director level or higher to maximise impact on financial performance.

#### **Recommendations of the study**

From the discussions and conclusions in this chapter, the study recommends that banks should take notice of the impact the head of SCM has on financial performance. An effective head of SCM improves financial performance through strategic cost management, policy formulation, procurement management and quality management. The head of SCM should focus on strategic cost management as the most impactful means to influence financial performance through formulation of effective and comprehensive strategic cost initiatives as well as ensuring their enforcement and consistent application leading to lower costs including lower warehouse, transport and logistics costs.

#### **Areas for Further Research**

The research studies the impact of head of SCM on financial performance. The study recommends that further research should be done on the impact of the head of SCM on performance of the SCM function itself. Further, the study recommends further research on the impact of head of SCM on the performance of other functions such as Finance, Marketing and Operations. Studies should also be performed to determine the most optimal organisation structure for the head of SCM in top management; whether reporting to the CEO is adequate or representation in the Board is required.

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