

# The Effect of Supply Chain Management on the Performance of Commercial Bank Organization in Ethiopia's Case of Jimma City

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## Abstract

**Purpose:** the main purpose of this research was to examine the impact of supply chain management (SCM) practice on performance in bank organizations in Ethiopia.

**Research methodology:** Cross-sectional descriptive survey design was employed and three purposively selected government banks were studied using a census sampling approach, the data was collected through pretested questionnaire. The main quantitative analysis was employed using STATA 14.

**Results:** status of SCM practice was at a high level. Spearman correlation analysis revealed that ease of access system support, efficient ordering, lean program, lead time, and customer relationship uniting SCM best practice with profitability have a positive relationship, however ordinal logistic regression analysis revealed that SCM practice dimensions customer relationship with SCM best practice and lean program have a positive significant impact on the profitability of bank organization.

**Limitations:** The study performed at Jimma city may not represent all business process office employees of the bank and further longitudinal study required

**Contribution:** This study offers practical and vital means for supply chain managers to appraise and measure supply chain performance practices. For instance, SCM practices can be employed to assess the degree to which firms' performance practices have been achieved and their impact on enhancing satisfaction.

**Keywords:** commercial bank, performance, profitability, SCM practice, Ethiopia

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## 1. Introduction

Supply chain management (SCM) deals with linking the organizations within the supply chain in order to meet demand across the chain as efficiently as possible. It is a device that directs operation towards the successful achievement of desired performance. [Anggraini, Hamiza, Doktoralina, and Anah \(2018\)](#) explain that both SCM and the working of financial institutions are highly linked to each other in which SCM is a meaningful tool for the banking firm's performance. This implies that the use of effective SCM practices has become a potentially valuable means to achieve organizational performance. Banks can play a significant role in the integration of physical and financial supply chains that is they can contribute to the enablers of integration, namely, supply chain coordination, collaboration, information sharing, and information visibility ([Silvestro & Lustrato, 2014](#)). Researchers have underlined the significance of researching the effects of internal integration between the SCM business unit and the information technology activities of the organization ([Azadegan, Syed, Blome, & Tajeddini, 2020](#)). Efficient operations need a planned flow of resources and information whereas banking operation is not exceptional. The primary basis of banking is transforming money in terms of deposits and lending them

to individuals, firms, and governments for performing various economic activities. SCM practice is relevant in bank operations since their activity obtains resources and passes through some processes, ultimately, produce output in the form of financial services. To achieve operational success in banking service, internal integration requires establishing long term relationship with customer ([Alshurideh, Alsharari, & Al Kurdi, 2019](#)). Effective SCM requires simultaneous improvements in both customer service levels and internal operating efficiencies of firms in the supply chain ([Kariuki, 2014](#)). Thus internal integration of functions and external integration with clients is important. [Annan, Otchere, and Daniel \(2013\)](#) suggested that SCM is recognized as the integration of key business processes across the supply chain. Supply chain theory suggests that the supply chain should be managed from end to end ([Storey, Emberson, Godsell, & Harrison, 2006](#)). Through the implementation of SCM, cost reduction and customer satisfaction are achieved and the service is perceived as more long-term ([E. M. Wachira, 2011](#)). Thus companies need to grasp the thoughts and practices of SCM for enhancing competitiveness and performance.

In the Ethiopian context, now a day bank organizations invest to improve technologies and expand operations ultimately enhancing total supply chain investment and reducing costs. However, [Ponduri \(2016\)](#) found that employees are dissatisfied with the working environment which might be due to low supply chain performance which in turn negatively affects client satisfaction. Medium satisfaction trend of the customers with regard to service features of commercial bank of Ethiopia (CBE) ([Shode, 2017](#)). There is a lack of an integrated approach to managing bank operations leads to inefficient links among various functional areas ([Mishra & Pradhan, 2020](#)). As a result, teamwork is unable to add value to the value chain collaboratively. Most studies on SCM practice focus on manufacturing companies but the nature of the operation is different from the service sector. This view is somewhat in line with the notion of the culture of banking industries differs from the culture of other organizations ([Ahmed, 2017](#)). Immediate change in environment of the financial market has made it important to focus on idea of SCM and related practices ([Anggraini et al., 2018](#)). CBE needs to improve mechanisms to overcome the challenges which are also happening in Jimma city bank branches as experience shows. Little is known about SCM practice's effect on banking organization performance, particularly in the Ethiopian context. It can be understood banks in Ethiopia like commercial banks are still not untainted with the implementation of SCM in their economic operation and do not have adequate knowledge of what comprises a set of SCM practices in supply chain integration. Supply chain integration is activities in SCM ([Fernando & Wulansari, 2020](#)). There is a gap for improvement in relation to how SCM understanding is translated into practice ([Dechow, Sloan, & Sweeney, 1995](#)). Understanding banks' SCM practice enables one to have insight into functional areas that need improvement based on client needs. Therefore, the main purpose of this study was to identify the effect of SCM practice on the performance of the bank based on employees' perceptions focusing on the SCM practice-related factors in CBE considering the main bank where the headquarters office is located and is responsible for manages at zonal level, and others are Mentina and Hermata bank branches at Jimma city. Employees were from the three banks representing the commercial bank who were engaged in offering the financial service under the same national bank policy of the country and desired sample frame represented in the city. Outcome of study could be applicable to the managerial implications of the bank organization.

To fill the research gap the subsequent specific objectives established

1. To explain the status and extent of SCM related to factors (awareness, strategy, right service, outsourcing, culture, lean practice, lead time, efficient ordering, and customer relation) in CBE
2. To describe the SCM factor (easy access system support, efficient ordering, lean program, lead time, and customer relationship in SCM) influence on the profitability of CBE
3. To examine which factor (easy access system support, efficient ordering, lean program, lead time, and customer relationship in SCM) has had the superior effect on the performance of the bank
4. To identify existing challenges in the implementation of SCM in CBE

## 2. Literature review

### 2.1 Concept of supply chain management

SCM is the management of the entire set of business processes that produces and delivers products and services to the final customer ([Nyenwa, 2005](#)). SCM is the administration of the flow of goods and services to the ultimate users ([Mishra & Pradhan, 2020](#)). SCM is the collaborative design and management of value-added processes to meet the needs of customers focusing on the internal supply chain which refers to the chain of activities or functions in providing a product to the customer ([Muluadam, 2014](#)). The aim of SCM practice is for better use and deployment of resources whereas a supply chain is a set of value-adding activities that connect a firm's suppliers to the firm's customers. The basic unit of a supply chain activity is receiving input from the supplier and then adding value and finally delivering output to the customer. The flows travel both upstream and downstream within the supply chain. Effectively coordinating these kinds of flows is a primary goal of SCM. The physical supply chain is activities involved in planning and executing the movement of goods and their documentation, while the financial supply chain is activities involved in planning and executing payments between trading partners ([Pandian, 2013](#)). Thus understanding internal SCM practice is crucial to have an insight into what comprises a set of SCM practice and their contribution to performance. SCM primarily bases its function on efficient management at different levels within the financial institution and makes sure that operation is in line with customer needs ([Popa, 2013](#)). Thus the current study attempts to determine the contribution of SCM elements on performance, examining whether SCM practice is relevant in CBE based on the attitudes of employees.

### 2.2 Supply chain management in banking

The commercial bank provides services that include a range of financial services that can be classified as deposit products, loan services, payment services, and others (ATM, POS). In order to be successful, supply chain activities need to be designed and performed considering the needs of clients. Better supply chain performer needs to be customer oriented, focus on process management, and invest in IT that enable the supply chain for free flow of information and efficient transaction. IT has a positive influence on the readiness of the SCM system ([Dehgani & Navimipour, 2019](#)). IT increases responsiveness and ultimately enhances client satisfaction.

In service organizations the common SCM practice is represented by customer relationship management (CRM) requires a good relationship between the bank and its clients. As a process CRM provides the opportunity to create and maintain long-term relationships with customers ([Nure, 2018](#)). Successful organizations determine the needs of clients and make the offering of products or services through information sharing in various ways such as using feedback, and handling complaints. For measuring service supply chain performance, ([Elgazzar & Elzarka, 2017](#)) found applicability of the framework comprises information sharing, CRM, and service delivery management including sharing updated information about the customer order status, level of demand forecast accuracy, the cross-functional teams, and risk management were among others. Thus examining SCM related to the operation of bank feedback, CRM, quality, information flow are relevant factors in commercial bank. [Chow et al. \(2008\)](#) suggested that SCM practice involves developing customer contacts through customer feedback to integrate the downstream activities and deliver orders directly to customers. Customers are considered co-production would be inevitable so managers must plan appropriate programs to make their customers more productive ([Hosseini & Hosseini, 2013](#)). Setting strategies that incorporate value addition and be customer focused will increase efficiency, avoid duplication and enhance cohesion in service delivery ([Mutinda, 2013](#)). ([Adaku, Famiyeh, Anderson, & Amoako-Gyampah](#)) stated that poor operational performances from banks lead to customer dissatisfaction. The location and inventory amount drive a supply chain's ability to provide short response times and reliably meet often very uncertain demand. Efficient inventory management is critical in SCM practice. Firms exposed to supply chain risk through lean systems result in little to no replenishment of inventory, and centralized decision-making affects their ability to plan and respond to risk event ([Pasutham, 2012](#)).

SCM practice in terms of implementing a lean program helps to identify inefficient operations ultimately helping to minimize cost and ultimately improving performance. To implement lean practices holistically, bank employees should understand the concept of lean ([Khan, Ahmad, & Butt, 2019](#)). Practicing lean in a bank reduces cost and improves revenue gain, retaining loyal clients by offering higher quality service ([Ndedi & Ekeme, 2017](#)). Lean maximize banking process concepts is waste minimization, work standardization, teamwork, and continuous flow ([dos Santos & Cabrita, 2016](#)). Lean helps financial services companies to meet customer requirements faster and with greater accuracy. Thus lean practice determines the lead time in SCM, it is the time from the client order received to the client order delivered in various financial services. The implementation of a lean program in a bank will result in less waste and bureaucracy, and more employee knowledge and empowerment, productivity, and satisfied customers (Alina-Maria, 2011). Service is almost always related to the ability to satisfy customer demand within a certain time ([Mutinda, 2013](#)). Financial sectors have implemented lean successfully ([Kanakana, 2013](#)). However lean contribution to the profitability was not investigated and in this study understanding status of lead time in relation to bank services such as loan supply chain and payment settlement based on the needs of the client can be understood.

Outsourcing is the practice of SCM which gives greater time and effort to improve value-added activity. It can be seen as part of a wider set of trends involving outsourcing along with others ([Storey et al., 2006](#)). Firms focus on in-house resources on tackling priorities ([Kedir, 2017](#)). Outsourcing leads to less control but has more supply chain partners and enables the creation of the concept of SCM.

Challenges in the literature cited include: conflict of interest among outsourced and permanent employees; low morale ([Yuliansyah & Jermias, 2018](#)) Low employee commitment and involvement in the decision-making process, lack of role clarity and openness of information flow, internal communications, transparency, openness and fairness in making a decision, accountability, consistency, officials unequal treat ([Abera, 2012](#)) Challenges of logistics are related to firm infrastructure, human resource and technology ([Abi, 2017](#)) Political interference, lack of financial input and inefficient tender handling were challenges facing banks in SCM practice ([Githeu, 2014](#)). The current study used open-ended questions to assess existing challenges in SCM practice.

### **2.3 Relationship between SCM (CRM, lean practice, lead time, system support) and performance**

Previous studies indicated that there is a link between efficient and effective SCM practice and the performance of a bank. [Anggraini et al. \(2018\)](#) noted that through effective SCM, banking firms are increasing their market share and performance outcomes. As market share increases, a business is likely to have a higher profit margin. Market shares (deposit and loan customers) have a positive relationship with profitability ([Etale, Bingilar, & Ifurueze, 2016](#)).

#### **2.3.1 CRM and system support**

Managing customers, organization resources, and inventory are the main SCM practices ([Singh & Kumar, 2020](#)). In SCM practice cross-functional areas need to make effort to provide efficient service considering clients' needs, as a result, this situation leads to achieving performance. The process of supply chain integration can be improved from the internal logistic process to external integration ([Alshurideh et al., 2019](#)). Supply chain integration includes the internal linkages among departments, and functions, and is linked to external including customers where this significantly contributes to supply chain performance ([Magenda, 2014](#)). Regression analysis by ([Anggraini et al., 2018](#)) revealed that SCM and bank performance are very much closely related to each other but the measurement was ordinal. The current study employed ordinal logistic regression analysis. SCM practices contribute significantly to the firm growth and performance ([Chowdhury, Alam, & Habib, 2017](#)). Customer integration has been found to be related to customer satisfaction ([Flynn, Huo, & Zhao, 2010](#)). [Lambert and Cooper \(2000\)](#) suggested some of the processes in the supply chain need to be integrated through order fulfillment, CRM along with others. The customer relationship construct has the least impact on performance ([Kumar & Kushwaha, 2018](#)). There is a significant and positive link between customer relationships and financial performance ([Pakurár, Haddad, Nagy, Popp, & Oláh, 2019](#)). Strong linkage between customer relationships on organizational performance established ([Sukati, Sanyal, & Awaain,](#)



2020) Customer satisfaction and loyalty have a significant positive influence on banks' profitability (Eklof, Podkorytova, & Malova, 2020). CRM practices are useful to increase the profitability of banks (Agnihotri & Bhavani, 2015). CRM practice leads to customer satisfaction secure loyalty and retention and increases sales and profit by reducing customer acquisition costs (Wachira and Were, 2016). However, the extent of CRM's contribution to enhancing profit was not examined and this research attempted to fill the gap.

Regression analysis of Mayaka (2015) showed that SCM practice affects the performance of bank organizations and most leaders are aware of SCM practice and satisfied with existing high performance ultimately increasing productivity and profit where dimensions were customer relations, flow management, and information sharing. In this study, ordinal regression was employed to determine the customer relation effect on the profitability of CBE.

There is a positive relationship between banks billing service and profitability increase (Alghusini, Alsmadi, Alqtish, & Al-Qirem, 2017). Communication, motivation, competency, planning, management commitment, and benchmarking are critical success factors in SCM practice (Anyanful & Nartey, 2015). Thus management commitment and the free flow of information through IT systems and capability are crucial for SCM practices. ICT had a major role in determining the performance of banks (Kiprop & Njeru, 2015). On the contrary, Binuyo and Aregbeshola (2014) suggested that more of the contribution to commercial bank performance comes from information and communication technology cost efficiency rather than its investment. Outsourcing and ICT along with others affected performance (Githeu, 2014). Thus this paper argues that findings were inconsistent in relation to ICT that require further investigation.

Structural equation modeling and hypothesis test analysis conclude that SCM practice (customer relation, level, and quality information sharing, postponement) has a direct impact on competitive advantage (Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006). There is a link between an organization's competitive advantage and its performance in which the advantages leads to attaining high profits (Majeed, 2011). Based on these findings, the following three hypotheses were proposed

Hypothesis 1: customer relation management positively influences profitability

Hypothesis 2: easy of access system support positively influences profitability

Hypothesis 3: efficient ordering positively influences profitability

### 2.3.2 *Lean practice and lead time*

Lean management has become one of the approaches taken to increase performance which gain more attention in the service sector (Seman et al, 2020). Baag et al (2019) support the use of lean thinking that increases satisfaction, profit, and business in bank branches. Lean management has increasingly been seen as a suitable solution to enhance competitive advantage and improve banking performance (dos Santos & Cabrita, 2016); (Kimani, 2016) depicted a strong correlation between supply chain integration and performance in which cost, responsiveness, and security along with others should be considered. SCM practice leads to outstanding performance by reducing costs through implementing lean practice. However, longer lead times can occur due to inefficiencies and the wastage of resources. Scholars also suggest that long lead time might be because of plant/system failure, skill gap of employees, ATM underutilization, and frequent breakdowns (Okyere et al, 2015). Lean assists to enhance team efficiency and improvements in the process which creates superior financial performance. A better approach to lead time reduction would be to improve or remove the non-added value waste from the operation (Metzinger & Latif, 2003) Customer responsiveness leads to customer retention and revenue growth (Awad, 2010) A firm's supply chain process integration has a positive impact on its efficiency related capabilities (Chen, Daugherty, & Landry, 2009). Lean practices have a positive relationship with profitability (Nawanir, Teong, & Othman, 2013). Implementation of lean practice in bank organization enables to generate profit from low cost and faults as well as improve efficiency and lead time. (Vadivel, Sequeira, Sakkariyas, & Boobalan, 2021) suggested that lean service systems can be analyzed to measure financial and organizational performances. As a result, lean practice and lead time improvement is hypothesized to have positive impact on profitability

Hypothesis 4: lean practice positively influences profitability

Hypothesis 5: lead time improvement positively influences profitability

Moreover, this paper argues that prior past studies lack evidence to what extent the contribution of the component of SCM on performance, specifically CRM, access to system support, efficient ordering, lean practice, and lead time contributes to profitability that indicates the most predictor or had an effect on the performance where this study examined using ordinal logistic regression analysis. Therefore originality of this study is to evidence on the impact of each component of the SCM practice through supply chain integration in various aforementioned constructs on performance is limited so that this paper offers empirical proof based on considering CBE employees' views.

### **Conceptual framework**

Based on factors commonly identified in the literature to measure SCM practice, a conceptual framework was developed shown in figure 1. The current study assumed that SCM practice through various constructs of integration could lead to improve supply chain performance. Key business processes across the supply chain related to bank operations were used to determine the status of SCM and its relation with profitability as well as explore each component of SCM contribution to the performance. Efficient ordering of system support, lean program, lead time, and inventory management. CRM comprises feedback, customer relation, and service delivery more over risk management considered which are independent variables, and dependent variable subjective performance (profitability and improved client satisfaction) considered.

Independent variable

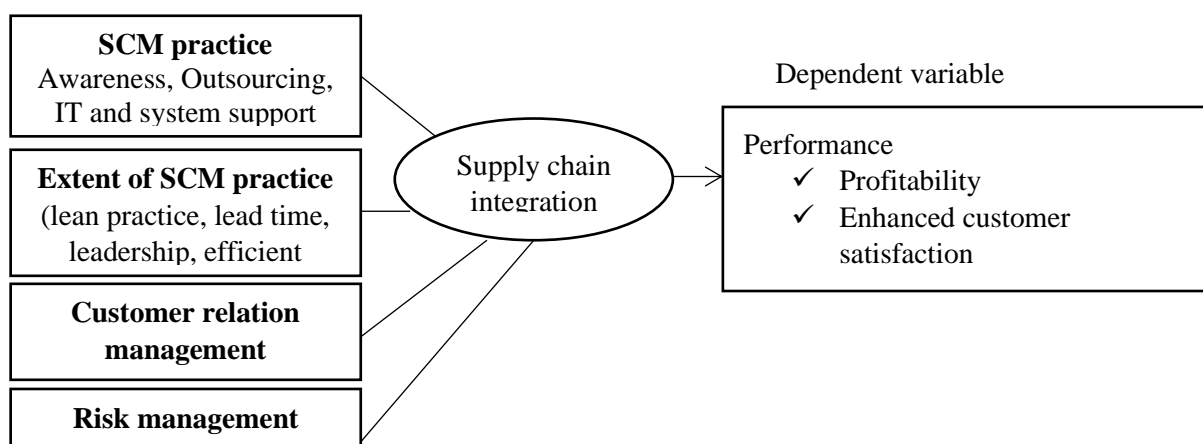


Figure 1. Conceptual framework  
Source: own from the literature review

Integration of the functions involves the holistic performance of activities across departmental boundaries enables to enhance performance through linking to external integration with the customer at the end of a prolonged supply chain. Internal integration serves as a foundation for establishing external collaboration ([Kim, 2013](#)). To achieve operational success in banking service, internal integration requires establishing long-term relationships with the customer ([Alshurideh et al., 2019](#)). This linkage is considered as customer integration ([Pakurár et al., 2019](#)). The authors underlined the significance of evaluating the performance of banks using both financial and non-financial indicators. One of the critical domains for business performance improvement is supply chain integration which is activities in SCM ([Fernando & Wulansari, 2020](#)). Internal operations integration and customer integration significantly influence performance ([Njagi & Muli, 2020](#)). Thus this paper attempted to measure the organizational performance of CBE using subjective profitability increase which offers insight into the most predictors. Ordinal logistic regression analysis employed for the analysis because of the order of agreement summarized on SCM practice. Analysis uses the link function to explain the impact of explanatory ordinal variables, without the normality and homogeneity assumption of

variables ([Elamir & Sadeq, 2010](#)). However, it assumes that each independent and dependent variable has a link at  $p < 0.05$  examined using spearman correlation. logit model was used to describe the data:

$$\text{Logit (Perfo)} = \mu + \beta_1 \text{sysupp} + \beta_2 \text{Effordering} + \beta_3 \text{Leanprog} + \beta_4 \text{Leadtime} + \beta_5 \text{Custscm} + \epsilon_i$$

Where:  $\mu$  is the overall mean

sysupp	=	examine easy access to system support
Effordering	=	efficient ordering
Leanprog	=	staff capability enhancement due to lean program
Leadtime	=	improvement in lead time
Custscm	=	high relation of the customer with SCM best practice

### 3. Research Methodology

#### 3.1 Research design

A cross-sectional descriptive survey design was used to examine the status of SCM and its impact on commercial bank performance in Ethiopia at Jimma city based on assessing the perception of employees in which studied in 2020. Descriptive research is a basic research method that examines the situation, as it exists in its current state ([Williams, 2007](#)). The design permits inquiry into selected issues in great depth, and also allows for flexibility in terms of data collection and analysis ([Uchehara, 2019](#)). The design is suitable to acquire information concerning the status of the SCM practice. Pertinent data related to SCM practice was collected using a pre-tested questionnaire that includes closed and open-ended questions.

#### 3.2 Sample and Data Collection

The study was undertaken at Jimma city and focused on three purposively selected public commercial banks, the reason for selecting them is because one of them is the main bank where the headquarter office is located in Jimma city, is responsible to manage at the zonal level and the others are Mentina and Hermata branches. Employees were respondents from the main bank and other two branches representing the commercial bank who were engaged in offering the financial service under the same national bank policy of the country and also desired sample frame represented in the city. These banks are located at the center of the city and high business transaction takes place in the surrounding. The branches are the main CBE, Mentina and Hermata branches which are among 17 available branches account 17.6%. The study population comprised all staff members of the three branches. According to CBE of the human resource department, 123 staffs were on duty. The target population of the study includes 62 from the main branch, Mentina 23, and 38 from Hermata branch in which the census approach was utilized for investigation where the entire population was studied. The approach is the most appropriate method for the study ([Magenda, 2014](#)).

Primary data were collected based on pretested self-administered questionnaire basically considered four main constructs which were measured with various items Likert- type scales with responses ranging from 1 (strongly disagree) to 5 (strongly agree) ([Boubakary & Moskolai, 2016](#)). The researcher constructed items based on adapting three pertinent studies which have similar indicators by [Pakurár et al. \(2019\)](#) that examine internal integration and performance. [Anggraini et al. \(2018\)](#) examined CRM in relation to performance, IT support. [Power \(2005\)](#) reviewed SCM and implementation. The questionnaire included both open and closed ended questions. Regarding the data collection procedure, the researcher communicated with the commercial bank to ensure their willingness and in line with the study requirements and also would agree to partake. After permission was granted a questionnaire was administered and collected through follow-up contact. This study also employed secondary data sources for the purpose of literature review. In this study, 88 (71.5%) respondents completed the questionnaire collected which is adequate for the descriptive survey. For a survey of the population that aims to describe knowledge or behaviors, a 60% response rate might be acceptable, although 70% would be preferable ([Lee, Mundy, Stone, and Ostriker \(2002\)](#)).

### 3.3 Method of Data Analysis

The data analysis was undertaken using STATA 14 software application which includes descriptive and inferential statistics. The first stage analysis was based on the computation of percentage, mean, and standard deviation unable to determine the status of SCM practice measures the level of agreement on the level and extent of SCM practice as well as customer relation and risk management. As cited by [Ngango, Mbabazize, and Shukla \(2015\)](#), [Agresti and Franklin \(2007\)](#) noted mean ranges interpretation can be 1-2.29 very weak, 2.5-3.49 weak 3.5-4.49 strong 4.5-5 very strong in which this suggestion measures adapted based on scholars specified responses ranging from 1 (strongly disagree) to 5 (strongly agree) ([Boubakary & Moskolai, 2016](#)) Moreover descriptive statistics measures of Skew and Kurtosis were used to determine indicators met normality assumption. Acceptable values of skewness fall between  $-3$  and  $+3$ , and kurtosis is appropriate from a range of  $-10$  to  $+10$ . When utilizing structural equation modeling, small deviations may not represent major violations of assumptions ([Matore & Khairani, 2020](#)); ([Urbano, 2013](#)). This research adopts the above-referred range due to the fact that the impact of SCM factors on performance was analyzed using ordinal logistic regression. In the second stage of analysis, Spearman's Correlation Coefficient is used to test the relationship between variables in which the study tests the hypothesis. Pearson correlation coefficient can be used to test the strength of dependency (not causality) between the variables in which proposed hypothesis is tested ([Letonja, Duh, & Ženko, 2021](#)). In this research the measurements are ordinal so that the Spearman correlation coefficient employed and ordered logistic regression analysis employed to explore the impact of each explanatory variable on the dependent variable. Descriptive research identifies attributes of a phenomenon based on exploration of correlation between two or more phenomena ([Williams, 2007](#)).

### 3.4 Reliability and validity analysis

In order to ensure the validity of the items pretested questionnaires were employed that enable the researcher to construct the items based on the suggestion of the participants. A pilot study ensures the relevance and clarity of the questions and also refines questions as needed to avoid misunderstanding ([Mosadeghrad, Ferlie, & Rosenberg, 2008](#)). Pilot tested questionnaire helps to establish the validity of the measure ([Nievas Soriano, García Duarte, Fernández Alonso, Bonillo Perales, & Parrón Carreño, 2020](#)) Internal consistency of measures constructed of the instrument was checked using Cronbach Alpha coefficient and the coefficients were within the range of 0.7275– 0.7861. [Nunnally and Bernstein \(1994\)](#) suggested reliability coefficients of .70 as sufficient. The summary is indicated in table 3.1.

Table 1. Cronbach Alpha coefficient

Category	Number of items	Cronbach Alpha coefficient
Supply chain management practice	8	0.7494
Extent of the SCM practices in CBE	6	0.7275
Customer relationship management	7	0.7861
Risk management	4	0.7309
Performance (profitability, client satisfaction)dependent variables	2	0.7744

Source: own survey

## 4. Result and Discussions

To measure the level of agreement, items were developed on to a scale of five-point Likert ranging from "1= Strongly Disagree" to "5=Strongly Agree." ([Boubakary & Moskolai, 2016](#)) In all cases, the descriptive measure of Skewness and Kurtosis values fall between  $-3$  and  $+3$ , as well as a range of  $-10$  to  $+10$  respectively. Values within the aforementioned ranges suggested no series violation of normality (Matore and Khairani, 2020).



#### 4.1 Profile of Respondents

Based on table 4.1 summary 51(58%) respondents were male while 37(42%) were female. 70 (79.05%) respondents were in 26-40 years whereas 16 (18.18%) under 25 years. Only 2(2.27 %) of the respondents hold masters whereas 86 (97.73%) had a first degree. 2 (2.27%) respondents have been working in the bank for less than 5 years, 41 (46.59%) for 6 to 10 years, 13(14.77%) have been working for over 10 years. majority of respondents 85 (96.58) were in the position of middle-level management, office, and others while 2(3.3 %) were senior banking officers.

Table 2. Profile of the Respondents

Characteristic	Category	frequency	percentage
Gender	male	51	58
	Female	37	42
	Total	88	100.0
Age	under 25 years	16	18.18
	26-40years	70	79.05
	above 40 years	2	2.27
	Total	88	100.0
Level of education	Degree	86	97.73
	Masters	2	2.27
	Total	88	100.0
Service year	Below 1 year	2	2.27
	1-5 year	32	36.36
	6-10 years	41	46.59
	Above 10 years	13	14.77
	Total	88	100.0
Position in CBE	senior banking officer	3	3.41
	middle-level officers	21	23.86
	Officers and others	64	72.72
	Total	88	100.0

Source: own survey

#### 4.2 Supply chain management practice

Table 4.2 illustrates that in all parameters measured, the level of agreement was at a high level where the mean score is above 3.5. Employees were very much aware of SCM practice; CBE was focusing on core a product which is an important element and determinant in supply chain practice which gives management adequate time and exert effort to enhance improvements in the value chain activities. Moreover, easy access to system support among departments was observed and the right service strategies were devised that ensured the supply chain was effective. Outsourcing was handled efficiently with clear procedures helps to emphasize on core services and lessen the burden on the management. Collaboration within the supply chain assists CBE to add value to the activities which improve operation in line with clients' needs and ultimately enhance their satisfaction. Bank organization culture improved through empowerment and satisfaction. This situation motivates employees to make an effort towards the improvements of the operation in the supply chain based on the needs of clients. CBE frequently uses consistent client feedback to improve service which helps to review the service also a system facility established to provide assistance. Employees' capability of the system is satisfactory.

Table 3. Perception of employees on supply chain management practice

Item	Mean	Sd.	Skewnes	Kurtosis
Aware of SCM practice	3.67	.65	-.28	3
Working focus on core products	4.01	.71	-1.1	6.2
easy to access system support in the supply chain	3.73	.85	-1.2	5.2

The right service strategy ensured supply chain effective	3.7	.55	-.4	3
Outsourcing handled	3.55	.85	-.9	3.6
Culture improved in empowering and satisfaction	3.59	.87	-1.1	4.6
consistent use of clients' feedback	3.63	.88	-1.4	5.3
Employees have the high capability of managing IT system	3.5	.94	-.83	3.6

Source: own survey

#### 4.3 Extent of SCM

Table 4.3 illustrates the extent of SCM practice using various dimensions in which findings revealed that the mean score is at a high level. Thus efficient ordering is achieved in the system which leads to clients' satisfaction with the service delivery. In addition, lean practice enhances employees' capability and minimizes non-core activity as result clients transact efficiently in the supply chain. Bank offers services faster and by making continuous improvements in the supply chain process in addition lead time improved. CBE greatly focuses on the aspect of quality in the supply chain in which service delivery is customer focused. Leaders making a decision to simplify processes indicates top management commitment and motivates employees to operate services in line with the expected standard established however open-ended questions showed it is inconsistent. Improvement in inventory management sufficiently meets demand.

Table 4. Opinion of employees on the extent of SCM practice

Item	Mean	Sd.	Skewnes	Kurtosis
efficient automated ordering system in the CBE	3.61	.81	-.9	3.9
Capabilities increased through a lean program	3.69	.81	-.5	3.5
focus on the aspect of quality in the supply chain	3.54	.98	-.9	3.9
improvement in lead time	3.64	.80	-.6	2.9
improvement in inventory turns	3.64	.71	-.3	2.9
leadership decisions simplify processes across value chain	3.55	.74	-.9	4.8

#### 4.4 Customer Relationship Management

Table 4.4 summarizes respondents' views on CRM and their level of agreement was at a high level in all measurements. Highly aware of CRM practices, a better relationship between customer and SCM best practices exists. Service is customer oriented offered at the right time based on order with no interruption with continuous enhanced improvement in service delivery. This condition indicates collaboration with customers achieved and continuous improvement of supply chain process improved service delivery this in turn increases bank performance. The system is user-friendly and the flow of information within the bank and with clients was satisfactory.

Table 5. Perception on customer relationship management

Item	Mean	Sd	Skewnes	Kurtosis
awareness about the CRM practices	3.60	.95	-.8	3.4
high relationship customers with SCM best practices	3.56	.73	-.3	2.8
services at the right time	3.5	.79	-.2	3.3
facilitate customers' ability to seek assistance	3.81	.71	-.6	4.6
improvement on service delivery	3.85	.71	-1	5.5
CBE system is user friendly	3.84	.78	-.4	2.9
free flow of information (information sharing)	3.62	.82	-.59	4.02

#### 4.5 Risk Management

Related to risk management, as shown in table 4.5 in all parameters the mean score is greater or equal to 3.5.

Table 6. View of employees on risk management

Item	Mean	Sd.	Skewness	Kurtosis
awareness of risk management practices	3.5	.80	-1.4	5.5
mitigation strategies towards risks arise from supply chain	3.60	.76	-.7	3.8
achieved better securing transactions with clients	3.72	.65	-.6	3.6
share information within strict limits that minimize risk	3.81	.61	.12	2.5

Respondents were very much aware of risk management practices. Moreover, respondents perceived that appropriate mitigation strategies designed and practiced toward risks may arise from the supply chain. CBE also shares information within strict limits that minimize the risk that is clients are safe in performing transactions due to a well-secured system that cannot be accessed easily and difficult for any frauds. At a high level, CBE achieved better-securing transactions with clients.

#### 4.6 Views of employees on performance

Regarding the performance in both dimensions, the finding showed that the mean score was above 3.5. The result is summarized in table 4.6. Thus through SCM practice particularly by simplifying the processes efficiently through a lean program, customer relations commercial bank achieved high profit and enhanced clients satisfaction.

Table 7. Performance

Item	Due to SCM profitability increased	Process efficiencies delivered enhance client satisfaction
mean	3.60	3.57
Std.	.76	.81
Skewness	-1	-.9
Kurtosis	4.7	4.7

#### 4.7 Existing challenges in SCM practice in commercial bank

Respondents suggested some challenges, summarized them, and coded them into three themes. As shown in Table 4.7. The challenges include medium cooperation among teamwork which accounts 27(52.94%) followed by inconsistent leader commitment and sometimes unfair performance evaluation which accounts 16(31.37%) and 8(15.69%) respectively. These challenges at some time may affect supply chain performance.

Table 8. Employees view on the existing challenges in SCM

item	medium cooperation in team work	Inconsistent leader commitment	sometimes unfair performance evaluation	cumulative
N	27(52.94%)	16(31.37%)	8(15.69%)	51(100%)

#### 4.8 Effect of access to system support, lean program, lead time improvement, customer relation, and efficient ordering on profitability

As shown in Table 4.8, according to Spearman's Rank Correlation Hypothesis testing at  $p < 0.05$  the study revealed a significant positive relationship between system support, efficient ordering, lean program, lead time, and customer relationship to the best SCM practice with profitability.

Table 9. the Correlation Coefficient among the Research Variables

Independent variable	Dependent variable	r	P value	Decision/status
Ease of access system support	SCM practice increase profitability	0.3311*	0.0016	supported
Efficient ordering	SCM practice increase profitability	0.2386*	0.0252	supported
Lean program	SCM practice increase profitability	0.3309*	0.0016	supported

Lead time	SCM practice increase profitability	0.4183*	0.0000	supported
Customer relationship with SCM	SCM practice increase profitability	0.4149*	0.0001	supported

All suggested relationships and hypotheses are established significance thus hypotheses are supported by the study. There was a significant, positive correlation between ease of access system support and profitability,  $r = 0.3311$ ,  $p < 0.05$ . Significance, positive correlation established between efficient ordering and profitability,  $r = 0.2386$ ,  $p < 0.05$ . The finding depicted a significant, positive association between lean programs and profitability,  $r = 0.3309$ ,  $p < 0.05$ . More analysis of correlation evidenced a significant, positive association between lead time and profitability,  $r = 0.4183$ ,  $p < 0.05$ . Significance, positive correlation between customer relationship with SCM and profitability,  $r = 0.4149$ ,  $p < 0.05$ . The dependent variable profitability was found to have a significant correlation with SCM practice (ease of access system, efficient ordering, lean practice, lead time, and customer relation) offering initial support to H1, H2, H3, H4, and H5. This implies that these factors are strong predictors. This correlation result facilitates to performance ordered logistic regression which enables to the determination of the contribution of each explanatory variable to enhance profitability.

Thus further this research examined the effect of easy-to-access system support in the supply chain, efficient ordering system, lean program, lead time improvement, and customer relations with best SCM practice on profitability. Ordered logit coefficient employed for the interpretation ultimately enables to determine which factor has had a superior effect that can be understood. In Table 4.9 the p-value from the LR test  $< 0.0000$ , which implies that at least one of the coefficients in the model is not equal to zero. According to the findings lean program (with  $\beta = .97$ , P-value = 0.002), customer relation with SCM best practice (with  $\beta = 1$ , P-value = 0.003) both factors have a statistically positive significant effect on profitability. whereas ease of access to system support (with  $\beta = .60$ , P-value = 0.058), efficient ordering ( $\beta = .33$ , P-value = 0.227), improvement in lead time (with  $\beta = .71$ , P-value = 0.058) have a positive but insignificant contribution on profitability in which individual measurements improvement contribution to increasing profitability with the amount of respective ordinal regression coefficients after other variables held constant in the model. This leads to conclude high customer relations with the best SCM practice and lean program are superior significant predictors of the performance at CBE.

Table 10. The ordinal logistic regression coefficients

Ordinal logistic regression						Number of obs = 88
						LR chi2(5) = 45.05
						Prob > chi2 = 0.0000
						Pseudo R2 = 0.2401
Log likelihood = -71.269979						
Profit sig	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
System support	.6026538	.3176215	1.90	0.058	-.019873	1.22518
Efficient ordering	.3313092	.2742783	1.21	0.227	-.2062664	.868884
Lean program	.9738193	.3122271	3.12	0.002	.361865	1.585773
Lead time	.710223	.3685507	1.93	0.054	-.0121232	1.4325
Custrel with SCM	1.024115	.3476302	2.95	0.003	.3427726	1.70545

## Discussion of the finding

### 5.1 Supply chain management practice in bank

The major objective of the study was to explore the impact of SCM practice on the performance of CBE. The study found that employees were very much aware that in SCM practice, CBE performs the operation by designating the right service strategies and putting it, in reality, to ensure the supply chain effectively through performing operations based on customer experience and focus on offering core products with the clear procedure that enable to improve clients' satisfaction and efficiency. The management had adequate time to realize planned activities. This suggestion is in line with the notion of successful outsourcing allows the organization to focus in-house resources on tackling priorities

([Kedir, 2017](#)). Inefficient tender handling along with others was a challenge facing commercial banks in Kenya in the SCM practice ([Githeu, 2014](#)).

Further satisfactory easy access to system support among various departments and clients, systems user-friendly and information sharing make the operation efficient and lead to the creation of better value addition in the supply chain achieved across functional areas in which service delivery was faster and accurate at the right time and place. Clients get various services using POS, ATM, online transactions, and the like ultimately enhancing clients' satisfaction. This conclusion proves the evidence of IT has positive influences on the readiness of the SCM system ([Dehgani & Navimipour, 2019](#)) Thus IT enhances responsiveness in which, in turn, enhance client satisfaction. Supportive culture of empowerment and satisfaction supports for easy communication with clients and feedback from clients incorporated. employees were satisfied which motivates, enhanced morale, and make them more productive and better coworker relationships were achieved to perform efficiently the operation based on standards which adds value to the performance. CBE benefits arise due to enhanced client satisfaction ultimately this contributed to increasing bank performance. This finding disagrees with the conclusion of ([Abera, 2012](#)) stated that workers' involvement in the decision-making process was weak, lack of openness of information flow in all directions and internal communications in the commercial bank.

### ***5.2 The extent of SCM practice and customer relationships as well as existing challenges***

Employees were very much aware of CRM which indicates employees work according to established benchmarks to achieve long-term relationships which is crucial to enhance performance and client satisfaction. Consistent feedback and suggestion enable standardizing processes in line with the client actually need better use of resources achieved this in turn increase profit There is a convenient system that helps clients to support if any assistance is required. It is obvious fast, polite and appropriate assistance in the operation enhance customer satisfaction and create a better successful supply chain. High-level satisfactory collaboration with customer achieved enhances client satisfaction. This notion is concurrent with the suggestion of [Chow et al. \(2008\)](#) note that in improving the supply chain activities organization need to work collaboratively with clients otherwise leads to clients to be dissatisfied. Customer integration has been found to be related to customer satisfaction ([Flynn et al., 2010](#)).

By implementing the lean program, commercial bank enhances employee capability by eliminating non-core activities through continuous revising, reforming, and improving the supply chain process based on clients need and associated costs saved and lead time improved in various services satisfactorily at a high level which contributes to enhance clients satisfaction and the profitability of commercial bank this finding confirms the suggestion of practicing lean in bank reduces cost and improving revenue gain which has consequence cement customer loyalty by offering higher quality service and increase revenue ([Ndedi & Ekeme, 2017](#)). Moreover, leaders deciding to simplify the processes along the value chain and suggesting solutions for process improvements indicates the existence of top management commitment that encourages employees to participate in the improvement of the process and so efficiently deliver the end product to the clients however commitment was not consistent. Employees' capability is an input to work and collaborate where the cross-functional team was able to respond to clients' requirements faster as a result quality service is offered to clients satisfactorily at a high level. This finding is supported by [Anyanful and Nartey \(2015\)](#) identified motivation and competency along with others is the primary critical success factors in SCM. Employees were very much aware of the risk management practice. Currently, appropriate strategies are devised and realized into action to mitigate and reduce chain exposure to risk which helps to convince the reliability of the bank and this situation leads clients to be loyal to the bank.

Identified challenges were medium cooperation in teamwork followed by inconsistent leader commitment and sometimes unfair performance evaluation. This situation might affect employees' motivation and coordination which leads to inefficiency and ultimately affects clients' satisfaction and performance. This suggestion is in line with the report of poor operational performances from banks



leading to customer dissatisfaction also related to performance evaluation ([Adaku et al.](#)) Also somewhat agrees with the conclusion of officials did not treat everyone similarly in the CBE ([Abera, 2012](#)).

### **5.3 The effect of SCM practice on the performance of CBE**

The Spearman correlation coefficient was used for exploring the relationship between explanatory variables and profitability increase in line with the utilized measure. The result association between variables shows that there is a significant positive relationship between ease of access of system support, efficient ordering, lean program, lead time, customer relationship with SCM best practice, and profitability increase. All proposed hypotheses are supported by the study. This finding confirms the conclusion of a significant and positive link between customer relationships and financial performance in supply chain integration ([Pakurár et al., 2019](#)). Customer responsiveness leads to customer retention and revenue growth ([Awad, 2010](#)). There is a positive relationship between banks billing service and profitability increase ([Alghusain et al., 2017](#)). In commercial banks, SCM practice enhanced profitability and client satisfaction by making the service efficient and customer-oriented along the supply chain and this result is concurrent with the finding of ([Chowdhury et al., 2017](#)) noted that SCM practices contribute significantly to the growth of the firm and its performances and also somewhat agrees with conclusion SCM practice affect bank performance ([Mayaka, 2015](#)).

The study found that lean practice and CRM are the most predictors of profitability in CBE. ordinal logistic regression was employed to examine SCM practice's effect on bank profitability and the research found that pillars of the SCM lean program have a positive significant impact on bank profitability which implies that simplifying the operation by eliminating processes that do not add value and offer service at the right time increases the profitability. Existing clients become loyal and create new clients this suggestion agrees with the report of [Ndedi and Ekeme \(2017\)](#) noted that lean practice enables banks to retain the customer by offering high-quality service also the finding of ([Nawanir et al., 2013](#)) depicted that lean practices have a positive relationship with profitability, lean management has increasingly seen as a suitable solution to enhance competitive advantage and improve banking business performance ([dos Santos & Cabrera, 2016](#)). [J. Wachira and Were \(2016\)](#) found that CRM leads to customer satisfaction which brings about loyalty and retention, thereby increasing sales and profit. Customer satisfaction and loyalty have a significant positive influence on banks' profitability ([Eklof et al., 2020](#)).

The study also revealed that customer relationships with best SCM practices have a positive significant impact on bank profitability and the result agrees with the finding of [Mayaka \(2015\)](#) noted that customer relations had a positive significant impact on profitability. Customer integration significantly influences performance ([Njagi & Muli, 2020](#)). [Sukati et al. \(2020\)](#) established a strong linkage customer relationship on organizational performance. This implies that supply chain integration needs to be customer focused. Managing customers is main the SCM practice ([Singh & Kumar, 2020](#)). But the result disagrees with the conclusion of the customer relationship construct has the least impact on performance ([Kumar & Kushwaha, 2018](#)). Moreover, the study found that ease of access to system support, efficient ordering, and lead time has a positive insignificant influence on bank profitability. This paper argues that it might be due to existing challenges in SCM practice that includes medium cooperation, and inconsistent leaders' commitment may lead employees dissatisfied which affects performance. Such experience can adversely affect efficiency and success of business in enhancing profitability that requires improvement.

## **5. Conclusion**

This study examined the effect of SCM on bank performance with a particular emphasis on some selected commercial banks in Jimma city in Ethiopia. It is evidenced that the status and extent of SCM practice including CRM was at a high level which is an important tool to enhance profitability and clients' satisfaction that is employees are focused on delivering core value, as a result, this situation lead to being more creative and efficient.

Based on the theoretical standpoint of a considered literature review, five hypotheses were tested. The findings revealed that SCM practice in terms of the ease of access system support, efficient ordering, lean program, lead time, and customer relationship with SCM best practice significantly predicted organizational profitability. Among predictors, high customer relations with best SCM practice and lean program are superior significant predictors of the performance at CBE in the supply chain integration. Eliminating unclear procedures and wastage create, and offering service customer focused contributed to enhancing client satisfaction and profitability. Ease of access system support, lead time, and efficient ordering have an insignificant contribution to the profitability of the bank.

The major challenges in SCM practice include cooperation among teamwork at a medium level, inconsistent leader commitment, and sometimes unfair performance evaluation. The study recommends that commercial banks be advised to implement SCM that represent strengthening customer relationship and implementing lean practice due to the fact that which have the prospective of improving process capability, enhancing profitability and client satisfaction by saving cost, clients become loyal and also create and keep new customers. Teamwork in the supply chain has a crucial role in adding value so that managers need to assign responsibilities to their employees helps to enhance the extent of teamwork and create awareness about how the performance evaluation process is undertaken.

### 5.1 Limitation and Study forward

The research can be enhanced by using interviews, observations, and document analysis where knowledge can be gained on SCM and related practices. Due to no fund support, this study focused on a single city that may not represent all business process office employees of the commercial banks. A longitudinal study is required for better prediction of performance. Moreover, prospective research could include other predictors related to motivational factors such as promotional factors, incentives, and quality of life may provide insight into factors enhancing employees' activity. Even if the lean program had a positive and significant effect on profitability which unique practice was not illustrated that can be represented by total quality management, Keizan, and the likes can be examined.

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